



SOWERBY'S
ENGLISH
BOTANY.



California Academy of Sciences Library

By action of the Board of Trustees of the
Leland Stanford Junior University on June
14, 1974, this book has been placed
on deposit with the
California Academy of Sciences Library.

157
WFXH

Pat. Class. 18

12/16

ENGLISH BOTANY.

Sowerby, James

ENGLISH BOTANY;

OR,

COLOURED FIGURES

OF

BRITISH PLANTS.

Third Edition.

ENLARGED, RE-ARRANGED ACCORDING TO THE NATURAL ORDERS
AND ENTIRELY REVISED.

WITH DESCRIPTIONS BY

JOHN T. BOSWELL, LL.D., F.L.S., ETC.,

AND

N. E. BROWN,

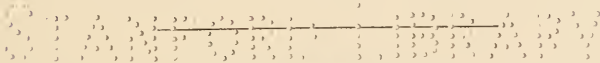
Of the Royal Herbarium, Kew,

THE FIGURES BY W. H. FITCH, N. E. BROWN,

AND

JOHN EDWARD SOWERBY,

Illustrator of the "Wild Flowers Worth Notice," &c. &c.



VOLUME XII.

CRYPTOGAMIA.

MARSILIACEÆ TO CHARACEÆ.—GENERAL INDEX.

LONDON:

GEORGE BELL & SONS, YORK STREET, COVENT GARDEN.

1886.

W

526317

LONDON:

PRINTED BY WILLIAM CLOWES AND SONS, LIMITED,
STAMFORD STREET AND CHARING CROSS.

YSAHEL | GROMAT

N 300
.56
1863
v. 12
Copy 2

PUBLISHERS' NOTE.



THE following Volume, containing the descriptions of British Cryptogamous Plants, completes the 3rd Edition of 'English Botany' within the limits proposed by its Editor, Mr. Boswell (Syme), with the exception of such supplementary and additional matter as the progress of time since its publication has rendered necessary. Unfortunately, the failure of Mr. Boswell's health prevented him from finishing his work, and its completion is due to Mr. N. E. Brown, of the Royal Herbarium, Kew, who had previously undertaken the drawings of some of the plants, and has ably supplemented the incomplete descriptions.

He has also undertaken the arduous work of revising the Latin Indices of the several Volumes which now, incorporated with the English indices, and with a new one of French and German names, furnish for the first time a complete Index to the whole work.



ENGLISH BOTANY.



CONTENTS OF THE VOLUMES.

VOLUME I.

Ranunculaceæ, Berberidaceæ, Nymphæaceæ, Papaveraceæ, and Cruciferæ.

VOLUME II.

Resedaceæ, Cistaceæ, Violaceæ, Droseraceæ, Polygalaceæ, Frankeniaceæ, Carophyllaceæ, Portulacaceæ, Tamarisaceæ, Elatinaceæ, Hypericaceæ, Malvaceæ, Tiliaceæ, Linaceæ, Geraniaceæ, Ilicineæ, Celastraceæ, Rhamnaceæ, Sapindaceæ.

VOLUME III.

Leguminifere and Rosaceæ.

VOLUME IV.

Lythraceæ, Onagraceæ, Cucurbitaceæ, Grossulariaceæ, Crassulaceæ, Saxifragaceæ, Umbellifere, Araliaceæ, Cornaceæ, Loranthaceæ, Caprifoliaceæ, Rubiaceæ, Valerianaceæ, and Dipsaceæ.

VOLUME V.

All the Plants ranked under the order Compositæ.

VOLUME VI.

Campanulaceæ, Ericaceæ, Jasminaceæ, Apocynaceæ, Gentianaceæ, Polemoniaceæ, Convolvulaceæ, Solanaceæ, Scrophulariaceæ, Orobanchiaceæ, and Verbenaceæ.

VOLUME VII.

Labiatae, Boraginaceæ, Lentibulariaceæ, Primulaceæ, Plumbaginaceæ, Plantaginaceæ, Paronychiaceæ, and Amarantaceæ.

VOLUME VIII.

Chenopodiaceæ, Polygonaceæ, Eleanaceæ, Thymelaceæ, Santalaceæ, Aristolochiaceæ, Empetraceæ, Euphorbiaceæ, Callitrichaceæ, Ceratophyllaceæ, Urticaceæ, Amentifere, and Conifereæ.

VOLUME IX.

Typhaceæ, Araceæ, Lemnaceæ, Naiadaceæ, Alismaceæ, Hydrocharidaceæ, Orchidaceæ, Iridaceæ, Amaryllidaceæ, Dioscoreaceæ, and Liliaceæ.

VOLUME X.

Juncaceæ and Cyperaceæ.

VOLUME XI.

Graminaceæ.

VOLUME XII.

Marsiliaceæ, Isoetaceæ, Sclaginellaceæ, Lycopodiaceæ, Ophioglossaceæ, Filices, Equisetaceæ, and Characeæ, General Index.



[ERRATA OF VOLUME XII.

PAGE	LINE	
110	7	For p. 622, read p. 602.
112	35	For PLATES 1871, 1872; read PLATES 1870, 1871.
115	25	After ATHYRIUM FLEXILE, add <i>Syme</i> ; and beneath this line insert, PLATE 1871.
139	25	After CETERACH OFFICINARUM, add <i>Desr.</i>
144	20	For Hurd Fern, read Hard Fern.
173	21	For Arthur Bennett, read A. W. Bennett.
177	9 & 32	} After the word Brunn, strike out the comma.
178	19	
181	6	
182	13	
188	30	
189	11	
191	28	
186	13	Strike out the words Var. <i>a. genuina</i> .
186-187		Strike out <i>N. glomerata</i> , var. β <i>Smithii</i> , with the remarks referring to it, and add the synonymy to that of <i>N. glomerata</i> . Messrs. Groves having intimated in the <i>Journal of Botany</i> , 1885, p. 350, that they had found nucules on Mr. Borrer's Lancing specimen, induced me to re-examine it, and in a fertile head taken from another part of the specimen, I find some extremely young nucules in their first stages of development; the two heads previously examined by me were probably too young, as I could find nothing of the kind upon them, although carefully searched for under a power of 450 diameters. The var. <i>Smithii</i> must therefore be considered to be founded upon an immature state of <i>N. glomerata</i> .
189	36-40	Strike out these lines beginning at the words 'The plant,' &c., as there is a specimen of <i>N. prolifera</i> from the Glasnevin Canal in the Herbarium of the late Dr. D. Moore, at Dublin.
200	18	For the word but, read and.
215	2	After var. ? β . <i>connivens</i> , add <i>N. E. Brown</i> .
217	31	After the words 'beneath the nucule' add—? (Messrs. Groves in the <i>Journal of Botany</i> , 1885, p. 350, state that this is <i>not</i> the case in their specimen, but do not say how they are situated. As this is the normal position of the globules in the group to which this species belongs, a further discovery of monocious specimens may possibly prove Messrs. Groves' example to be abnormal.)
PLATE		
1826*		For <i>Isoetes eu-lacustris</i> , var. <i>Morei</i> , read <i>Isoetes lacustris</i> , var. <i>Morei</i> .
1827		For <i>Poetes echinospora</i> , read <i>Isoetes echinospora</i> .
1871		For <i>Athyrium alpestre</i> , var. <i>flexile</i> , read <i>Athyrium flexile</i> .
1897		Strike out the words var. <i>Wilsoni</i> .

N. E. BROWN.]

ENGLISH BOTANY.

SUBKINGDOM II.

CRYPTOGAMIA, OR FLOWERLESS PLANTS.

PLANTS destitute of flowers furnished with special organs of reproduction (stamens and pistils), but producing spores, which differ from seeds in containing no embryo previous to germination. The plants have, however, at some period of their growth, bodies which represent the male and female organs of flowering plants, which are so various that they must be described under each separate Class or Order.

CLASS I.—VASCULARES.

Herbs, usually perennial, very rarely annual, rarely trees, which have a stem composed of cellular tissue in which are imbedded closed fibro-vascular bundles, the whole covered by an epidermis, producing adventitious roots and leaves, or representatives of leaves with various venation. Spores produced without fertilisation, included in spore cases which are either enclosed in sporocarps (modified leaves), or naked in the axils of the leaves or on the back of the leaves, or on the under side of peltate hexagonal plates collected into a terminal cone. Male and female organs produced on a prothallium, which is the result of the germination of the spore. The prothallium is sometimes simply a growth of cellular tissue which protrudes from the spores after the latter have burst, but in other cases it grows out into a scale resembling a Liverwort, and has an independent existence sometimes lasting for months. In either case, the female organs (*archegonia*) are formed in the prothallium, their essential part consisting of a cell (*oosphere*), enclosed in the tissue of the prothallium, and having an

open protruding neck: the male organs consist of spiral ciliated threads (*antherozoids*), produced from cells (*antheridia*), either formed upon or in the prothallium or contained in separate spores from those which produce the prothallium which develops the archegonia.

ORDER LXXXIX.—MARSILIACEÆ.

Aquatic or marsh plants with creeping rooting branched rootstocks. Leaves alternate, erect, filiform, without any lamina, or with a lamina composed of 4 equal, obovate, entire or retuse leaflets; in either case with circinate vernation. Sporangia contained in capsules or sporocarps, sessile in the axils of the leaves or more or less longly stalked and springing from the lower part of the leaf, globular or ovoid, often hairy at least when young, 2- to 4-celled vertically, 2- to 4-valved. Spores of two kinds, the larger (*macrospores*) solitary in each macrosporangium, the smaller (*microspores*) numerous in each microsporangium. Macrosporangia and microsporangia included in the same sporocarp. Prothallium developed from a papilla at the apex of the macrospore; its oosphere, after being fertilised by the antherozoids discharged from the microspores, develops and forms the new plant.

GENUS I.—PILULARIA. *Lin.*

Sporocarps subglobular sessile and erect, or shortly stalked and bent down, 2- or 4-celled, 2- or 4-valved at the apex.

Aquatic herbs, with slender branched creeping stems and setaceous leaves without any lamina.

Name derived from *pilula*, a pill, which the sporocarps resemble.

SPECIES I.—PILULARIA GLOBULIFERA. *Lin.*

PLATE 1825.

Rabenhorst, Cryptogamæ Vasculares Europæ Exsiccata, No. 27.

Sporocarps subglobose, 4-celled, 4-valved, 3 or 4 times longer than their peduncle, erect. Macrospores numerous, ovoid, constricted in the middle. Microspores without a gelatinous covering.

On the margins of lakes and ponds, usually in shallow water, but left growing in the damp mud in summer. The Rev. W. W. Spicer says, that in September he found it in a pond near Guildford, Surrey, in water 40 inches deep. (*Phyt.* 1851, p. 350.)

Rather sparingly but generally distributed from Cornwall and Sussex, northwards to Skye and Sutherland. Rare in Ireland, where it has been noticed in the west, and more plentifully in the north-east.

England, Scotland, Ireland. Perennial. Summer, Autumn.

Rootstock long, creeping, filiform, sparingly branched, glabrous except at the growing apex, which is clothed with hairs, producing 1 or more adventitious roots at each point from which leaves are given off. Leaves 1 to 4 inches long, 2 to 4 together at intervals along the rootstock, erect, deep green, smooth, with a few very minute hairs or papillæ, the young ones coiled up at the apex like the fronds of a Fern. Sporocarps solitary in the axils of the leaves, very shortly stalked, globose, slightly pointed, resembling small pepper-corns, at first hairy, at length glabrous, divided parallel to the axis into 4 cells, with a parietal placenta running down each; to this placenta the sporangia are attached, forming a sorus. Lower sporangia in each sorus a dozen or more, each containing a single megaspore; uppermost sporangia of the sorus containing numerous microspores: in either case the sporangia are small thin hyaline walled sacs which eventually burst and discharge their spores, which escape enveloped in the jelly which fills the sporangia, and by its expansion causes their rupture. Ripe microspores enveloped in a gelatinous coat, furnished with a small projection at the apex, formed by the protrusion of the inner layer of the spore, which is torn into shreds. Underneath all this there is a collection of protoplasm, from which is developed the prothallium; for the details of this, see Hoffmeister on the Higher Cryptogamia, translated by Currie, pp. 318 to 324.

Pillwort, or Pepper-grass.

ORDER XC.—ISOETACEÆ.

Aquatic or terrestrial plants consisting of a fleshy depressed 2- to 4-lobed corm, producing simple or forked root-fibres, and giving rise to rush-like leaves with dilated bases, which are sometimes persistent. Leaves subulate or linear, containing 4 air-tubes, with transverse partitions, furnished with stomata in some species. Sporangia solitary, immersed in the inner face of the dilated base of the leaves to which they are connected by their backs, crossed internally by threads affixed to their upper and under sides; the sporangia of the outer leaves containing numerous megaspores, those of the inner leaves containing very numerous microspores. Some species have *phyllodes*, or barren leaves, on the corm between the

leaves bearing macrosporangia and those bearing microsporangia. Macrospores large, with a whitish crustaceous integument, subglobular, trigonous towards the apex, the division between the hemispherical and the trigonous portion, and those between the three faces of the trigonous part marked by elevated lines, the trigonous portion ultimately opening into three valves. Microspores very numerous and very minute, grey, oblong-trigonous, marked by a single line. Macrospore developing a prothallium at its apex, which has its oosphere fertilised by the antherozoids developed in the microspores, as in the Marsiliaceæ.

GENUS I.—ISOETES. *Linn.*

The only genus. Characters the same as those of the Order.

Name from *ἴσος* (*isos*), equal, and *ἔτος* (*etos*), year, from the plant having the same appearance all the year round.

SPECIES I.—ISOETES LACUSTRIS. *Linn.*

PLATES 1826 and 1827.

Plant aquatic, submerged. Roots glabrous. Corm 2-lobed, not clothed with the persistent and hardened bases of former leaves. Leaves subcylindrical or tetragonous, subulate, with broad sheathing bases having membranous edges and smooth backs, straight or recurved, erect or ascending, more or less translucent, without marginal bast-fibres, and without stomata or with very few. Phyllodes absent. Velum incomplete. Sporangia oblong-ovoid oval-ovoid or subglobose, unspotted. Macrospores with a white crustaceous integument, tuberculate, with the tubercles not coalescing into ridges. Microspores smooth.

SUBSPECIES I.—Isoetes eu-lacustris.

PLATE 1826.

Rabenh. Crypt. Vasc. Europ. Nos. 5 and 77.

I. lacustris, *Durieu* et Auct. plur. *Bab. Man. Brit. Bot.* ed. vii. p. 456. *Milde*, *Filices Europ.* p. 276.

Plant aquatic, submerged. Root-fibres glabrous. Corm 2-lobed, with 3 to 7 longitudinal furrows, not clothed with the persistent and hardened bases of former leaves. Leaves slightly translucent, dark green, subcylindrical-terete or subulate, with broad sheathing bases having

membranous margins and smooth backs, erect or ascending, straight or recurved, without marginal bast-fibres, and without stomata or with very few. Phyllodes absent. Velum incomplete. Sporangia oblong-ovoid or subglobose, unspotted. Macrospores with a white crustaceous integument, tuberculate with prominent blunt or truncated tubercles, which are not higher than broad.

Var. *α. genuina.*

PLATE 1826.

Leaves rarely exceeding 6 or 7 inches in length, stout, more or less recurved when the plants are not crowded; the membranous margins usually rather narrower than the firm portion of the leaf-base.

Var. *β. Morei.*

PLATE 1826*.

I. *Morei*, *D. Moore* in *Journal of Botany* (1878), p. 353.

Leaves 1 to 2 feet long or more; more slender and more tapering than in var. *α*, erect, or with the apices floating; the membranous margins usually as broad as the firm portion of the leaf-base. Macrospores in more saccate cavities, and fewer in number, and microspores smaller than in var. *α*.

Var. *α* occurs in lakes, growing submerged in the water, almost confined to hilly districts. In Wales it is frequent in Carnarvonshire, and occurs also in Merioneth and Denbigh. Frequent in the Lake district. In Scotland it occurs in most of the counties from the Forth and Clyde north to Caithness and Sutherland. Dr. A. R. Duguid found it in Loch of Carness, Orkney. In Ireland it occurs from north to south, chiefly in mountainous districts, and most plentiful in the west and north.

Var. *β* is found wholly submerged, or with the leaves floating on the water, in the Upper Lough of Bray, Co. Wicklow.

England, Scotland, Ireland. Perennial. Summer, Autumn.

Corm from the size of a cherry-stone to that of a hazel-nut, dark brown exteriorly, white when cut through. Root-fibres developed from the furrow which traverses the bottom of the corm, simple or once or twice forked towards the apex, brown. Leaves 2 inches to 1 foot long, deep green, rather rigid, tapering, usually recurved and diverging or erect; their bases dilated, with membranous pale yellow edges, withering and ultimately rotting off from the corm without

becoming hard; bases of the lowest leaves containing macrosporangia, and the upper ones microsporangia. Sporangia ovoid, about the size of wheat or barley grains, immersed in the substance of the leaf to which they are attached by the back, and more or less covered by a membranous outgrowth from the margin of the fovea or depression in the leaf termed the *velum*. Immediately above the fovea which contains the sporangium, there is a transverse pit in the leaf termed the *foveola*. The margin of this foveola nearest the sporangium is elevated, and forms the *labium*, and from the bottom of the pit there rises a membranous scale (*lingule*), attached by a broad base and acuminate upwards. Macrospores $\frac{1}{60}$ inch in diameter, furnished with prominent tubercles whose height does not exceed the breadth of their base. The prothallium is formed at the apex of the macrospore, and eventually ruptures it, the macrospore opening by 3 sutures corresponding with the converging lines at the apex.

Var. β is a very remarkable form, and may be a distinct subspecies, as which Dr. D. Moore has described it; and in this view of it he is supported by the authority of Prof. Caruel of Pisa, Prof. Duval-Jeune and Martius of Montpellier, and Dr. Ascherson of Berlin, who all consider it distinct from any described species.

It is with great reluctance that I express an opinion different from that of such great authorities, especially as I have not had an opportunity of seeing the plant in a recent state; but the most careful comparison of the specimens of *I. Morei* (which the late Dr. Moore has kindly sent me) with those of genuine *I. eu-lacustris* leads me to the conclusion that it is impossible to separate it even as a subspecies. From the time of Dillenius it has been known that there are two forms of *Isoetes eu-lacustris*, found growing in the same places, viz. a solitary form in which the leaves are thicker, shorter spreading, and more or less recurved, and another form, var. β , *Smith* (*Calamaria folio longiore et graciliore*, *Dill.*), a gregarious form, in which the leaves are flaccid, longer, more slender, and more brittle. Modern British authors regard these as states, and not varieties of the plant. *Smith* advanced the untenable hypothesis that the tall and slender variety might perhaps "be caused by those sudden risings of the waters so frequent in mountainous countries." But as the stout recurved-leaved plants grow in the same lake as the others, this is evidently a fallacious idea. Mr. E. Newman no doubt has pointed out the true cause of the variation of the plant, viz. that many of the spores "remain in the capsule and there germinate, throwing up dense tufts of slender leaves of a delicate green colour. I am indebted to Miss *Beever* for specimens which beautifully exhibit this germination of the seeds in situ, the parent plant and its offspring having been dried while in the most favourable state for displaying this peculiarity, to which Miss *Beever* particularly called my attention. These young plants rapidly increase in size, send their roots downwards into the earth, and their leaves upwards into the water; and from the

crowding incident on this condition of the seedling plants the elongate and slender leaves would naturally result." (Hist. Brit. Ferns, ed. ii. p. 392.)*

Every one who has gathered *I. eu-lacustris* must be familiar with this form, and to my eyes *I. Morei* seems to be merely a greatly developed state of this crowded form of *I. eu-lacustris*. No doubt, as Dr. Moore says, in habit it resembles *I. setacea* *Delille*, and *I. velata* *A. Braun*, but in the structure of the corm, of the leaves, and of the velum it differs from these plants, and agrees perfectly with *I. eu-lacustris*; for both *I. setacea* and *I. velata* have the leaves furnished with 6 peripheral bast-fibres.

Dr. Moore says it differs from *I. eu-lacustris* "in the veil which covers the macrosporangia being one-half longer, leaving only one-third of the spores naked;" but according to my experience the velum in *I. eu-lacustris* does usually leave only one-third of the spores naked. The macrospores seem quite similar in vars. α and β .

Attention was called to this remarkable form by Mr. A. G. More in 1871, but it was not until November 1876 that Dr. Moore obtained living specimens. These and some of the ordinary state he found retained their respective character in cultivation.

Lake Quillwort.

SUBSPECIES II.—*Isoetes echinospora*. *Durieu*.

PLATE 1827.

Rabenh. Crypt. Vasc. Europ. Ex. No. 76. Bab. Journ. Bot. 1863, p. 1. Milde, Filices Europ. p. 279.

Plant aquatic, submerged. Root-fibres glabrous. Corm 2-lobed without longitudinal furrows, not clothed with the persistent and hardened bases of former leaves. Leaves pellucid, pale green, sub-cylindrical-terete or -subulate, with broad sheathing bases having membranous margins and smooth backs, ascending, straight, without marginal bast-fibres, and without stomata (in the European plant). Phyllodes absent. Velum incomplete. Sporangia subglobose oval-ovoid. Macrosporangia with a white crustaceous integument, muricate with very prominent acute spine-like tubercles, which are higher than broad.

In lakes in mountainous districts "where there is peat at the bottom of the water." In a pool near Llyn-y-cwm near Llanberis (Mr. W. Wilson); and in the river that runs out of the lakes of

* Since the above was written I have seen Mr. Baker's monograph of the genus in the 'Journal of Botany,' 1880, pp. 65 *et seq.* He considers *I. Morei* a form of *I. lacustris*.

Llanberis, Carnarvon (Professor Babington). In a pool near the top of Ben-Voirlich, Dumbarton (Professor Babington, 1845). Loch of Drum, Aberdeenshire (where I gathered it in 1850). Loch Callater, Braemar (Mr. J. Sadler in 1878). Lake near the Gap of Dunloe, Killarney, and in the upper lake of Killarney, near Glenagh (Dr. Moore). Lough Gowla-na-gower and Lough na-Grooan, Iuish Boffan, Galway (Mr. A. G. More).

England, Scotland, Ireland. Perennial. Summer, Autumn.

Very similar to *I. eu-lacustris*, but according to Professor Babington the plants may be distinguished when growing by the "spreading leaves and pale green colour," in contrast "with the dark tint and usually erect leaves of *I. eu-lacustris*." The only place where I have collected this plant is in the Loch of Drum in 1850 and 1851. There the fronds are 2 to 6 inches long, spreading, flaccid, fragile, pellucid, pale green, with a large portion of the base paler: but the North American form, var. *Braunii*, is described by Dr. Engelmann as having the "leaves dark, and often olive-green, straight or commonly recurved," while another American variety *Boothii* has bright green stiffly-erect leaves. Both these American forms have stomata on the leaves, which, so far as I know, have not been observed in any European specimens, except some from 'Iceland' (Milde). The threads in the interior of the sporangia are more thickened, but the only conspicuous difference between the subspecies is that the tubercles on the macrospores of *I. echinospora* are very much longer and more acute than in *I. eu-lacustris*.

Probably the plant will be found in other stations, having been passed over as *I. eu-lacustris*.

Prickly-spored Lake Quillwort.

SPECIES II.—**ISOETES HYSTRIX.** *Durieu.*

PLATE 1828.

Rabenh. Crypt. Vasc. Europ. Nos. 101, 102, and 103.

I. Duriei, *Hook.* Brit. Ferns, tab. 26 (non Bory).'

Plant terrestrial. Roots pubescent. Corm 3-lobed, with 3 radiating furrows beneath, its lower part clothed with the persistent and indurated bases of former leaves. Leaves trigonous, filiform, with broad sheathing bases having membranous edges and a tuberculated band on the back, recurved and spreading in a circle, opaque, with numerous stomata. Phyllopodia or indurated bases of the leaves crustaceous, pitchy black, 3-toothed at the apex with the central tooth often minute. Phylloides usually present. Velum complete, wholly

covering the sporangia. Macrospores with a crustaceous white integument, tuberculate, with the blunt tubercles coalescing into ridges. Microspores tuberculate.

On damp spots in sandy pastures near the sea, L'Ancrese, common in the north of Guernsey. Discovered by Mr. George Wolsey, in June, 1860.

Channel Islands. Perennial. Summer.

Corm in the Guernsey specimens I have seen about the size of a pea, enclosed in a kind of husk formed by the greatly hardened persistent bases of the former leaves, until it attains a bulk about that of a hazel-nut. The leaf scales or phyllopodia are $\frac{1}{2}$ inch long, concave, pitchy black, the uppermost ones terminated by 3 teeth not above $\frac{1}{16}$ th inch long, and often shorter. The lower scales are in a decaying state, and have the teeth broken off; and sometimes the whole of the scales begin to decay as soon as they are matured by the deposition in them of dark coloured tissue. Leaves $1\frac{1}{2}$ to $2\frac{1}{2}$ inches long, deep dull green, something like those of *Scilla autumnalis*, strongly recurved, flattish above, and acutely convex beneath, so as to have a trigonous section, pellucid towards the base, which is greatly dilated over the sporangia, which are about the size of grains of pearl barley, and concealed by the velum. On the back of the pale enlarged leaf-base there is a band covered with small tubercles extending as far as the sporangium does. Macrospores much smaller than those of *I. lacustris*, and with much less prominent tubercles than even in *I. eu-lacustris*, and forming beaded lines, from their bases coalescing.

The above description is not that of the typical *I. Hystrix*. (*I. Hystrix forma loricata*, Rabenh. l. c. No. 101), which has persistent scales terminated by lateral spines $\frac{1}{4}$ or even $\frac{1}{2}$ inch long, with a short intermediate tooth, and a bulb from the size of a hazel-nut to that of a walnut.

The Jersey plant agrees well with *I. Hystrix forma desquamata subinermis* of A. Braun, Rabenh. l. c. Nos. 102 and 103 *b*.

Spiny Quillwort.

ORDER XCI.—SELAGINELLACEÆ.

Moss-like herbs or small shrubs with dichotomous or branched stems and minute entire or serrulate or denticulate leaves, either equal and regularly disposed round the stem, or bifarious and unequal, two being larger than the others and diverging right and left from the stem, while the smaller leaves are adpressed to it. Sporangia of two kinds, macrosporangia and microsporangia, which are produced in the axils of

modified leaves or bracts arranged in terminal spikes. Macrosporangia often solitary in the axils of the lowest bracts of the spike, but sometimes intermingled with the microsporangia, 3- or 4-lobed, and 3- or 4-valved, containing 3 or 4 (rarely 1 to 6), comparatively large roundish angulated macrospores. Microsporangia numerous, ovoid or subglobular, containing very numerous microspores. Prothallium developed on the apex of the macrospores, and fertilised by the antherozoids escaping from the cells of the microspores as in Isoetaceæ.

GENUS I.—SELAGINELLA. Spring.

The only genus; characters the same as those of the Order.

Name a diminutive of *Selago*, i.e. of *Lycopodium Selago*.

SPECIES I.—SELAGINELLA SELAGINOIDES. Gray.

PLATE 1829.

Rabenh. Crypt. Vasc. Europ. No. 63. Hook. Stud. Flor. p. 471.

S. spinulosa, A. Braun in Döll. Rhein Flor. p. 38. Bab. Man. Brit. Bot. ed. vii. p. 458.

Milde, Filic. Europ. p. 260. Koch, Syn. Fl. Germ. et Helv. ed. ii. p. 971. Fries, Summ. Veg. Scand. p. 83. Gren. & Godr. Fl. de Fr. Vol. III. p. 656. Wilkomm & Lange, Prod. Fl. Hisp. Vol. I. p. 14.

Lycopodium selaginoides, Linn. Spec. Plant. ed. iii. Vol. II. p. 1565. Smith, Eng. Bot. ed. i. No. 1148, and Eng. Flor. Vol. IV. p. 332. Newman, Brit. Ferns, ed. ii. p. 371.

Stem slender, shortly creeping, sparingly branched, with the branches decumbent, ascending at the apex. Leaves all similar, pointing in all directions, spreading or ascending, strap-shaped lanceolate, very acute, remotely spinous-ciliate on the margins. Spikes erect, cylindrical or clavate, solitary at the extremities of erect branches thicker than the barren ones. Bracts spreading all round, triangular-lanceolate, much larger than the leaves on the barren shoots, and drawn out into a more acute point so as to be cuspidate, strongly spinous-ciliate, passing without any break into the leaves of the fertile branch. Macrosporangia 3- or 4-lobed, and 3- or 4-valved. Macrospores with a few scattered papillæ.

In boggy ground, especially by the sides of small streams and ditches and on wet rocks; frequent in mountainous districts, also, in the north, on sandy ground near the sea. From Carnarvon, Flint,

Chester, Derby and York, north to Orkney and Shetland. Rare in the south, but frequent in the west, middle and north of Ireland.

England, Scotland, Ireland. Perennial. Summer, Autumn.

Stem 1 to 2 inches long, rarely more. Leaves bright green, shining $\frac{1}{16}$ to $\frac{1}{10}$ inch long, with a faint midrib, and commonly with 1 or 2 projecting spine-like serratures or teeth, which however are more conspicuous in the leaves towards the apex of the branches than on those towards the base, where as well as on the stem leaves they are sometimes absent. Spike-bearing branches 1 to 4 inches high, erect from a decumbent base. The spike is from $\frac{1}{2}$ to $1\frac{1}{2}$ inch long. Bracts $\frac{1}{10}$ to $\frac{1}{6}$ inch long, broad at the base, and much more strongly spinous-ciliate and more acuminate than the leaves, at first adpressed, afterwards spreading. Macrosporangia about $\frac{1}{25}$ inch in diameter, 3-sided. Microsporangia placed in the axils of the upper branches, and smaller than the macrosporangia.

Lesser Alpine Clubmoss.

EXCLUDED SPECIES.

SELAGINELLA HELVETICA. *Link.*

A specimen of this is included in Sherard's 'Herbarium,' but without any record of locality; with it, according to the Rev. W. W. Spicer, there is a label in the form of a paragraph from Ray's 'Synopsis,' ed. iii. From this it would seem Lobel (1570) supposed it to have been gathered on the Mendip Hills, Somerset; and Merrett (1667) by the Thames side at the Neathouses and Kingsbridge, Middlesex. The last certainly an error; the former probably so. See Phyt. 1851, p. 384.

ORDER XXII.—LYCOPODIACEÆ.

Herbs or small shrubs, often with creeping woody branched or forked stems, having adventitious roots, or rarely with subterranean branches apparently performing the office of roots, in one genus with tuberous roots. Leaves small, often resembling those of Juniper, in one genus all radical and subulate. Sporangia all similar, placed in the axils of modified leaves or bracts, arranged in terminal spikes, which often resemble small cones, more rarely scattered over the

upper part of the stem in the axils of the leaves, roundish or 3- or 4-lobed, 1- to 3-celled, 1- to 3-valved. Spores uniform, all extremely minute. In the only case in which germinating spores have been observed (those of *Lycopodium annotinum*), they had produced an irregularly lobed subterranean prothallium, destitute of chlorophyll, sparingly furnished with small root-hairs; the upper surface has numerous grooves and protuberances, in which antheridia and archegonia were found containing antherozoids. The archegonium was not observed, but the position it would occupy is indicated by the germinating plants. See Sachs' 'Text Book of Botany,' translated by Bennett and Dyer, p. 400. This agrees quite with the reproduction of Ophioglossaceæ, with which Berkeley has pointed out their connection previous to the discovery of the prothallium mentioned above. See 'Introduction to Crypt. Botany,' p. 549.

GENUS I.—LYCOPODIUM. Linn.

Sporangia roundish-reniform, 1-celled, 2-valved; spores marked with 3 striæ.

Herbs or small shrubs, often with creeping stems or rootstocks, and small leaves like those of Juniper or Savin. Sporangia usually in terminal spikes.

Name from *λύκος* (*lucos*), wolf, and *πούς* (*pous*), foot, to which the extremity of the stem has been compared.

SPECIES I.—LYCOPODIUM SELAGO. Linn.

PLATE 1830.

Rabenh. Crypt. Vasc. Europ. No. 95.

Stem short, not creeping, decumbent at the base, repeatedly dichotomous; branches erect or ascending, approximate. Leaves all similar, inserted all round the stem, crowded, 8-farious, adpressed or spreading, lanceolate strap-shaped, acuminate and acute, pungent or sub-pungent, entire, rarely spinous-serrate. Sporangia in the axils of ordinary leaves, not collected into terminal spikes, but distributed over the greater part of the branches.

Var. a. vulgatum.

PLATE 1830.

Leaves imbricated, adpressed, at least on the ultimate divisions of the branches.

Var. *β. recurvum*.

Leaves spreading or reflexed, usually longer and more decidedly strap-shaped than in var. *α*.

On heaths, rocks, and barren places, chiefly on mountainous districts, although it is found over the whole of Britain from Cornwall, Devon, and Sussex north to Orkney and Shetland; but it is a scarce plant in the low-lying counties of England. Frequent and widely distributed throughout Ireland.

England, Scotland, Ireland. Perennial. Summer, Autumn.

Stem short, or at least the rooting part of it, leafy to the base, often reddish, forking 2 to 5 times into branches from 2 to 7 inches long, very rarely a foot long; these branches rise from the procumbent part of the stem with a rather sudden curve, and when growing on rocks or beside hollows they frequently dip downwards before they ascend. Leaves $\frac{1}{10}$ to $\frac{3}{10}$ inch long, those on the lower part of the stem generally spreading or reflexed, and those in the upper part of the branches adpressed, but every intermediate form occurs between the extremes of the leaves being all adpressed, or all spreading; they are convex, beneath bright green or olive, and have no evident midrib. Generally the branches are quite continuous, but sometimes they are slightly annotinous, with slight indications of the annual growth. There is no marked division between the spikes and the branches, the leaves in the axils of which there are sporangia, being quite similar to the others. The sporangia are sometimes confined to the apex of the branches, but more usually are spread over the greater part of their erect portion. On the upper part of the stem small buds or bulbils, developed from the upper leaves, are to be found. These bulbils are formed in an irregular 6-cleft calyx-like body, developed out of the upper leaves; the bulbils consist of 5 lobes, of which 2 remain small, while the others develop into oval leaf-like bodies, ultimately at least as long as and much broader than the leaves of the plant. The bulbils appear to germinate whether they remain on the plant or fall to the ground. A detailed account of them will be found in Newman's 'British Ferns,' ed. ii. p. 378-380, and 'Phytologist' for 1844, pp. 84-86.

I have never seen British specimens of *L. Selago* with the leaves spinous-serrate. Milde includes under *L. Selago*, *L. suberectum*, *Lowe*, in which they are very conspicuously spinous-serrate; but this plant, from Madeira and the Azores, seems too different from *L. Selago* not to be separated from it at least as a subspecies, to which it has as good a claim as the North American *L. lucidulum*, *Michaux*.

Fir Clubmoss.

SPECIES II.—**LYCOPODIUM INUNDATUM.** *Linn.*

PLATE 1831.

Rabenh. Crypt. Vasc. Europ. No. 65.

Stem short, creeping, prostrate, applied to, and on the under side actually imbedded in the ground, simple or very sparingly branched; branches at first ascending, afterwards prostrate. Leaves inserted all round the stem, approximate, all turned upwards and slightly falcated so as to be secund, or a few of them on the under side of the stem adpressed to it, strap-shaped linear, tapering gradually to a very acute point, not pungent nor bristle-pointed, entire. Fertile branches 1 on each stem, rarely 2 at intervals, very rarely 2 close together, erect, densely leafy. Leaves on fertile branches similar to those of the stem, but ascending or adpressed, not secund. Spike occupying from half to one-third of the upper part of the fertile branch, oblong-fusiform or clavate-cylindrical, with its bracts resembling the leaves but larger, and broader towards the base, which has usually 1 tooth or sometimes 2 teeth on each side.

On damp heaths, growing generally on peat or sand. Rather frequent and generally distributed in England, with the exception of Wales. Rare and local in Scotland, where it occurs on Tent's Muir, Fife; Inverarnon, Dumbarton; and in the counties of Perth, Forfar, Elgin, Inverness, Ross, and perhaps Kincardine. In Ireland it appears to be very scarce, but has been found in counties Cork, Kerry, and in the Connemara district of Galway.

England, Scotland, Ireland. Perennial. Summer, Autumn.

Stem 1 to 4 inches long, attached to the soil at intervals by wiry roots. Fertile branches 1 to 4 inches high. Leaves $\frac{1}{8}$ to $\frac{1}{4}$ inch long, rather dull green, especially the older ones, not shining, with a slender midrib and a narrow hyaline margin. Spike always thicker than the fertile branch that supports it, $\frac{3}{4}$ to 2 inches long. Bracts $\frac{1}{8}$ to $\frac{3}{10}$ inch long, at first adpressed, afterwards spreading, and ultimately yellowish-olive. Sporangia transversely oval, opening near the base.

This is the only British Lycopodium in which the barren stems are annual, the basal portion dying off each year.

The American plant, called *L. inundatum*, is larger and stouter, with much longer and more subulate leaves, often with a few denticulations. The spike is much more conspicuous than in the European plant, and begins abruptly, and the leaves on its stalk have a tendency to be verticillate, and are more distant. Probably it ought to be

considered as a distinct subspecies, and bear the name *Bigelovii*, which is given to the larger form of it. *L. alopecuroides*, *Linn.*, another North American form, seems no more than a subspecies, with the leaves conspicuously ciliate, especially towards the base: the whole plant is much larger than *L. inundatum*.

Marsh Club-moss.

SPECIES III.—**LYCOPODIUM ANNOTINUM.** *Lim.*

PLATE 1832.

Rabenh. Crypt. Vasc. Europ. No. 67.

L. juniperifolium, DC. Fl. Fr. Vol. IV. p. 572.

Stem very long, creeping, prostrate, much branched; branches ascending or erect, unbranched or irregularly once or twice dichotomous. Leaves inserted all round the stem, rather distant, most of them turned upwards and slightly falcate so as to be subsecund; those the under side of the stem mostly adpressed to it, lanceolate strap-shaped, acute, not piliferous, entire or faintly denticulate; leaves on the branches 5-farious, crowded, ascending or spreading or slightly reflexed, decurrent, linear strap-shaped or narrowly elliptical-strap-shaped, acuminate and acute, pungent, remotely serrated, with callous points; those at the termination of each year's growth smaller and adpressed, which gives the branches the appearance of being constricted at intervals. Spikes oblong-cylindrical, subobtuse, terminating some of the branches. Bracts yellow, deltoid-ovate or roundish, abruptly acuminate so as to be cuspidate with the cusp frequently drawn out into a long point, cordate at the base, finely denticulate on the margins.

On heaths in mountainous districts. Rather local. On Glyder Fawr above Flyn-y-cwm, Carnarvonshire; Charnwood Forest, Leicestershire; Lake district. In the Scotch highlands it is more common, occurring on the Breadalbane, Clova, Braemar, and Inverness mountains. It is reported from Goatfell in Arran, and I have collected it in the south of Mull at an elevation which from recollection I should estimate at about 50 yards. In Orkney it occurs in Berridale, Hoy, and I believe in Ronsay.

England, Scotland. Perennial. Summer, Autumn.

Stem 1 or more yards long, tough, wiry, flexuous, rooting at distant intervals, sending up simple or once or twice forked branches 3 to 9 inches high. Leaves coriaceous, almost rigid, green inclining

more or less to olive, slightly shining, with a midrib ending in a sharp, almost spinous, point. Stem leaves $\frac{1}{3}$ to $\frac{1}{5}$ inch long; branch leaves $\frac{1}{5}$ to $\frac{1}{4}$ inch long, more serrated, and much closer together than those of the stem. Spikes $\frac{1}{2}$ to $1\frac{1}{4}$ inch long, $\frac{1}{8}$ to $\frac{1}{5}$ inch in diameter, often with a few of the leaves on the apex of the branch on which it is placed adpressed and smaller than the lower ones, which gives the spike the appearance of being shortly stalked. Bracts of the spike variable in shape, from narrowly ovate to roundish reniform, subcordate at the base, sometimes gradually acuminate into a triangular point, at other times with a linear subsetaceous cusp.

The North American plant appears to be identical with the European.

Interrupted Club-moss.

SPECIES IV.—**LYCOPodium clavatum.** *Lim.*

PLATE 1833.

Rabenh. Crypt. Vasc. Europ. No. 66.

Stem very long, creeping, much branched; branches at first ascending, afterwards prostrate, unbranched or irregularly dichotomous or pinnate. Leaves inserted all round the stem, approximate, most of them turned upwards and slightly falcate, so as to be subsecund; those on the under side of the stem adpressed to it, linear strap-shaped, acute, piliferous, finely and rather remotely spinous-dentate; leaves on the branches crowded, more closely placed than on the main stem, adpressed or ascending, incurved, similar to those on the stem, but less denticulate and the upper ones often quite entire. Peduncles from the termination of short branches, elongate, furnished with irregular whorls of small subulate leaves with membranous denticulate margins and terminal hairs, which are usually somewhat shorter than those of the stem-leaves. Spikes in pairs, more rarely solitary or three together, shortly pedicellate, linear-cylindrical or oblong-cylindrical, subobtuse. Bracts yellow, deltoid-ovate, gradually acuminate into a long cusp, which, at least in the lower bracts, often terminates in a hair, rounded at the base, finely denticulate on the margins.

On heaths and stony places. Rather frequent and generally distributed, though more common in mountainous districts.

England, Scotland, Ireland. Perennial. Summer.

Stem attaining the length of 1 or 2 yards, or even more; tough, wiry, rooting at distant intervals, much branched, but the branches

seldom remain erect or ascending after they are 1 or 2 inches high. Leaves $\frac{1}{5}$ to $\frac{1}{4}$ inch long, exclusive of the white hair-like point, rather thin, bright green, with an evident midrib. Peduncles 1 to 4 inches long, rather slender; spikes $1\frac{1}{2}$ to $2\frac{1}{2}$ inches long. Bracts at first adpressed and greenish, ultimately spreading or reflexed at the point, and straw-yellow. Sporangia reniform.

When *L. clavatum* is in fruit it cannot be mistaken for any other British species, this being the only one which has the spikes supported on a long slender peduncle. But sometimes when the hair-like point of the leaves is short, the barren stem bears some resemblance to that of *L. annotinum*; the leaves, however, of *L. clavatum* are thinner in texture, brighter green, less decurrent, and without the rigid almost prickly point which is found in *L. annotinum*; they are also less spreading, and almost always some of them at least have a white wool-like point, which indeed is sometimes as long as the leaf, and in the young plant generally forms a little tuft at the end of the growing branches. The North American *L. clavatum* is quite similar to the European.

Common Club-moss.

SPECIES V.—**LYCOPODIUM ALPINUM.** *Lim.*

PLATE 1834.

Rabenh. Crypt. Vasc. Europ. No. 96.

Stem rather long, creeping, prostrate, much branched. Branches ascending or erect, regularly two or three times dichotomous, so as to appear fasciculate; the ultimate branches of each fascicle of nearly equal length, approximate. Leaves inserted in four rows: those on the main stem remote and scale-like, strap-shaped, obtuse or subacute, entire; those on the branches approximate; the lateral ones opposite, placed edgewise to the stem, triangular subulate, falcate, broadest at the base, very acute, entire; those of the upper row imbricated, smaller than the lateral ones, narrowly elliptical-subulate, affixed by a narrow base, acute, entire; those of the lower row not imbricated, similar to those of the upper row, but smaller. Fertile branchlets repeatedly dichotomous, approximate, equal in length, usually conspicuously longer than the accompanying barren branchlets, with the leaves regularly imbricated in four rows round the stem, all similar, adpressed, lanceolate-subulate. Spikes solitary and sessile at the extremities of the ultimate divisions of the fertile branchlets, cylindrical; bracts ovate acuminate into a triangular cusp, subcordate, erose or denticulate.

On bare and stony places, common on mountains, but rare in low

districts. With the exception of a station at Dunkerry beacon, south Somerset, it does not occur in the south of England, but from Cardigan, Brecon, Montgomery, Denbigh, Chester, Derby, and York, it is found northwards, as far as Orkney and Shetland. It occurs from north to south of Ireland.

England, Scotland, Ireland. Perennial. Summer.

Stem very tough, wiry, often partially buried, 9 inches to 2 feet long, round, whitish, with minute scale-like leaves. Branches $\frac{3}{4}$ to 5 inches high, produced at intervals; but each branch is so repeatedly divided that it looks like a little shrub. The barren branches, from the mode in which the leaves are inserted, appear flattened, convex above and concave beneath, with a ridge formed by the line of lower leaves. The leaves have some resemblance to those of the Savin, and are coriaceous, $\frac{1}{10}$ to $\frac{1}{8}$ inch long, rather pale dull green above, still paler and glaucous beneath. Ultimate branchlets $\frac{1}{2}$ to 2 inches long. Fertile branchlets 1 to 3 inches high, repeatedly dichotomous like the sterile ones, so that the spikes are produced in level-topped fascicles, containing commonly some multiple of four, such as 8 or 16 spikes. Spikes $\frac{1}{4}$ to $\frac{3}{4}$ inch long, a little thicker than the branches which support them. Scales at first olive and adpressed, afterwards yellowish-brown and spreading. Sporangia reniform, opening to the base.

Savin-leaved Club-moss.

EXCLUDED SPECIES.

LYCOPodium COMPLANATUM. *Lin.*

Reported from near Bramshot, Hants, and from Worcestershire, but requires confirmation. Under *L. complanatum* are included two plants—*L. anceps*, Wallroth, to which many authors confine the name of *complanatum*; the other *L. Chamaecyparissus*, A. Braun. Both these grow in Belgium and Scandinavia, and *L. Chamaecyparissus* in France. It is by no means unlikely to occur in Britain, especially as *L. alpinum* is not recorded from either of the supposed stations for *L. complanatum*. The barren branches of the two are so similar, that they can scarcely be distinguished; but in *L. complanatum* the spikes, 2 to 6 in number, are borne on a long peduncle, as in *L. clavatum*. Dr. Milde thinks it not improbable that *L. alpinum* may be merely a form of *L. complanatum*.

ORDER XCIII.—OPHIOGLOSSACEÆ.

Perennial herbs, frequently with a tuberous root producing 1 or more fronds with straight (not circinate) vernation. Frond commonly with 2 branches, the lower sterile, the upper fertile; very rarely the fertile frond is separate from the barren one, though some species produce accessory sterile fronds, or sterile fronds only on young and weak plants. Sporangia in simple or compound spikes, naked, coriaceous, without any thickened ring, 2-valved, opening by a transverse slit, rarely by a vertical slit. Spores all similar, very minute. Prothallium subterranean, destitute of chlorophyll, tuberiform.

The sporangia in Ophioglossaceæ are produced by a metamorphosis of the leaf itself, not from a single epidermal cell, as in Filices, from which these plants differ also in their straight vernation and subterranean prothallium destitute of chlorophyll.

GENUS I.—OPHIOGLOSSUM. *Linn.*

Herbs with a short fleshy tuberiform caudex, præmorse below. New frond produced exterior to the base of the stalk of that of the preceding year. Barren branch of the frond entire, more rarely forked or palmate; fertile branch stalked, undivided. Sporangia connate, disposed in a stalked 2-ranked simple linear flattened spike.

Name from *ὄφης* (*ophis*), serpent, and *γλῶσσα* (*glossa*), tongue.

SPECIES I.—OPHIOGLOSSUM VULGATUM. *Linn.*

PLATE 1835.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 7.

Caudex oblong-cylindrical, very slightly swollen. Fronds usually solitary. Barren segment or frond ovate or oval or elliptical, rarely oblanceolate-elliptical, not greatly attenuated at the base, entire, rather thick, fleshy; veins conspicuous in the dried plant when held against the light, anastomosing and forming rather elongate areolæ at the base and centre of the frond, and short roundish-polygonal ones at the margin; primary areolæ containing secondary ones; cells of the epidermis flexuose-sided. Spike stalked, strapshaped-linear, compressed, apiculate; stalk cylindrical. Spores tubercled.

Var. *a. genuina.*

PLATE 1835.

Frond solitary, very rarely with a second frond or a barren frond from the same caudex. Barren segment or barren frond generally widest below the middle, more or less rounded at the base, or at least not greatly attenuated, even in fronds which have no fertile spike. Plant 4 to 15 inches high; spike $\frac{5}{8}$ to $1\frac{3}{4}$ inches long.

Var. *β. polyphyllum.* A. Br.

A. Braun in *Seubert's Flora Azorica*, p. 17. *Milde*, *Fil. Europ.* p. 189.

O. vulgatum, var. *microstichum*, "*Acharius*," *T. Moore*, *Nat. Print. Brit. Ferns*, 8vo. ed. Vol. II. p. 336.

O. vulgatum, var. *ambiguum*, *Coss. & Germ. Fl. des Env. de Paris*, ed. ii. p. 874. *Bab. Man. Brit. Bot.* ed. vii. 455.

O. vulgatum, *polyphyllum*, a. *intermedium*, *Vigineix*, and b. *cuspidatum*, *Milde*, *Fil. Europ.* pp. 188-189.

O. Azoricum, *Presl*, *Suppl. Tent. Pterid.* p. 309, teste *Milde*.

Fronds often with a second frond, or 1 or even 2 barren fronds from the same caudex. Barren segment or barren frond generally widest at or even above the middle, attenuated at the base, at least in those fronds which have no fertile spike. Plant 1 to 7 inches high; spike $\frac{1}{4}$ to $\frac{3}{4}$ inch long.

In meadows and pastures, rather common, and generally distributed throughout England, rather rare in Scotland extending north to Aberdeen, Elgin, Perth, and Argyle; possibly the Burn of Sandybank, Scalloway, Shetland, may be a locality for var. *a*, but more probably it produces var. *β*. Frequently throughout Ireland.

Var. *β* in elevated sandy ground, Scilly Islands, St. Agnes (Mr. F. Townsend), St. Martin's (Mr. I. Ralfs). Between Barmouth and Harlech, Merioneth (Mr. C. Bailey). In Orkney it is found at Barnorie (Swanbister), and Voeness Point, Smoogrow, both in Orphir, seen by myself; Black Craig, Stromness (Miss P. Duchar); Calf of Flotta (Mr. W. Irvine Fortescue), Calf of Cava (Dr. H. Halero Johnston), Fara (Mr. J. Johnston), Hunda and Rysay Little (Miss Fortescue), all in Scalpa Flow.

England, Scotland, Ireland. Perennial. Summer. (Var. *β* in Orkney. Autumn.)

Caudex fusiform, yellowish, marked with transverse pits producing fleshy fibres about the thickness of a darning-needle, which are brittle, some of them forming buds on their upper surface close to

the extremity from whence new fronds are developed. From the top of the caudex arises the frond, with its base enveloped in an olive-brown stipule-like sheath, the remains of the covering which envelops the bud. At the time of fructification an elongated conical bud is found, which is the rudiment of the frond of the succeeding year. At the same time there may be seen the withered remains of the scale which enclosed the frond of the preceding year, and the scars whence still earlier fronds have rotted, and it is these scars which give a pitted appearance to the caudex. Fertile frond 4 to 15 inches high, the barren branch usually placed about the middle, but very variable in this respect; barren branch resembling a sessile decurrent leaf embracing the base of the stalk of the spike, $1\frac{1}{2}$ to 4 inches long, varying from broadly ovate or oval to rather narrowly elliptical, acute or rather obtuse, entire at first, convolute when it appears above the ground in April, afterwards with the sides folded together, ultimately opening out until it is nearly flat. Fertile branch of the frond consisting of a stalked spike. The length of the stalk of the spike seems to have no relation to the luxuriance of the plant. In my herbarium are specimens with the stalk of the spike from a little over 1 inch to nearly 8 inches. Spike $\frac{3}{4}$ to 2 inches long, linear, flattened on both faces, but with a wider space between the series of sporangia on the side away from the barren branch; on each side of the groove, i.e. at the edges of the spike the sporangia are imbedded, they are contiguous and adherent to each other and at length open by a wide transverse slit; the apex of the spike is apiculate, and bare of sporangia. The spores are very minute and of the same sulphur colour as those of the genus *Lycopodium*; they are subglobular, and marked with distinct blunt tubercles. Occasionally there are two spikes produced and more have been observed, though not by myself.

In young or weakly plants the frond consists solely of a barren branch, quite similar to that of the barren branch of the complete frond; like it, it is thick, fleshy, bright green; it is so thick that when held up against the light when living the venation is scarcely perceptible, but when the plant is dried it may be very clearly seen; there is no midrib, but the veins anastomose, forming meshes which are long and narrow towards the base and along the centre of the frond, but become smaller and shorter in proportion as they approach the margin; the primary meshes are again divided into smaller meshes by finer anastomosing veins: some of these secondary veins are often free.

Of var. β there are two forms; that found by Mr. Townsend in the Scilly Isles and the Orkney plants from the Calf of Flotta and the Calf of Cava belong to the form termed *intermedium* by Vigineix and, according to Milde, the *O. vulgatum* var. *ambiguum* of Cosson and Germain. My specimens are from 1 to $2\frac{1}{2}$ inches high; the barren branch of the frond is broadly oval and situated usually above the

middle of the step so that the spike has a stalk sometimes as short as $\frac{1}{2}$ inch, or even less. The Orphir plant appears to be the form termed *cuspidatum* by Milde; some of my specimens of it are quite similar to the specimens of *O. polyphyllum*, which I have from Madeira and the Azores; it is generally 2 to 4 inches high, but in the year 1855 I found specimens 7 inches high, though in no other year have I found them above 5 inches and generally less. The barren branch is usually placed below the middle of the stem and mostly very conspicuously so, so that the stalk of the fertile branch is 3 or 4 times longer than the portion between the caudex and the barren segment. Two fronds from one caudex are common, and frequently these accessory fronds are without a spike. In both forms the spike is from $\frac{1}{4}$ to $\frac{3}{4}$ inch long. Except in this particular and in size it does not differ from the ordinary form of *O. vulgatum*. In Orkney it grows only on fine short grass, often within the earthen enclosures where sheep are driven, termed "buchtts." Cultivated in pots in a cool greenhouse it maintains its small size, and fruits freely, but it appears to be much less hardy than the common *Ophioglossum*, and I cannot get it to thrive in the open ground; it seldom survives more than the one season after it is planted out, and I have never got it to produce a fertile spike in the garden, though the common form of *O. vulgatum* grows wild about Balmuto.

The plant is quite easy to cultivate and certainly does not require to grow amongst herbage; it increases rapidly by means of the root-fibres which run along almost horizontally beneath the surface of the ground. Some of these become swollen at the extremity, and beneath this swelling a root is formed—apparently a continuation of the fibre on which the swelling exists; the swelling develops into a bud which in the succeeding year produces a barren frond; the year after, this is succeeded by another barren frond, and it is not till the third or fourth year that a frond with both barren and fertile branches is developed. As the runner-like roots persist for more than one year, we frequently find two or more plants in different stages of development connected by them with the parent. A detailed account of the growth of *Ophioglossum vulgatum*, by Mons. Duval Jouve, will be found in C. Billot, 'Annotations à la Flore de France et d'Allemagne,' pp. 247-250.

Common Adder's-tongue.

SPECIES II.—**OPHIOGLOSSUM LUSITANICUM.** Linn.

PLATE 1836.

Rabenh. Crypt. Vasc. Europ. Exsicc. Nos. 28 and 111.

Caudex oblong-fusiform, slightly swollen. Primary frond often accompanied by 1 or more barren ones. Barren segment or frond greatly attenuated at the base, strapshaped-elliptical or strapshaped-

oblanceolate, entire, very thick and fleshy; veins scarcely observable (even in the dried plant) when held against the light, anastomosing and forming a few elongate areolæ; primary areolæ usually without secondary ones; cells of the epidermis straight-sided. Spike stalked, oblong or linear-oblong, compressed, rostrate; stalk slightly thickened upwards. Spores without tubercles.

In pastures, very local, discovered by Mr. George Wolsey in the island of Guernsey; "it occurs amid short and very level herbage sloping towards the south, on the summit of rocks on the south coast of the island and not far from Petit Bot Bay. On this elevated down are a few scattered and stunted furze bushes, and around these the grass is as usual somewhat longer, and here the little Adder's-tongue is not quite so minute as on the level turf where it scarcely attains an inch in height. It grows in company with *Trichonema Columnæ* and *Scilla autumnalis*, and on the 17th of January was in full fruit." ('Phytologist,' 1854, p. 80.)

In the fifth edition of the 'History of British Ferns,' p. 195, the late Mr. E. Newman states that it is found also near the Land's End in Cornwall, but I have been unable to get any information about the Cornish locality. Mr. H. Chichester Hart reports it from "the north side of Horn Head, Donegal," where he found a "few plants in August, 1878." ('Journ. of Bot.' 1879, p. 149.) From the date of fruiting and the unlikeliness of *O. Lusitanicum* occurring so far north, I fear it is likely to prove *O. vulgatum*, var. *β. polyphyllum*.

England? Ireland? Channel Islands! Perennial. Winter.

The Guernsey plant is 1 to 2 inches high. The sterile branch of the frond is generally placed about the middle of the stem, and is $\frac{1}{2}$ to 1 inch long, very much attenuated at the base, acute; the stalk of the spike varies from $\frac{1}{4}$ to 1 inch. The spike itself is from $\frac{1}{10}$ to $\frac{3}{10}$ inch long.

Besides the small size and the winter fructification, *O. Lusitanicum* offers several points of contrast with *O. vulgatum*, although it does present some resemblance to the smaller states of the var. *polyphyllum* of the latter, with which it agrees in having often more fronds than one produced simultaneously from one caudex. In *O. Lusitanicum* the caudex is considerably more swollen and tuber-like than in *O. vulgatum*. The barren fronds and barren segments of the complete frond are always narrower and much more attenuated at the base, much thicker in texture, so that it is difficult to make out the venation; but this may be done by steeping the dried plant in water, and holding it against the light. The network of veins is then seen to have the meshes much more uniformly elongated, and the

primary meshes do not (or but rarely) contain secondary veins. The cells of the epidermis are separated by straight boundary lines, while in *O. vulgatum* the boundaries of the cells are sinuous. The spike contains fewer sporangia in each row; in the Guernsey plant they are three to six on each side; but I have Continental specimens with as many as ten in the row, and Milde says there are sometimes nineteen. The sporangia do not extend so near the apex of the spike as in *O. vulgatum*, the bare part extending like a little point or spur beyond the fertile part and bearing a much greater proportion to the length of the spike than in *O. vulgatum*. The spores are considerably smaller than in *O. vulgatum*, and are quite smooth.

Dwarf Adder's-tongue.

GENUS II.—BOTRYCHIUM. *Schwartz.*

Herbs with the caudex not tuber-like, passing downwards into a slender creeping branched root. Frond produced within the base of the stalk of that of the preceding year. Barren branch of the frond varying from oblong and pinnate or even only pinnatifid to deltoid and ternately decomposed; fertile branch stalked or sessile, once to 3 or 4 times compound, oblong-triangular or deltoid, nearly all in one plane or incurved. Sporangia free, disposed in a distichous compound or decomposed spike.

Name from *βότρυς* (*botrus*), a bunch of grapes, from the appearance of the fertile branch of the frond.

SPECIES I.—BOTRYCHIUM LUNARIA. *Schwartz.*

PLATE 1837.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 9.

B. lunatum, Gray, Nat. Arr. Brit. Plants, Vol. II. p. 19.

Osmunda Lunaria, Linn. Spec. Plant. p. 1519. Sm. Eng. Bot. ed. i. No. 318.

Base of the frond without a slit on one side where it encloses the bud that forms the frond of the succeeding year. Sterile segment of the frond placed about the middle or above the middle of the whole frond, sessile, oblong or ovate-oblong, pinnate; terminal segment truncate and incised at the apex; pinnae lunate or fan-shaped, entire or crenate, or more rarely incised at the apex, without a midrib; veins radiating from the base, repeatedly forked, not extending quite to the margin; cells of the epidermis straight-sided. Fertile branch of the frond conspicuously stalked; stalk often exceeding the length

of the barren portion; lamina a compound spike, triangular or deltoid, with the primary branches spreading.

Var. *a. genuinum*.

Margins of the pinnæ entire or crenate.

Var. *β. incisum*. Milde.

B. Lunaria, var. *Moorei*, *Lowe*, Native Ferns, Vol. II. Tab. 76 b.

B. Lunaria, var. *rutaceum*, *Fries*, Summ. Veg. Scand. pp. 83, 252.

Margins of the pinnæ rather deeply and irregularly incised.

In pastures and on heaths where the herbage is short. Not very common but generally distributed, occurring from the extreme south of England north to Orkney and Shetland. Sparsely distributed throughout Ireland, and reported in the 'Cybele Hibernica' to be plentiful in some of the limestone pastures of Galway and Clare. Var. *β*, Halifax, Yorkshire; Crosby Ravensworth, Westmoreland; Horsley, Tyneside, Northumberland! Pentland Hills, Edinburgh! Kilnasaton, Dublin.

England, Scotland, Ireland. Perennial. Summer.

Caudex or rootstock obliquely descending, thickened upwards, creeping, sending forth fleshy root-fibres which are simple or once or twice branched. Plant 2 to 10 inches high; stipes stout, clothed at the base with a brown lacerated membrane formed from the decayed frond of the preceding year, and enclosing within its hollow base the rudiment of the succeeding year's frond. Sterile branch $\frac{1}{2}$ to 3 inches long, with from 3 to 8 pairs of fleshy bright-green pinnæ. These pinnæ are from $\frac{1}{8}$ to $\frac{1}{2}$ inch long and usually broader, the larger ones nearly semicircular and attached by a wedge-shaped base, each side of which is curved, so as to leave a blunt cusp directed backwards on either side where it meets the curve of the semicircle; the upper pinnæ attain little more than a quarter of a circle, and have the wedge-shaped base more excavated on the posterior than on the anterior side of the base. The pinnæ are all connected by a herbaceous strip down each side of the midrib of the barren branch of the frond; when young these pinnæ or segments are folded inwards over the fertile branch of the spike, the lower cusp of each pinna overlapping the upper cusp of the pinna situated below it; the terminal lobe is commonly trifid. The stalk of the fertile branch between the barren branch and the base of the spike is from $\frac{1}{2}$ to $2\frac{1}{2}$ inches long; the spike itself is from $\frac{1}{2}$ to $2\frac{1}{2}$ inches, the primary branches spread horizontally to the right and left; these branches, or at least the lower ones, are generally compound and triangular, becoming

shorter as they approach the apex of the spike; but more rarely they are twice compound, and in small specimens they are all simple. The sporangia are arranged along the edges of the ultimate divisions of the spike, on their inner side, that is, looking towards the barren frond; they are about the size of poppy-seed or a little larger, at first green, afterwards orange. The spores are pale yellowish-white, roundish-trigonus, smooth, areolated.

The var. β scarcely deserves mention. It differs merely in the crenatures which are often present in the more common form, being separated by more or less deep incisions of unequal depth, so as to give a fimbriated appearance to the margins of the pinnae.

Monstrosities occur in which the barren branch is tripartite, each division resembling the ordinary barren branch of the frond. This is the var. *tripartitum* of Moore ('Nat. Print. Brit. Ferns,' 8vo. ed. vol. ii. pp. 324 and 332), which was found at Kilmashogue Hill, co. Dublin, by the late Dr. Kinahan, and called by him var. *cristatum*. I have a monstrous specimen from Southernness, Kirkcudbright, collected by the late Sir William Jardine, in which the fertile branch is tripartite, producing 3 spikes. I have another from Northumberland, in which, from the side of the barren segment, a branch is produced, the lower part of which is barren and the upper fertile. I have 2, one from Northumberland and the other from Kirkcudbright, in which, from the base of the lowest pinna of the fertile segment, a stalked compound spike is produced; and lastly, I have one from Northumberland in which sporangia are placed round the edges of the pinnae of the barren segment.

Botrychium Lunaria evidently increases by subterranean buds; but the origin of these buds has not, so far as I know, been ascertained. In all probability they are developed at the extreme apex of runner-like shoots, or in the axils of their forks. The bud so produced remains in a rudimentary state underneath the ground, instead of springing up at once into a barren frond, and it is not until the fourth year that it rises above ground, at which time both fertile and barren branches are fully developed. The plant is said to appear in April; but in cultivation I have never found it do so earlier than the beginning of May, and it dies off in August. If the base of the stipes of the plant be cut longitudinally, it will be found to contain the young frond of the ensuing year, and within this the frond for the next again. This has been worked out by the late Mr. Newman, whose observations were made in May 1843, and he found that each frond was placed alternately, "*i.e.*, having laid all the specimens before me with the fruit on the right-hand and the leafy portion on the left, then the frond for 1844 invariably had the fruit on the left and the leafy portion on the right; the frond for 1845 appearing to be again reversed, having the fruit on the right and the leafy portion on the left." (Newman, 'Brit. Ferns,' ed. iii. p. 316.)

There is not the slightest reason for thinking that the Moonwort

or the Adder's-tongue is parasitic, yet fern-growers seem to think it cannot be cultivated for any length of time unless grown in a tuft of grass. Mr. Newman goes the length of saying that it should be dug up with a large sod and placed in a pot, and the grass kept short with a pair of scissors, and watered in dry weather "for the purpose of keeping the grass green and vigorous;" and Mr. Moore states that Mr. Wollaston, one of the most successful cultivators of Ferns, has told him "that he finds that to keep the plant over the second year, it is absolutely necessary to grow it in a tuft of grass." I have grown plants of it for 4 years in an unheated greenhouse without any herbage about it, and it thrives well. The plants were taken up in June, the whole of the surrounding grass removed, but the soil left about the roots. They were potted in light loam from mole-hills in the field where they grew, interspersed with fragments of limestone for drainage, and received no attention except removing any extraneous plant that appeared in the pot. Previously, I had tried growing it with grass, and found the grass flourished and the *Botrychium* died. I suspect each frond is short-lived, as in the wild state it is often not seen for years in a spot where it has been found.

Moon-wort.

EXCLUDED SPECIES.

BOTRYCHIUM RUTACEUM. *Schwartz.*

B. matricariifolium, *A. Braun.* *Milde*, *Fil. Europ.* p. 195.

B. Lunaria, var. δ , *Sm.* *Eng. Fl.* Vol. IV. p. 328.

The supposed authority for this is a passage in Ray's 'Synopsis,' where he mentions a plant, "Lunariam minorem ramosam et Lunariam min. fol. dissectis. Westmoreland. D. Lawson hujus plantæ varietates esse; non distinctas species opinatur. D. Doody ('Syn.' 11. App. 340) Lunariam minorem foliis dissectis revera distinctam speciem vult, cum segmenta seu lunulæ non solum eminenter sint sectæ, sed planta etiam elatior sit et botrus racemosior. Est Lunaria botrytis minor pinnulis laciniatis in Borealibus nostris (*Pluk. Ann.* 288). Mr. Doody received it from Sir Thomas Willughby, but "hath since seen it several times gathered by our herbwomen." (*Raii 'Syn.'* 129.)

From this passage Mr. Newman draws the following conclusions:—

- "1. That Ray supposed there were two British species of *Botrychium* distinct from *Lunaria*.
- "2. That Mr. Lawson thought them both varieties of *Lunaria*.

“3. That Dillenius believed one of them, described as with ‘foliis dissectis,’ to be a distinct species.

“4. That this species, or supposed species, was ‘found by or known to Ray, Lawson, Doody, Willughby, and the herbwomen.’” (Newman, ‘Phyt.’ 1854, p. 30.)

No one can doubt that Mr. Newman is right in his deductions, but I do not see how they prove Ray’s plant to be *B. rutaceum*. There is no mention of the midrib to the pinnæ, nor of their being pinnatifid: and the mere mention of lunules in connection with the pinnæ would seem to exclude the idea of *B. rutaceum*, in which the pinnæ have no lunate appearance whatever. Again, *B. rutaceum* is ordinarily a smaller plant than *B. Lunaria*. I am inclined to add a fifth deduction to those of Mr. Newman, viz.:

5th. That this species or supposed species is *B. Lunaria*, β . *incisum*, *Milde*, which I have mentioned in its proper place.

There still remains a passage in Smith’s ‘English Flora.’ After describing the ordinary form of *B. Lunaria*, he adds the following paragraph:—

“ β has a branched stalk, bearing several leaves and compound spikes alternately disposed. γ is a very slight variety, with more jagged leaflets than ordinary. δ has pinnatifid leaflets and a more spreading habit. All these varieties, and perhaps others, are found occasionally intermixed here and there with the plant in its proper or common form; but never, as far as I could learn, so numerous distinct as to have the appearance of a different species.” (Sm. ‘Engl. Fl.’ vol. iv. p. 329.)

In this paragraph β is the monstrous form termed *tripartitum* by Mr. Moore; γ is the plant I have before mentioned as *B. Lunaria*, β . *incisum*; and δ is probably the true *B. rutaceum*. Smith appears, if not to have seen, at least to have heard of, the occasional occurrence of all these forms; and as *B. rutaceum* is a plant likely to occur in Britain, and liable to be overlooked, it is just possible that it may really be a native.

BOTRYCHIUM LANCEOLATUM. *Ångström.*

B. rutaceum, *Newm.* in part, *Hist. Brit. Ferns*, ed. iii. pp. 320–324.

Mr. Newman writes of a *Botrychium*, which he supposes to be *B. rutaceum*, “Mr. Cruickshank says in a note: ‘I found it on the Sands of Barry, near Dundee, in August, 1839. I observed but

three specimens, all of them exactly alike excepting a small difference in size, and I could find none of the common form of the plant growing near them.' Mr. Cruickshank sent me a drawing, which I did not at the time recognise as representing the present species (*B. rutaceum*). A carefully accurate engraving of this will be found at p. 324, Newman's *Brit. Ferns*, ed. iii. p. 321."

Of this drawing Mr. Moore says, "Dr. Milde's own illustrations of *B. lanceolatum*, including Fl. Dan. T. 18, fig. dext. are most nearly accordant with the figure of the Dundee plant, which should probably bear the name of var. *lanceolatum* instead of *rutaceum*, hitherto applied to it." (Moore, 'Nat. Print. Brit. Ferns,' 8vo. ed. vol. ii. p. 332.)

Under *B. lanceolatum* Dr. Milde says, "Newm. Hist. of Brit. Ferns, 1854, figura pag. 324, ad *B. lanceolatum* pertinere videtur" (Milde, 'Fil. Europ.' p. 197).

I do not think there can be any doubt that Mr. Newman's figure here referred to represents *B. lanceolatum*, and not *B. rutaceum*; neither have I any doubt that Dr. Milde is right in considering that *B. Lunaria*, *B. rutaceum*, and *B. lanceolatum* are three distinct species. Unfortunately no further information can be obtained about the plant from the Sands of Barry, nor can any of Mr. Cruickshank's three specimens be traced to their present owners, so far as I can discover. No one else has found it there, still *B. lanceolatum* seems to have a better claim to be included in the British lists than *B. rutaceum*."

ORDER XCIV.—FILICES.

Herbs, rarely trees, very rarely annuals, sometimes with creeping buried or exposed rootstocks, in which case the leaves or fronds are few and distant, in other cases with a stem (*caudex*) or in Tree-ferns a trunk, producing a circle of fronds like the feathers of a shuttlecock. Fronds very various in shape and division, usually supported on a stalk (*stipes*) which is continued as a midrib through the expanded part of the frond, and there is termed the *rachis*. Sporangia borne on the back or margin of the fronds, usually attached to the veins, each formed from a single epidermal cell, opening transversely or longitudinally, with a more or less complete vertical or transverse or apical ring of thickened tissue (*annulus*). The sporangia are collected into groups termed *sori*, which are round, oblong,

linear, or curved, and sometimes naked, sometimes covered when young by a membrane (*indusium*), sometimes enclosed in pouches (*involucres*). Prothallium flat, green, resembling a frondose Liverwort, producing on its under side archegonia and antheridia, the former producing a new plant when fertilised by the antherozoids of the antheridia.

According to Dr. W. G. Farlow, in *Pteris serrulata*, the prothallium was found in about 50 cases to produce a young plant, where no traces of archegonia were seen. See 'Journ. Bot.' 1874, p. 185. If this viviparous production of young plants be general, it may account for the numerous curious facts that occur in the rearing of Ferns from spores.

SUBORDER I.—OSMUNDACEÆ.

Sporangia with an incomplete annulus on one side immediately beneath the apex, opening by a longitudinal slit on the side opposite to the incomplete annulus, and extending across the apex.

GENUS I.—OSMUNDA. *Linn.*

Caudex massive. Fronds tufted, coriaceous or herbaceous, pinnate or bipinnate. Sporangia on a separate frond or on a portion of a frond so contracted that it appears to be made up of clusters of sporangia arranged in a compound spike, rarely with the barren portion interrupted by a few fertile lateral pinnæ.

Name *Osmunda*, a Saxon name of the god Thor. But some authors derive it from *Osmund*, a Saxon waterman, who is said to have hidden his wife and children among the Royal Fern on an island in Loch Lomond, during an incursion of the Danes.

SPECIES I.—OSMUNDA REGALIS. *Linn.*

PLATE 1838.

Rabenh. Crypt. Vasc. Exsicc. No. 10.

Stipes nearly as long as the laminae of the frond, rarely only half as long. Barren frond subcoriaceous, pale green, glabrous when mature, clothed with cinnamon-coloured arachnoid hairs when young, which come off in floccose patches as the frond develops, oblong or ovate-oblong, with a triangular apex, bipinnate; ultimate pinnules strap-shaped or oblong strap-shaped, obliquely truncate or sometimes half-cordate at the base, tapering towards the subobtusely or subacute

apex, very minutely serrulate or crenate, or almost entire; veins running from the midrib of the pinnules to their margins, twice or thrice forked. Fertile fronds similar to the barren ones, but with 3 to 9 of the upper pairs of pinnae and the apex of the frond bearing contracted spur-shaped pinnules, thickly clothed with roundish and often coalescent glomerules of sporangia.

In bogs, meadows, wet heaths, and damp woods, and on wet ledges of rock. Sparingly distributed over England and Scotland, but much more abundant towards the west side of the island, extending from Cornwall, Devon, Dorset, Hants, Sussex, and Kent, to Sutherland and Caithness. It does not appear to be recorded from Orkney; but I think the late Mr. Robert Heddle told me he had found it there. Generally distributed throughout Ireland, but there also more plentiful in the west.

England, Scotland, Ireland. Perennial. Summer, Autumn.

Plant with few heads, the caudex attaining a large size before it divides; divisions of the caudex nearly vertical, thickly clothed with the decayed bases of former fronds, in old luxuriant plants sometimes attaining a height of 2 feet above the ground, but in exposed situations only rising a few inches. Fronds 5 to 12, erect or when very luxuriant arching backwards, usually 2 to 4 feet high, but in favourable localities often much taller. I have seen it 5 or 6 feet high in the Isle of Bute; Mr. Newman has measured fronds 8 feet high on the banks of Loch Fyne; Mr. W. Bennett records it about the same height in Merivale Wood, at the foot of Leith Hill, Surrey; and Mr. T. Moore says it is occasionally 10 to 12 feet high in very damp, sheltered spots. The rachis is attached by a narrow base to the caudex, and gives off a strong root-fibre from its back above the point of attachment, above which it is greatly enlarged and furnished on each side with a stipule-like expansion, something like the blade of a feather, or still more like the pen found in the cuttlefish called the squid (*Loligo*): in large plants this wing is from 2 to 4 inches long, projecting $\frac{1}{4}$ to $\frac{1}{2}$ an inch, it ends rather abruptly upwards; it is plicate and crisped at the margin, and splits readily from above obliquely downwards. The rachis itself is green, convex on the back, flattened on the anterior surface, which is bounded by two slightly raised rounded strips; when cut through the vascular bundle is visible as a curved line with its two free ends rolled inwards. The fronds are at first tinged with reddish but become pea-green when mature, they have 5 to 9 pairs of rather distant and nearly opposite pinnae; the pinnules or ultimate segments are sessile, 5 to 14 pairs in each pinna, each one $\frac{3}{4}$ to $2\frac{3}{4}$ inches long by $\frac{1}{4}$ to $\frac{5}{8}$ inch broad; they are placed nearly opposite to each

other, and are more developed on the lower side than on the upper; their texture is very firm, and their surface throws off rain or dew without being wetted. The veins are either given off from the midrib in pairs or divide immediately after leaving it, and are again often once or twice forked, the ultimate segments running into the notches between the extremely minute serrulations, and not into their apices. The fronds begin to develop in May, and perish with the first sharp frost. The fertile fronds have from 2 to 6 of the lower pair of pinnæ quite like those of the barren fronds, but the upper ones have the pinnæ cut down to a winged midrib, from each side of which herbaceous processes are given off, round which the sporangia are clustered. These metamorphosed pinnæ are from $\frac{1}{4}$ to $1\frac{1}{2}$ inch long; they are at first green, afterwards olive-yellow, and ultimately they become of a rusty-brown colour. The spores are green while they are capable of germinating, but become pale yellow when they have lost their vitality.

This plant has no varieties, properly so called, found in Britain; *cristata* and *interrupta*, Moore, being malformed states or monstrosities. It sometimes occurs with the rachis divided or with the leaflets lobed and crisped. Not unfrequently on the fertile fronds some of the barren pinnæ are fertile on one side, and in this case the opposite side is divided into rounded lobes; this lobing evidently being the first stage of the transition from the barren to the fertile pinnules.

Royal Fern, Flowering Fern, or Osmund Royal.

SUBORDER II.—HYMENOPHYLLACEÆ.

Sporangia placed on an extended vein, which forms a receptacle enclosed in an involucre. Each sporangium with a complete obliquely-transverse annulus, opening by a longitudinal slit.

GENUS II.—TRICHOMANES. *Linn.*

Rootstock usually creeping. Fronds more or less translucent, often consisting of but a single layer of cells. Sori marginal, arranged round the lower part of a filiform elongated receptacle terminating a vein. Involucre tubular, undivided, truncate or slightly 2-lipped, often falling short of the receptacle.

Name from *θρίξ* (*thrix*), hair, and *μανός* (*manos*), loose.

SPECIES I.—**TRICHOMANES RADICANS.** *Swartz.*

PLATE 1839.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 116.*T. speciosum*, *Willd.* Sp. Pl. Vol. V. p. 514. *Milde*, Fil. Europ. p. 10. *Newm.* Hist. Brit. Ferns, ed. ii. p. 305.*T. brevisetum*, *R. Br.* Hort. Kew. ed. ii. p. 529. *Sm.* Eng. Fl. Vol. IV. p. 324.*T. alatum*, *Hook.* Fl. Lond. Tab. 53 (non *Swartz*).*T. pyxidiferum*, *Linm.* (parte) Sp. Pl. 1561 (non Auct.). *Huds.* Fl. Eng. p. 461.*Hymenophyllum alatum*, *Sm.* Eng. Bot. No. 1417.*H. Tunbridgense*, var. β , *Sm.* Fl. Brit. Vol. III. p. 1417.

Rootstock wiry, elongate, creeping, thickly covered with long pitchy brown hairs intermixed with shorter ones. Fronds distant. Stipes wiry, from one-fourth as long to as long as the lamina of the frond, with hair-like scales similar to those on the rootstock at the base, nearly naked above, with an herbaceous wing on each side, which is broadest at the top and vanishing towards the base. Lamina about twice as long as broad, translucent, consisting of but a single layer of cells, ovate or lanceolate, twice or thrice or four times pinnatifid, dark green; ultimate segments wedge-shaped at the base, pinnatifidly lobed; rachis and secondary rachides winged; veins branching, with a branch running into each ultimate segment, but not extending quite to its apex. Involucre solitary, more or less exserted, cylindrical-obconic, more or less winged, truncate or very indistinctly 2-lipped; receptacle more or less ultimately exserted.

Var. *a. genuinum.*

Frond ovate or oblong-ovate. Involucre conspicuously exserted.

Var. *\beta. Andrewsii.*

Frond lanceolate. Involucre nearly wholly immersed in the substance of the frond. Receptacle projecting much more beyond the involucre than in var. *a.*

On wet, shady rocks and banks, very local. Formerly found at Bell bank, near Bingley, in the west of Yorkshire. In North and South Wales (Mr. Backhouse, who considers the South Wales station at least as a natural one). Near Corrie, Arran, but probably planted there. In several places in the south and south-west of Ireland. "Valentia (perhaps introduced, Kinahan); Waterville; Turk Mountain and near Killarney; Kenmare; Glouin (or Glen) Caragh; near Derriana Lake and Lough Carragh; Dingle; Mounteagle; near

Bantry; Bandon; Templemichael Glen (Mr. D. Murray and I. Carroll). On the Glashgariff river, Cork (Drummond). Near Blarney (I. C.). Near the summit of Carrigana Kildorrey, north of Cork (I. C.); Glenbower Wood, near Cork; Glendine Wood, Waterford (Kinahan). Sparingly at Powerscourt waterfall; and a few plants in Hermitage Glen, Wicklow, Flor. Hib. (not found lately). Cumaelta Mountains (Moore, Nat. Pr. Br. F.); Glenstal, Barrington's Bridge, near the Keeper Mountain, Limerick (Mr. G. A. Pollock); on the banks of the Clare river, three miles south of Newport, Tipperary (Mr. G. H. Kinahan). (This station may extend to district 7.)—*'Cybele Hibernica,'* p. 378.

Var. β . In a moist, rocky cave, Blackstones, Glouin Caragh, Kerry (Mr. W. Andrews), and near Killarney, Mr. Isaac Carroll.

England, [Scotland,] Ireland. Perennial. Summer, Autumn.

Rootstock about the thickness of a crow-quill, emitting wiry, forking, radical fibres, densely tomentose with scales resembling hairs. Stipes varying from 1 to 6 inches; lamina 3 to 12 inches; pinnae and divisions of pinnae all connected by a broad wing, so that the frond must be termed pinnatipartite instead of pinnate; ultimate lobes oblong, with short, entire or bifid teeth. Involucre situated on the lowest anterior branch of the vein of the ultimate segments, urn-shaped, tapering below, about $\frac{1}{10}$ inch long, pale green. Receptacle bristle-shaped, sometimes scarcely exceeding the involucre, but usually ultimately twice as long or more. Spore-cases reddish, concealed within the involucre.

Of var. β . I have no specimens, but judging from the figure in Mr. Newman's *'British Ferns,'* it appears to differ from the ordinary form only in the frond being narrower and more acuminate, the receptacles immersed in the substance of the leaves, and the bristle or receptacle sometimes 3 or 4 times longer than the involucre; Mr. Andrews, in his description, says 6 times longer. Mr. Andrews lays some stress as a distinctive feature on "the lower pinnae being distant and short;" but this occurs in var. α , of which I have specimens in which the same rootstock bore some fronds having the lowest pinnae longer than the succeeding, and others in which they are considerably shorter.

This fern is remarkable for the slow development of its fronds, and their lengthened duration, as they are not fully developed until the second year, and until then the involucre is not produced. According to Milde, however, the Mexican form is said to be fructiferous in the first year. Mr. Andrews, as quoted in Newman's *'British Ferns,'* says no disposition to bear fruit is shown until the autumn of the third year, when the involucre appears, and the

setæ and capsules attain maturity in October. After this the fertile frond begins to decay, but sterile fronds have even a longer existence.

The Bristle-fern is easily cultivated, and its semitransparent foliage presents an exceedingly attractive appearance. The easiest method of culture is to plant it in a pan (unglazed if possible), filled with broken sandstone and peat. Place the pan in a larger glazed pan, in which keep water. Cover with a glass fitting into the outer pan, and leaving a space between the glass and the margin of the inner pan, or place the two pans in a hand-light or window fern-case. The outer pan should never be without water, the object being to keep up a damp atmosphere round the Fern by the evaporation of the water in the outer pan, and allow no stagnant water about the roots.

Bristle-fern.

GENUS III.—HYMENOPHYLLUM. *Smith.*

Rootstock filiform, creeping. Fronds translucent, usually consisting of but a single layer of cells. Sori marginal, arranged round a slender columnar receptacle, terminating in a vein. Involucre 2-valved or deeply bipartite, usually equalling or exceeding the receptacle.

Name from *ὕμην* (*lumen*) a membrane, and *φύλλον* (*phullon*) a leaf, alluding to the delicate membranous texture of the frond.

SPECIES I.—HYMENOPHYLLUM TUNBRIDGENSE. *Smith.*

PLATE 1840.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 80.

Trichomanes Tunbrigense, Linn. Sp. Plant. 1561.

Rootstock capillary. Fronds flat and glabrous, translucent, consisting of a single layer of cells scarcely longer than broad, ovate-oblong or lanceolate-oblong, pinnatifid, with the pinnae all connected by a wing running down each side of the rachis and extending a short distance down the stipes; pinnae flat, pinnatifid or pinnatifid, with the segments alternate, and on both the upper and lower sides of the main vein, at least those at the base of the frond (the pinnae near the apex being divided on the anterior side only); ultimate divisions strapshaped, spinous-serrulate. Involucres at the termination of the first or first and second anterior veins given off by the main vein of the pinnae, broadly oval; valves semicircular, flattish, serrate-denticulate or spinous-denticulate at the apex. "Receptacle furnished with paraphyses at the base" (Milde).

On rocks, more rarely on steep banks, or even trunks of trees.

Rather local, but widely distributed. Chiefly in the west of England and Scotland, Cornwall, Devon, Somerset, Sussex, West Kent, Glamorgan, Merioneth, Carnarvon, Yorkshire, the Lake district, Northumberland, Dumfries, Peebles, Stirling, Dumbarton, Renfrew, Argyle, Bute, Arran and Mull. In Ireland it is local, being rare in the east, centre and north of the island; it occurs in Kerry, Cork, Waterford, Tipperary, Kilkenny, Limerick, Clare, Longford, Galway, Sligo, Leitrim, Donegal, Tyrone and Down.

England, Scotland, Ireland. Perennial. Summer, Autumn.

Plant growing in sheets or mats, with the black hair-like rootstocks interlaced; these are much branched, and emit numerous hairy rootlets, which attach themselves to the rock or substance on which the plant grows; they are nearly naked, having a few brown hair-like scales on their younger portions, and commonly a small tuft at the base of the young fronds. Stipes setaceous, a little thickened upwards, $\frac{1}{2}$ to 2 inches long; lamina $\frac{3}{4}$ to $4\frac{1}{2}$ inches long, by $\frac{1}{2}$ to 1 inch broad; lower pinnae somewhat flabellately pinnatifid or pinnatifid, which arises from the distribution of the veins; the main vein of each pinna gives off a lateral vein first on the anterior side, then on the posterior, then another anterior branch, and often a posterior following it; each of these branches is commonly forked, or sometimes twice forked, and so is the termination of the main vein; the ultimate veins do not quite reach the apex of the ultimate divisions; in the uppermost segments the veins frequently branch only on the upper side. Involucres about $\frac{1}{10}$ inch long, inversely deltoid at the base, which is somewhat swollen; the valves are flattened horizontally, and project beyond the substance of the leaf. The sporangia are wholly included, and the vein or receptacle on which they are placed does not extend beyond them.

The leaves in texture, and in the shape of their ultimate divisions, bear considerable resemblance to those of the barren stems of the moss, *Mnium undulatum*, *Hedwig*.

Tunbridge Filmy Fern.

SPECIES II.—**HYMENOPHYLLUM UNILATERALE.** *Bory.*

PLATE 1841.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 120.

H. *Wilsoni*, *Hook. Wilson, Eng. Bot. Supp. No. 2686. Bab. Man. Brit. Bot. ed. vii. p. 454. Fries, Summ. Veg. Scand. pp. 83, 253.*

H. *peltatum*, *Desvaux, Ann. Linn. 1827, p. 333. Rabenh. l.c.*

H. *Tunbridgense*, var. *Bentham, Handb. Brit. Fl. p. 638. Baker in Hook. & Bak. Syn. Filic. ed. ii. p. 67.*

Trichomanes peltatum, *Poiret, Enc. Bot. Vol. VIII. p. 76, fide Desvaux.*

Rootstock capillary. Fronds convex, recurved, glabrous, translucent, consisting of a single layer of cells nearly twice as long as broad, lanceolate-oblong or narrowly oblong, pinnatipartite, with the pinnæ all connected by a wing running down each side of the rachis, and extending a short distance down the stipes; pinnæ recurved, pinnatipartite, with the segments all on the anterior side of the main vein, even in those at the base of the frond, simple or once forked; ultimate divisions strapshaped spinous-serrulate. Involucres at the termination of the first anterior vein given off by the main vein of the pinnæ, ovate; valves ovate, convex, entire throughout. Receptacle without paraphyses.

On rocks and trunks of trees, often growing with *H. Tunbridgense*, but much more frequent, especially in the north-west of England and Scotland, extending north to Orkney (where it was found by the late Mr. Heddle near the Kame of Hoy, and in 1880 by Mr. H. H. Johnston on the Wart Hill of Hoy), and Shetland. Frequent in mountainous districts in Ireland, especially in the west and north.

England, Scotland, Ireland. Perennial. Summer, Autumn.

Very similar to *H. Tunbridgense* in general appearance, and about the same size. It is easily recognised when growing by its dark lurid green fronds, recurved at the apex and margins, while in *H. Tunbridgense* they are flat and paler green. But even in the dried state it may be known by the narrower pinnæ, of which the main vein branches only on the upper side, consequently they have the segments all pointing towards the apex of the leaf, even in the basal leaflets. The fronds are also rather narrower in outline, and their ultimate divisions are rather broader and less parallel-sided. The involucres are more exserted, a little larger, and with longer convex and entire valves. The cells of the fronds are longer and narrower than in *H. Tunbridgense*. Mr. Gulliver gives the average size of the cells of *H. Tunbridgense* as $\frac{1}{571}$ inch each way, and in *H. unilaterale*, the average long diameter $\frac{1}{308}$ inch, and the short diameter $\frac{1}{615}$ inch. (See 'Journ. Bot.' 1865, p. 294.) Mr. F. Clowes states that the fronds of *H. Tunbridgense* die annually, while those of *H. Wilsoni* grow on from year to year, like those of *Trichomanes radicans*, but Mr. Moore says the fronds of *H. Tunbridgense* endure for "two or three years under favourable circumstances." ('Nat. Print. Ferns,' Svo. ed. vol. ii. p. 304.) I have not had *H. Tunbridgense* in cultivation, but I can corroborate the statement that the fronds of *H. unilaterale* live for more than one year.

Wilson's Filmy Fern.

SUBORDER III.—POLYPODIACEÆ.

Sporangia with an incomplete vertical annulus, and opening by a transverse slit on the side where the annulus is incomplete.

TRIBE I.—POLYPODIEÆ.

Rootstock growing in advance of the fronds, the stipes of which is articulated to the rootstock, and separates from it, leaving a distinct scar. Sori roundish or more or less elongated, attached to the back of the veins, without an indusium.

This is the only tribe of British Ferns belonging to Mr. John Smith's division *Eremobrya*, which is characterised "Fronds solitary, solitary, lateral, and articulate with its caudex;" all the following tribes belong to his division *Desmobrya*, and have the "fronds terminal, solitary, fasciculate, adherent to the caudex." (J. Smith, 'Hist. Filicum,' pp. 61-79.) I agree with the late Mr. E. Newman ('Phytologist,' ser. 1, vol. v. p. 229) that such plants as *Pteris aquilina*, which have a rhizome growing in advance of the fronds, cannot naturally be referred to *Desmobrya*; though I cannot go so far with him as to join them with *Polypodium* and the other *Eremobrya*. Probably *Pteris aquilina* and such Ferns as have a rhizome growing in advance of the fronds, but the rachis of the fronds continuous with the rhizome and not articulated to it, ought to be formed into a separate division to be placed between *Eremobrya* and *Desmobrya*—as natural primary divisions of the suborder Polypodiaceæ.

GENUS IV.—POLYPODIUM. *Linn.*

Rootstock scaly, growing in advance of the fronds. Fronds solitary, their stipes articulated to the rootstock. Veins free. Sori roundish, rarely oval, terminating the lower anterior veins. Indusium absent.

Name from *πολύς* (*polus*) many, and *πούς* (*pous*) foot.

SPECIES I.—POLYPODIUM VULGARE. *Linn.*

PLATE 1842.

Bab. Crypt. Vasc. Europ. Exsicc. No. 1544.

Ctenopteris vulgaris, Newm. Phyt. 1851, App. p. 29; Brit. Ferns, ed. iii. p. 42.

Rootstock thick, at first densely clothed with peltately attached reddish-brown ovate-triangular and lanceolate acuminate or cuspidate

scales, which are toothed on the margins. Fronds petiolate, coriaceous, evergreen, not scurfy, glabrous when full grown, strap-shaped or oblong-strapshaped or lanceolate- or ovate-oblong, acuminate at the apex, abrupt at the base, very deeply pinnatipartite; segments strap-shaped or lanceolate, with broad adnate bases, usually indistinctly crenate or serrate, more rarely deeply crenate or serrate or pinnatifid. Secondary veins forked, or with 1 to 4 alternate lateral veins below the terminal fork, the ultimate veins not reaching the margin. Sori round or roundish, arranged in a line on each side of the segment, and about midway between it and the margin, attached to the extremity of the first anterior branches of the secondary veins. No barren fronds differing in shape or division from the fertile fronds.

Var. *a. genuinum.*

Stipes containing a single vascular bundle. Frond strap-shaped, gradually acuminate at the apex; segments strapshaped or oblong-strapshaped, obtuse or abruptly acute, rarely attenuated from near the middle to the apex, very finely crenate-serrulate. Secondary veins usually with 1 lateral vein below the terminal fork, or more rarely only forked.

Var. *β. serratum.* Willd.

Stipes containing 2 vascular bundles. Frond oblong-strapshaped, often abruptly acuminate at the apex; segments strapshaped or lanceolate-strapshaped, gradually acuminate, more or less distinctly serrate or crenate, serrate at the margins. Secondary veins usually with two lateral veins below the terminal fork.

Var. *γ. Cambricum.* Willd.

P. Cambricum, *Linn. Spec. Plant.* p. 1546.

Stipes containing two vascular bundles. Fronds lanceolate- or ovate-oblong, abruptly acuminate; segments lanceolate or elliptical, irregularly pinnatifid, or some of them pinnatifid and on the same frond, others serrate or crenate-serrate, or rarely all crenate, often barren. Secondary veins with 2 or 3 lateral veins below the terminal fork, or elongated so as to form midribs to the secondary segments, in which case they give off simple or once-forked veins.

On rocks, walls, steep banks, stumps of trees. Common, and generally distributed in England, Scotland, and Ireland.

Var. *β* is much more rare, at least in Scotland. I have it from

Cheshire from the Rev. W. W. Newbould; Godalming, Surrey (H. C. Watson and Henry Bull). Mr. Moore gives stations in Kent, Surrey, Sussex, Somerset, Devon, Cornwall, Monmouth, Hereford, Warwickshire, Gloucester, Oxford, Worcester, York, Pembroke, Denbigh, Kirkeudbright, Stirling, Galway, Clare, Waterford and Guernsey.

Of var. γ the typical Cambricum was originally found in a wood near Dinas - Powys Castle, Cardiff, Glamorganshire. Said by Mr. Lowe to have been found recently in a wood near Macclesfield, Cheshire; also reported from Kidderminster, Mill Dingle, Beaumaris, Conway Castle, Ambleside, and Antrim. A fertile form of it was found at Goderich Castle, Herefordshire by Mr. W. Bennett, from whom I have cultivated specimens. Forms still less divided I have from Killarney, and it has been observed in various parts of Ireland, especially Kerry, Clare, and Wicklow. In the south and west of England.

England, Scotland, Ireland. Perennial. Summer, Autumn.

Var. α has the rootstock varying from the thickness of a goosequill to that of a man's little finger, usually creeping along the surface on which it grows, to which it adheres by numerous branched densely tomentose radical fibres; it is branched, and the growing apex is always in advance of the fronds, thickly clothed with pale reddish-brown scales, which ultimately fall off, and leave the rhizome smooth and green. Upon this part of it there are elevated warts, the top of which exhibits a circular depression; this is the scar left by the stipes which have separated from the rootstock by an articulation. The scales with which it is covered are remarkable for adhering by a large surface, so as to be peltate, they are dentate on the margins and on the long apical cusp; the teeth are prominent and distant, spreading, or even a little recurved at the point. The stipes is from 1 to 8 inches long, pale green, cylindrical, with an inconspicuous green ridge on each side, about as thick as a stocking wire, at first furnished with distant lanceolate acuminate cuspidate brown scales, like those on the rootstock, but soon becoming quite bare. Lamina usually more or less channelled from the segments bending inwards; 2 to 10 inches long by 1 to $2\frac{1}{2}$ inches broad, dark green, paler and somewhat glaucous beneath, with the veins more translucent than the rest of the frond, and clubbed at the apex, unrolling at the end of May or first half of June, but the sori are not completely developed till a month or six weeks afterwards, when they are become yellow or bright orange, and about the size of sago grains or larger; they are often produced on the apical portion only of the frond. The spores are pale yellow, oblong-reniform, bluntly tuberculate. The fronds remain green until the

following summer, except in exposed localities; they are erect, or pendent when luxuriant.

Var. β is usually a larger plant, the fronds 6 to 20 inches long, 3 to 5 inches broad.

Var. γ has the fronds 4 inches to 1 foot long, by 3 to 7 inches broad. It is to this variety that the handsomest forms, so much coveted by fern-growers, belong. Most of these, however, are abnormal developments, which is shown by the frond being either wholly or partially barren, and by the irregularity of the divisions of the primary segments. The most regular of all the forms, which is also occasionally fertile, is that from Goderich Castle, Herefordshire, which is named "*omnilacerum*" by Mr. Moore. The true *Cambricum* is always barren. The form called *crenatum* by Mr. Wolleston, which I have from Mucrus, Killarney, appears to be really the *Cambricum* without monstrous development. This comes very near var. β . *serratum*, but has the frond much broader in proportion. Mr. Moore gives Saltoun Castle, Kent (S. Grey); Devonshire (Rev. J. M. Chanter); Conway (Dr. Alchin); Ruthin, Denbigh (E. Pritchard); the Craigs, near Dumfries (W. G. Johnson); Mucrus, Killarney (Dr. Alchin); as stations for the form *crenatum*. (Moore, 'Nat. Print. Ferns,' 8vo. ed., vol. i. p. 67.)

Common Polypody.

TRIBE II.—GRAMMITIDEÆ.

Caudex not growing in advance of the fronds, the stipes of which is not articulated to the caudex, and does not separate from it. Sori elongated or linear, or more rarely nearly round, attached to the back of the veins, without an indusium.

GENUS V.—GYMNOGRAMME. *Desv.*

Fronds produced from the apex of the caudex, usually approximated or tufted; stipes not articulated to the caudex. Veins forked, free. Sori linear or oblong, rarely roundish, on the back of the ultimate veins, and often occupying their whole length, frequently ultimately confluent, not covered by the reflexed margins of the frond. Indusium absent.

Name from *γυμνός* (*gymnos*) naked, *γραμμή* (*gramme*) a line, referring to the naked lines often formed by the sori which are not covered by an indusium.

SPECIES I.—**GYMNOGRAMMA LEPTOPHYLLA.** *Desvaux.*

PLATE 1843.

*Rabenh. Crypt. Vasc. Europ. Exsicc. No. 81.**Grammitis leptophylla, Swartz & Willd. Spec. Plant. Vol. V. p. 143. Gren. & Godr.**Fl. de Fr. Vol. III. p. 629.**Polypodium leptophyllum, Linn. Spec. Plant. 1553.*

Caudex minute, annual, or rather biennial, with filiform scales. Fronds of two forms on the same plant. Fertile frond, with the stipes usually as long as or longer than the lamina, maroon-coloured at the base, at first with a few capillary scales, ultimately naked. Lamina pale yellowish-green, membranous, glabrous when full grown, without scales or powder beneath, oblong or lanceolate-oblong, abrupt at the base, acuminate, bipinnate; pinnules obovate, pinnatisect or flabellately lobed, wedge-shaped or inversely deltoid at the base, with the lobes once or twice dichotomous; ultimate divisions very short and rounded. Sori oblong, ultimately confluent, and covering the upper half of the lobes of the pinnules. Sterile frond smaller, and with a much shorter stipes than the fertile frond. Lamina thinner than in the fertile frond, ovate, pinnate; pinnæ shortly stalked, larger than in the fertile frond, flabellate, dichotomously incised, in luxuriant plants not unfrequently bearing sori, which are rounder than in the fertile frond, and not confluent. Fertile fronds deciduous; barren ones fugacious.

On banks and walls facing the south or south-west in Jersey. The first notice of it was published in the 'Gardeners' Chronicle,' Jan. 29th, 1853, p. 69, by "J. M.," who appears to have found it not only in that year, but in the previous one in Jersey. Mr. Newman, in March 1853, states that he learned from his friend Mr. Henry Hagen, in the winter of 1852-3, that a lady had discovered *Gymnogramme leptophylla* in one of the Channel Islands, and on receipt of a specimen he announced the fact in the 'Phytologist,' 1853, p. 914. As a result of communications received May, 1853, he intimated that it was reported from Jersey that *Gymnogramme* was widely distributed in the island, preferring localities in which the moistened soil induces the growth of *Marchantia*, in company with which plant it appears particularly to flourish; it also occurs, but not so frequently, growing in moss. The principal localities are near Le Haule, near St. Aubin's, and in several places near St. Laurence. On the 25th of June, 1853, I gathered the *Gymnogramme* on the right-hand side of

the road from Goose-green to St. Laurence; it was about $\frac{1}{4}$ mile from Goose-green, on a high bank, looking towards the south-west, faced up with stones, in the interstices of which it grew; it was far past its prime, and much of it quite dried up. Before it was ascertained to occur in Jersey, it was reported from Aberdeenshire. Mr. W. W. Spicer published in the 'Phytologist' for 1862, p. 600, a letter from Miss Veitch, in which she states she discovered it "in a stone dyke on the high-road, on the right-hand side, leading from Braemar to Ballater, nearly opposite Invercauld House, and as far as I remember where the highlanders perform their annual feats at the gathering, viz., a rock called 'the Lion's Face,' at the foot of which, enclosing trees, is the above-named dyke." No one else, however, has found the plant in this station, and it is scarcely conceivable that it could exist in so cold a climate. Doubtless some mistake has been made.

Channel Islands. Annual or biennial. Spring.

Caudex very minute, roundish, simple, sending out woolly root-fibres with from 4 or 5 fronds in the Jersey specimens, which vary from 1 to $2\frac{1}{2}$ inches high. In Portuguese specimens there are sometimes 8 or 9 fronds with the tallest 6 to 8 inches high. The fronds which are first produced are sterile; the earliest of these is not above $\frac{1}{4}$ or $\frac{1}{2}$ inch long, and has a roundish trifid lamina with dichotomously lobed segments; the succeeding fronds are longer and more compound, but still are only accidentally fertile; the pinnæ of these are about $\frac{1}{4}$ inch long. The fertile fronds have a much longer and stouter stipes; they are much more decomposed, pale green, thin, soon becoming tinged with olive-yellow; the primary rachis is very narrowly winged, with a herbaceous stripe running from each pinna; the rachides of the pinnæ are much more broadly winged, sometimes so much so that the pinnæ cannot be said to be more than pinnatifid. In very luxuriant specimens the pinnules are again pinnatifid, but in the small specimens, such as those I have seen from Jersey, they cannot be termed more than lobed, and are about $\frac{1}{8}$ inch long. The sori are yellowish, and before coalescing appear as if forked; this arises from their being continued along the course of the veins from the last fork down to their apex, which is a little within the margin of the segment. Spores dark brown, areolate. The stipes contains a single reniform vascular bundle; the hair-like scales are at first white, afterwards brown.

According to Moore, in the wild state we learn that the prothallus is developed in the damp late autumnal months, being perfectly formed in November; by January 3 or 4 fronds have been produced, in April or May the growth is mature, and by August the plants

have perished. Sometimes in cultivation the perfect fronds are not produced till the second year."—'Nature Printed Ferns,' 8vo. ed. vol. i. p. 110.

Annual Maidenhair.

GENUS VI.—CRYPTOGRAMME. *R. Brown.*

Fronds produced from the upper part of the caudex, approximate, dimorphous, the fertile fronds contracted; stipes not articulated to the caudex. Veins forked or simple, free. Sori roundish or oval, at the extremity of the ultimate veins, ultimately confluent so as to form a submarginal line covered by the reflexed margin of the frond. Indusium absent. Sterile frond with the margins not reflexed.

Name from *κρυπτός* (*kruptos*) hidden, and *γραμμή* (*gramme*) a line, on account of the lines of sori being concealed by the reflexed margin of the frond.

CRYPTOGRAMME CRISPA. *R. Brown.*

PLATE 1844.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 42.

Allosorus crispus, *Bernhardt.* *Newman*, Brit. Ferns, ed. iii. p. 35. *Moore*, Nat. Print.

Brit. Ferns, 8vo. ed. Vol. I. p. 100. *Milde*, Fil. Europ. p. 23. *Koch*, Syn. Fl. Germ.

et Helv. ed. ii. p. 95. *Fries*, Summ. Veg. Scand. p. 83. *Gren. & Godr.* Fl. de Fr.

Vol. III. p. 641. *Rabenh.* l. c.

Pteris crispa, *Linn. ms.* Eng. Bot. No. 1160; and Eng. Fl. Vol. IV. p. 19.

Osmunda crispa, *Linn.* Spec. Plant. p. 1522.

Rootstock shortly creeping, dividing into numerous crowns. Fronds of two forms on the same plant. Fertile frond with the stipes usually twice as long as the lamina, sparingly furnished with lanceolate scales when young, ultimately naked. Lamina triangular-ovate or ovate, firm, pale green, ultimately yellowish-green, glabrous, tripinnate or more rarely bipinnate or quadripinnate; the ultimate pinnæ shortly stalked, or contracted towards the base, oblong elliptical fusiform or oblong-cylindrical, with the margins recurved and nearly concealing the sori, which are ultimately confluent. Sterile frond with the stipes usually twice as long as the lamina. Lamina membranous, firm, bright green, deltoid-ovate or triangular-ovate, 2 or 3 times pinnate, the ultimate pinnæ obovate or oblanceolate, wedge-shaped at the base, incised or toothed with the teeth blunt; the veins running into the teeth, but not quite reaching their apex. Both kinds of frond deciduous.

On rocks and walls, and among loose stones and on hillsides. Local and principally found in mountainous districts. Challi-comb, near Simmons-bath, Somerset; it also occurs in Shropshire, Worcestershire, Derbyshire, Glamorganshire and Cardiganshire. In North Wales it becomes abundant, and still more so in the Lake district. In Scotland it is much more generally distributed, extending north to Caithness, Sutherland and the Hebrides, but it is not recorded from Orkney or Shetland. In Ireland it is very rare, and confined to the east and north-east.

England, Scotland, Ireland. Perennial. Summer, Autumn.

Caudex dividing into a great number of small crowns massed closely together, so that though each crown produces but few fronds, the plant grows in large tufts. Stipes of fertile fronds, 3 to 10 inches high, slender, wiry, brown at the base, then yellowish-green. Lamina $1\frac{1}{2}$ to 4 inches long; ultimate segments $\frac{1}{8}$ to $\frac{3}{8}$ inch long, bearing a superficial resemblance to a pod of a *Draba*. Stipes of sterile frond $1\frac{1}{4}$ to 5 inches long; lamina $1\frac{1}{2}$ to 4 inches; ultimate segments variable in the shape of and in the degree in which they are incised, varying from $\frac{1}{8}$ to $\frac{1}{4}$ inch long.

Occasionally barren fronds are found with the ultimate segments, but slightly sinuated at the edges and not cut. These appear to be transition forms between the barren and the fertile fronds. It is certainly not a variety, for I have a specimen in which, from the same caudex, one of these fronds is produced along with the ordinary barren fronds with deeply cut pinnules, and fertile fronds of the usual form.

The fronds are produced in May or the beginning of June, and are killed by the first severe frost of autumn. It cannot be mistaken for any other British Fern, on account of its dimorphous decomposed bright green crisped fronds.

The name of Parsley-fern is given on account of the barren fronds having some resemblance to those of garden Parsley (*Petroselinum sativum*). They are, however, more like those of Fool's Parsley (*Æthusa Cynapium*).

Parsley-fern, or Rock-brakes.

TRIBE III.—ASPIDIÆ.

Caudex or rootstock not growing in advance of the fronds, the stipes of which is not articulated to the rootstock, and does not separate from it. Sori punctiform, round, very rarely elongated, attached to the back of the veins, generally furnished with an indusium which assumes various forms, but is never attached to the veins longitudinally; rarely the indusium is absent.

GENUS VII.—PHEGOPTERIS. Fée.

Fronds produced from the extremity of the caudex and its branches, solitary or approximate, membranous, once or more times pinnate; stipes not articulated to the caudex. Veins forked or pinnate, free. Sori punctiform, round, rarely oval or linear, at the extremity of the ultimate veins or attached to some portion of their back. Indusium absent.

Name from *φήγος* (*phegos*) a Beech, and *πτέρις* (*pteris*) a Fern. The Beech-fern is the type of the genus.

SPECIES I. **PHEGOPTERIS DRYOPTERIS.** *Fée.*

PLATE 1845.

Rabenh. Crypt. Vasc. Exsicc. No. 57.

Polypodium Dryopteris, Linn. Spec. Plant. 1555. Sm. Engl. Bot. No. 616, and Brit. Fl. Vol. IV. p. 282. Bab. Man. Brit. Bot. ed. vii. p. 445. Hook. fil. Stud. Fl. p. 467. Moore, Nat. Print. Brit. Ferns, 8vo. ed. Vol. I. p. 85. Koch, Syn. Fl. Germ. et Helv. ed. ii. p. 974. Fries, Summ. Veg. Scand. p. 82.

Polypodium Dryopteris, var. a. genuinum, Ledeb. Fl. Ross. Vol. IV. p. 509. Gren. & Godr. Fl. de Fr. Vol. III. p. 628. Hook. & Baker, Syn. Fil. ed. ii. p. 309.

Lastrea Dryopteris, Bory. Newm. Brit. Ferns, ed. ii. p. 13.

Gymnocarpium Dryopteris, Newm. Phytol. 1851, p. 371, and App. xxiv.; and Brit. Ferns, ed. iii. p. 57.

Caudex elongate, very slender, wiry, creeping, branched, not tortuous, not tomentose, the younger portions clothed with ovate scales, producing fronds at rather distant intervals. Fronds all similar. Stipes erect, almost filiform, much longer than the lamina, glabrous, at first with a few ovate or lanceolate often piliferous pale scales, ultimately naked. Lamina suddenly bent back at nearly a right-angle with the stipes, so as to appear almost horizontal when growing, bright pea-green, membranous, rather flaccid, glabrous and without glands, deltoid, acute, ternately bi- or tripinnate, with the three main divisions of which the frond is composed each rolled up into a separate ball in vernation; ultimate pinnules or segments flat, oblong, obtuse, crenate-serrate or entire. Sori round, arranged in a line near the margin on each side of the pinnules or ultimate segments, attached to the lateral veins a little below their apex.

On rocks and amongst stones, chiefly in ravines, and on the ground in damp woods. In the south of England it is very rare, and probably in some of its reported stations *P. Robertianum* has been mistaken for it. There is, however, good authority for its occurrence in

East Cornwall, North Devon, West Gloucester, Hereford, Worcestershire and Shropshire, as well as both North and South Wales; from Lancashire, Derbyshire, and Yorkshire, it occurs in almost every county north to Caithness and Sutherland, and may certainly be called frequent in Scotland. It is not recorded from Orkney, but it is from Shetland. In Ireland it is very rare, and the only recent authority which is beyond question is that on Knocklyd Mountain, Antrim, where it was found about the height of 1800 feet by Dr. Moore; Benoo Mountain, near Manor Hamilton, Leitrim, where it was found by the late Mr. J. Wynne; and near Loch Talt, on the Ox Mountain, Sligo (Mr. P. Warren).

England, Scotland, Ireland. Perennial. Summer, Autumn.

Rootstock pitchy black, about the thickness of a stocking-wire, creeping just under the surface of the leaf-mould or loose soil in which it grows, emitting numerous capillary root-fibres sparingly clothed with very short down; the growing extremity and young branches of the rhizome are completely covered with ovate, very pale brown scales, which disappear from the older portions of the caudex; when the plant is luxuriant, the rhizomes and their branches interlace and form a sort of loose tangle. Fronds few in number, proceeding from the two sides of the caudex alternately, usually from $\frac{1}{2}$ inch to 1 inch apart. Rachis 6 inches to 1 foot high, very slender, bluntly channelled on the upper half on the front, containing 2 vascular bundles. Lamina $2\frac{1}{2}$ to $5\frac{1}{2}$ inches by $3\frac{1}{2}$ to 8 inches broad, with a few pairs of distant opposite pinnae, the lower pair so much larger than any of the others that the frond might be termed ternate with each of its 3 divisions bipinnate. These lowest pinnae have their pinnules, especially the basal ones, much more developed on the lower side than on the upper; the lowest pinnae of all the 3 divisions have their lowest pinnules separated from succeeding pairs, but towards their apex the pinnae coalesce; the same thing takes place with the pinnules of these pinnae, of which the basal ones are separate, but the apical ones cohere, so that the apex of each of the 3 main divisions and of the tips of the lower subdivisions are only lobed or toothed—not pinnate. The lowermost of these ultimate pinnules or subdivisions are more or less deeply crenate-serrate, the upper ones entire; each one has a midrib, which is flexuous towards the apex, and gives off veins which run to the margin of the pinnule or lobe; these veins are simple, or the lower ones once or even twice-forked. The fronds begin to be produced early in May, and very soon attain their full size, so that mature sporangia may be found in June. The sporangia are at first yellow, they are minute and sometimes ultimately nearly coalesce so as to form submarginal lines upon the segments. The fronds perish with the first frost. When growing in shade they are of a

rich vivid green, but not at all shining. In exposed places they frequently become tinged with red. They are very delicate in texture, and soon wither if after being gathered they are exposed to the air.

Properly speaking, this Fern produces no barren fronds distinct from the fertile ones; still we frequently meet with fronds fully developed without sori. These have the pinnae broader and ultimate pinnae more approximate, and a greater number of them combined than the fertile fronds, so that they appear to be less divided, but they occur too rarely to be considered more than an accidental variation.

Oak-fern.

SPECIES II.—**PHEGOPTERIS ROBERTIANA.** *A. Braun.*

PLATE 1846.

Rabenh. Crypt. Vasc. Exsicc. No. 58.

Ph. calcarea, Fée, Gen. Fil. p. 243. *Rabenh.* l.c.

Polypodium Robertianum, Hoffm. Bab. Man. Brit. Bot. ed. vii. p. 445. *Hook. fil. Stud.*

Fl. p. 467. *Moore, Nat. Print. Brit. Ferns, 8vo. ed. Vol. I.* p. 92. *Koch, Syn. Fl.*

Germ. et Helv. p. 974. *Fries, Summ. Veg. Scand.* p. 82.

Polypodium calcareum, Sm. Engl. Bot. No. 1525; and Eng. Fl. Vol. IV. p. 283.

Polypodium Dryopteris, β. Robertianum, Ruprecht. Led. Fl. Ross. Vol. IV. p. 509.

Hook. & Bak. Syn. Fil. ed. ii. p. 309.

Polypodium Dryopteris, β. calcareum, Gr. & Godr. Fl. de Fr. Vol. III. p. 628.

Lastrea Robertiana, Newm. Hist. Brit. Ferns, ed. ii. p. 13.

Lastrea calcarea, Bory, Dict. Class. Hist. Nat. Vol. IX. p. 233.

Gymnocarpium Robertianum, Newm. Phyt. 1851, p. 371, and App. 24; and Brit. Ferns, ed. iii. p. 63.

Caudex elongate, slender, wiry, tortuous, creeping, branched, flocculently tomentose, the younger part thickly clothed with ovate scales, producing fronds at rather short intervals. Fronds all similar. Stipes erect, wiry, longer than the lamina, minutely glandular, at first with numerous ovate or lanceolate often piliferous pale scales, ultimately naked. Lamina curved backwards, firm, dull greyish-green, sprinkled with very minute stalked glands, which are most numerous on the rachis partial rachides and mid-veins, deltoid or triangular-deltoid, bipinnate, acuminate, and very acute; ultimate pinnules or segments often convex with reflexed margins, oblong, obtuse, crenate or entire. Sori round, arranged in a line near the margin on each side of the pinnules or ultimate segments, attached to the lateral veins a little below their apex.

On limestone rocks, local. It occurs in Somersetshire, Wiltshire, Oxford, Bucks, Gloucester, Hereford, Stafford, Salop, Glamorgan, Brecon, Denbigh, Derby, Lancaster, York, Durham. Besides these

counties it has been reported from Worcestershire, Carnarvon, and Cumberland. It grows in the Isle of Wight, at Swainston, and Carisbrooke Castle, but not wild. It has been found in an old quarry near Aberfeldy: concerning this station, Dr. Buchanan White says it is now nearly eradicated, but was once abundant; he adds that he once suggested, half in jest, that the spores might have been accidentally carried with workmen's tools from some limestone quarry in England. Mr. Watson also gives No. 93, i.e. North Aberdeen, as a Scotch station, which is insufficiently vouched for, but possibly correct. ('Top. Bot.,' p. 489.) It seems remarkable that it should be absent from the limestone hills of Ireland.

England, Scotland? Perennial. Summer.

Rootstock pitchy black, about the thickness of a straw or more. Fronds several, $\frac{1}{8}$ to $\frac{3}{4}$ inch apart. Stipes 4 to 10 inches long. Lamina $3\frac{1}{2}$ to 9 inches long, by 3 to 8 inches broad. Lower pair of pinnæ much larger than the succeeding ones, and more remote from them than any of the other pairs or than the portion of their partial rachis which is between its junction with the main rachis and its first pair of pinnæ; they are, however, not so much larger than the other pairs of pinnæ as to give the frond a ternate appearance, and they are not rolled up into little balls separate from the one into which the rest of the lamina is coiled in bud. The fronds appear in May and perish with the first frost. I have not seen any fully developed barren fronds of this species analogous to those mentioned under *P. Dryopteris*.

P. Robertiana has been often confounded with *P. Dryopteris*, and indeed even now some botanists regard them as varieties of a single species. To me they appear abundantly distinct, and it is surprising that any one who has seen the two plants alive could combine them. *P. Robertiana* differs from *P. Dryopteris* in having the caudex considerably thicker, more woody, and more tortuous, the younger portions more thickly clothed with scales and with brownish tomentum, which comes off in flakes, leaving the old portions of the rootstock glabrous; the root-fibres are also stronger and more tomentose. The fronds are more numerous, much closer together, and (when young) with many more scales. The stipes is much thicker, and firmer, and glandular, at least when young. The lamina is not suddenly bent back at its junction with the stipes as in *P. Dryopteris*, but curves backwards gradually; it is longer in proportion to its breadth, much more acute, rather less compound, with the pinnules less approximate and more of them separated; it is of a dull greyish tint—very different from the vivid green of *P. Dryopteris*. The very minute stalked-glands with which it is clothed, give it a somewhat dusty appearance, and furnish a character by which it may be distinguished in the dried

plant; they are most abundant on the rachis and midrib. The ultimate divisions are often more or less convex, from having their edges recurved like those of some forms of *Athyrium Filix-femina*. The sori are larger, and from this sometimes become confluent so as to form continuous lines. Lastly, the constitution of the plant seems quite different, for *P. Dryopteris* loves shade and moisture, while *P. Robertianum* prefers dry spots and full exposure to the sun.

Limestone-Fern, Smith's-Fern, or Limestone Polypody.

SPECIES III.—**PHEGOPTERIS POLYPODIODES.** *Fée.*

PLATE 1847.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 56.

Ph. vulgaris, Mett. Fil. Hort. Bot. Lips. p. 83.

Polypodium Phegopteris, Linn. Spec. Plant. p. 1550. *Sm.* Eng. Bot. No. 2224; and Eng. Fl. Vol. IV. p. 282. *Bab.* Man. Brit. Bot. ed. vii. p. 441. *Hook. fil.* Stud. Fl. p. 467. *Moore,* Nat. Print. Brit. Ferns, 8vo. ed. Vol. I. p. 70. *Hook. & Baker,* Syn. Fil. ed. ii. p. 308. *Koch,* Syn. Fl. Germ. et Hebr. ed. ii. p. 974. *Fries,* Summ. Veg. Scand. p. 82. *Gren. & Godr.* Fl. de France, Vol. III. p. 627. *Rabenh.* l. c.

Lastrea Phegopteris, Bory. *Newm.* Hist. Brit. Ferns, ed. ii. p. 13.

Gymnocarpium Phegopteris, Newm. Phyt. 1851, p. 371, and at p. 23; and Hist. Brit. Ferns, ed. iii. p. 49.

Caudex elongate, slender, scarcely tortuous, creeping, branched, tomentose, the younger parts sparingly clothed with lanceolate scales, producing fronds at rather distant intervals. Fronds all similar. Stipes erect, almost filiform, finely pubescent, at first with rather numerous lanceolate or subulate often piliferous pale brown scales, ultimately naked. Lamina gradually curved backwards, firm, dull yellowish-green, sparingly pubescent, triangular-acuminate and very acute, pinnate with the pinnae pinnatifid or pinnatipartite but not again pinnate; lower pair of pinnae deflexed; ultimate segments often convex, oblong, obtuse, crenate or entire. Sori round or oval, arranged in a line near the margin on each side of the ultimate segments, but commonly only towards their base, attached to the lateral veins a little below their apex.

On rocks and amongst stones, chiefly in ravines, and on the ground in damp woods. This plant has almost the same distribution as *P. Dryopteris*, in company with which it often grows. There are, however, a few more localities in the south of England, as it occurs not only in Cornwall and Devon, but also in Dorset and Sussex. In Scotland it occurs in Orkney, where *P. Dryopteris* has not been noticed, although it, as well as *P. Phegopteris*, has been observed in

Shetland. In Ireland it is rather local and rare, but widely distributed from south to north.

England, Scotland, Ireland. Perennial. Summer.

Caudex very similar to that of *P. Dryopteris*, but thicker, and finely pubescent. This pubescence is more persistent than that on the caudex of *P. Robertianum*, and does not come off in flocculi, as in that plant; the hairs, too, are considerably shorter. The scales on the caudex are considerably narrower, more acute, and darker coloured than in *P. Dryopteris*. The fronds are $\frac{1}{4}$ to 1 inch apart. The stipes is 3 to 12 inches long, thicker than that of *P. Dryopteris*, and like it very brittle, but is not so thick as that of *P. Robertianum*; at first it is pitchy at the base, and usually with a good many scales similar to those on the caudex, while those above are narrower; it is also sparingly clothed with very minute whitish spreading or reflexed hairs. The lamina is 3 to 8 inches long by 2 to $5\frac{1}{2}$ inches broad; the rachis and midrib of the pinnæ are clothed with minute narrowly subulate whitish scales, as well as minute hairs. The texture of the frond is much firmer than in *P. Dryopteris*, but less so than in *P. Robertianum*, and it is also intermediate in colour between the two. The pinnæ are more or less deeply pinnatifid or pinnatipartite, at least towards the base. The first pair of pinnæ, which are as long as, or nearly as long as, the second pair, are directed slightly downwards, so as to form acute angles with the succeeding pair, and are not parallel to them. The uppermost pinnæ are combined, so that the apical half of the frond is pinnatipartite, not pinnate. The sori are usually less numerous than in *P. Robertianum* and *P. calcareum*, and are often more or less oval.

Beech Fern, or Mountain Polypody.

GENUS VIII.—**LASTREA.** *Presl.*

Fronds produced from the extremity of the caudex, approximate and tufted or solitary, membranous or subcoriaceous, once or more times pinnate; stipes not articulated to the caudex. Veins all free. Sori punctiform, round, at the extremity of the ultimate veins, or attached to some portion of their back. Indusium round or reniform, with a sinus at the base, by which it is attached; rarely the indusium is absent or fugacious.

Name after the Chevalier de Lastre, a French botanist and microscopist.

SPECIES I.—**LASTREA THELYPTERIS.** *Presl.*

PLATE 1848.

*Rabenh. Crypt. Vasc. Europ. Exsicc. No. 16.**L. palustris, J. S. Milde, Hist. Fil. p. 266.**Nephrodium Thelypteris, Desr. Hook. fil. Stud. Fl. p. 466. Hook. & Bak. Syn. Fil. ed. ii. p. 271.**Aspidium Thelypteris, Schwartz. Sm. Eng. Fl. Vol. IV. p. 285. Fries, Summ. Veg. Scand. p. 82. Rabenh. l. c.**Polystichum Thelypteris, Roth, Syn. Fl. Germ. et Helv. ed. ii. p. 917. Gren. & Godr. Fl. de Fr. Vol. III. p. 630.**Polypodium Thelypteris, Linn. Mant. Pl. p. 505. Sm. Engl. Bot. No. 1018.**P. palustre, Salisb. Prod. 403.**Acrostichum Thelypteris, Linn. Sp. Pl. 1523.**Thelypteris palustris, Schott, Gen. Fil. sub T. 10 in note.**Hemestheum Thelypteris, Newm. Phyt. 1851. App. xxii.; and Hist. Brit. Ferns, p. 124.*

Caudex very long, slender, wiry, creeping, much branched, the youngest portion with a few ovate obtuse pale very deciduous scales. Fronds of 2 kinds, produced at distant intervals along the rhizome, either solitary, or (in luxuriant plants) a few together in small fascicles, deciduous. Fertile fronds erect, with the stipes as long as, or longer than, the lamina, slender, slightly channelled in the upper part, containing 2 vascular bundles, pitchy-black at the base, with a very few pale ovate-acuminate scales, which soon fall off and leave the stipes naked. Lamina firm, yellowish-green, almost without glands (at least when full grown), oblong or strapshaped-oblong, abrupt at the base, rather abruptly acuminate into an acute apex, pinnate; pinnæ all shortly stalked, triangular-strapshaped, pectinate-pinnatifid or -pinnatipartite; ultimate segments convex, narrowly triangular-strapshaped or triangular-oblong, more or less falcate, acute, entire, with recurved margins. Ultimate veins running from the midrib to the margins of the segments, forking near their base, those towards the apex of the segment generally simple. Rachis not scaly, or rarely with a few ovate brown scales. Sori attached to the back of the ultimate veins, forming a line on each side of the mid-vein about half-way between it and the margins of the segments, more or less covered by the recurved margins, ultimately confluent all over the lower surface of the segments. Indusium hyaline, soon disappearing, reniform, with minute stalked glands round the margin. Spores muricated. Sterile fronds produced earlier than the fertile ones, less erect, and not so

tall. Stipes usually shorter than the lamina. Lamina bright green, membranous, oblong or ovate-oblong, acuminate, abrupt at the base, very shortly stalked, deeply pinnatifid; first pair of pinnae elongate, but a little shorter than the succeeding pair; ultimate segments oblong, sometimes slightly falcate, obtuse or subacute, entire or repand, flat. Ultimate veins mostly once forked, but the basal ones sometimes branched below the fork, and the terminal ones simple.

In bogs and marshes. Local, but widely distributed in England, from Devon, Dorset, Hants, Sussex, and Kent, to Northumberland and Cumberland. In Scotland it is confined to Forfarshire, where it grows about Rescobie, and formerly at Restennet. It is reported from Scalloway and Guendal, Dunrossness, Shetland, but most likely this is a mistake. Local and rare, but widely distributed in the west, centre, and north of Ireland.

England, Scotland, Ireland. Perennial. Summer, Autumn.

Caudex very long, creeping at a short distance below the surface of the loose peaty soil in which the plant grows, and extending rapidly when the conditions favourable for its growth occur; it is about the thickness of a straw, nearly black, with very numerous radical fibres, which are at first tomentose, afterwards glabrous. The fronds are produced alternately, $1\frac{1}{2}$ to 2 inches apart, in this respect resembling those of the British species of *Phegopteris*, but there is this difference between them, that in luxuriant plants the fronds, instead of being produced singly at the nodes of the caudex, are in small fascicles, sometimes as many as 5 or 6 being found together. The barren fronds are the first to appear, about the month of May, the fertile ones not for a month or six weeks afterwards. The fronds continue to develop during the whole season, until stopped by the advent of frost, which kills both barren and fertile fronds. The stipes is from the thickness of a stocking-wire to that of a crow-quill, much longer and stouter in the fertile than in the barren fronds. These are 7 inches to 2 feet long; the lamina is 6 to 18 inches long, by 3 or 4 inches broad; the ultimate segments are $\frac{1}{4}$ to $\frac{3}{8}$ inch long. In the sterile fronds the stipes varies from 3 to 9 inches long, and the frond is from 3 to 15 inches, and from 2 to 6 inches broad; the ultimate segments are $\frac{1}{4}$ to $\frac{1}{2}$ inch long, commonly contiguous, so that the pinnae have not the pectinate appearance of those of the fertile fronds. This is no doubt in great measure owing to the segments of the latter being recurved; but even when the latter are flattened out, they are narrower than in the barren fronds. In both the fertile and barren fronds, but especially in the latter, the first pair of segments is often larger than the others, and the pinnules are separated almost down to the midrib of the pinna, but this is by no means always so.

The indusium is extremely thin, and very quickly disappears, after which the sori appear to be as naked as in the genus *Phegopteris*. The young fronds have generally a few glands, especially beneath, but these can rarely be detected in fully matured fronds; they are sessile, and yellowish, situated chiefly along the back of the midribs of the pinnae. Sometimes a few very minute whitish hairs are to be found on the rachis and lamina. I have not seen British specimens with the segments cut, but Milde gives a var. "pinnatifidum," from Silesia, in which the laciniae are irregularly pinnatifid.

Marsh-fern, or Female Buckler-fern.

SPECIES II.—**LASTREA OREOPTERIS.** *Presl.*

PLATE 1849.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 39.

L. montana, *Newm.* Hist. Brit. Ferns, ed. iii. p. 130. *Moore*, Nat. Print. Brit. Ferns, 8vo. ed. Vol. I. p. 170.

Nephrodium Oreopteris, *Desv.* *Hook. fil.* Stud. Fl. p. 466.

N. montanum, *Baker.* *Hook. & Bak.* Syn. Fil. ed. ii. p. 271.

Aspidium Oreopteris, *Swartz*, Summ. Veg. Scand. p. 82. *Rabenh.* l.c. *Sm.* Eng. Fl. Vol. IV. p. 286. *Fries.*

A. montanum, *Ascherson.* *Milde*, Fil. Europ. p. 115.

Polystichum Oreopteris, *DC.* *Koch*, Syn. Fl. Germ. et Helv. ed. ii. p. 978. *Gr. & Godr.* Fl. de Fr. Vol. III. p. 631.

P. montanum, *Roth*, Fl. Germ. Vol. III. p. 74.

Polypodium Oreopteris, *Ehrh.* *Sm.* Eng. Bot. No. 1019.

P. montanum, *Vogler*, non *Lamarck*.

Hemestheum montanum, *Newm.* Phyt. 1851, App. p. xxii.

Caudex short, thick, separating into numerous crowns, which are also thick and shortly creeping or decumbent, and covered by the imbricated bases of fronds. Fronds all similar, several produced close together from the extremity of each crown, erect or inclined outwards, deciduous. Stipes very short, stout, channelled on the anterior face in the upper part, containing 2 vascular bundles, glandular, with numerous ovate-acuminate pale scales which are partially persistent. Lamina firm, bright green, glandular beneath, oblanceolate or elliptical, gradually and longly attenuated towards the base, gradually acuminate and acute at the apex, pinnate; lower pinnae deltoid, very short, those in the middle and apex of the frond triangular-strapshaped; all of them sessile, pinnatifid or pinnati-partite; ultimate segments flat, oblong or oval-oblong, sometimes slightly falcate, obtuse, entire or faintly crenate, with the margins not recurved. Ultimate veins running from the midrib to the

margins of the segments, forking near their middle, those towards the apex of the segment generally simple or all of them simple. Sori attached to the back of the ultimate veins, forming a line on each side of the main vein a little within the margin of the segment, which is not recurved over them. Indusium hyaline, soon disappearing, irregularly roundish, with minute stalked glands round the margin, generally imperfect or malformed, and frequently entirely absent. Spores granulated. No sterile fronds dissimilar to the fertile ones.

In pastures and woods, especially in hilly districts. Generally distributed in England, but sparingly so, except in Wales and the north of England. In Scotland it is frequent, and very abundant throughout the highlands, extending north to Orkney and Shetland. In Ireland it is local, and rather scarce, though it is found from the north to the south of the island.

England, Scotland, Ireland. Perennial. Summer, Autumn.

Caudex dividing into branches from the thickness of a man's finger to nearly that of his wrist, that is taking into account the brown decayed bases of the stipes with which it is clothed; sometimes these branches are so short that the plant grows in a great tuft with numerous crowns, but usually, when growing in light soil, the crowns are quite detached, and seem like separate plants until the caudex is laid bare by digging, when they will be found connected. Stipes slightly dilated at the base, where there is a more or less evident rib on each side extending for a short distance upwards, above this the stipes is rounded, with the exception of a rather deep furrow on the anterior surface, which is continued along the rachis to the apex of the frond. The fronds are ordinarily 2 feet high, but vary from 7 inches to 4 feet, of which the stipes occupies only from 1 to 6 inches, the breadth is from $2\frac{1}{4}$ to 10 inches; they begin to unfold in May, and perish with the first severe frost in autumn. There does not appear to be a continued succession of fronds as in *L. Thelypteris*, for I have not noticed young fronds appearing later than the end of July. In their young state they are of a delicate pea-green with the scales white and hyaline. They have a peculiarity in their mode of unfolding: the pinnae unroll themselves before the rachis uncurls, so that as the latter develops the pinnae attached to the unfolded portion have already straightened themselves; the end of the rachis goes on unfolding to the apex. The mature fronds are more or less firm, especially so when growing in exposed situations, but in moist shady woods they are often flaccid; in this case they are of a bright pure green, or even dark green, but on exposed hillsides they are more of a yellow green. The pinnae diminish in length rapidly towards the

base of the frond, and the lower ones are more distant from each other ; the consequence of this is to give a very long and gradual taper to the base of the lamina. The sori are placed very near the margin of the segments ; they are either distinct or coalesce in a line, but do not cover the whole of the lower surface of the frond, but are always most numerous in the apical half of the frond.

There seem to be no true varieties of this Fern. In 1872 I brought a plant of it from Glen Cloy, Arran, which was the ordinary form with entire segments ; in 1878, it is much more robust than it has ever been, and had the edges of the segments conspicuously crenate and undulated too, so it is now what I suppose Mr. Moore calls *crispa*. The breadth of the segments also varies a good deal. There are a few monstrosities, but none of them very striking.

Strangely enough, *L. Oreopteris* appears to have been sometimes mistaken for *L. Thelypteris* ; it differs by its thick short caudex, with the fronds of each crown arranged like the feathers of a shuttlecock, by its short scaly stipes and its frond greatly attenuated at the base, and, when fertile, with the margins of the segments not recurved so as to cover the sori, also by the minute yellow glands, which are sprinkled over the under surface of the frond, and which give it a pleasant scent.

There is some difficulty in deciding whether this Fern ought to be called *Oreopteris* or *montana*. There is no agreement amongst botanists as to the limitation of the genera of Ferns, the characters on which the genera ought to be founded being still an undecided question. Very possibly the microscopical structure may afford more natural characters than any at present employed. The lower the plant is in its organisation, the more permanent are the form and structure of the cells and the tissue into which they are combined. It is now generally admitted that the form and disposition of the leaf-cells of Mosses can be advantageously employed as generic characters, while in Ferns the presence or absence and even the shape of the indusium is admittedly liable to variation, and genera founded on characters taken from it present the most incongruous groups. In consequence of this want of agreement as to generic names it has become a general rule that the specific name shall not be changed, and that the first specific name applied to a Fern shall be retained in whatever genus it is afterwards placed. Seeing, then, that the generic name is unstable, and the specific name unchanging, it has become very general, not only amongst fern-growers, but amongst botanists in this country, to speak of Ferns by the specific names only. We speak of *Dryopteris*, *Filix-mas*, *Filix-femina*, etc., without using generic names at all, except in the few cases where the generic name has proved stable and consists of but a single British species, as *Osmunda* or *Scolopendrium*, in which it is usual to use the generic name alone. The same practice arising from the same cause occurs in entomology, where in certain groups of moths but a

single name is employed, as 'Betularia,' 'Viridana,' etc. The late Mr. Newman, in the 5th edition of his 'British Ferns,' designates nearly all the Ferns by but a single Latin name. Of course this use of a single name can only be practicable provided there be not two British Ferns with the same specific name. In 1781 Vogler gave the name *Polypodium montanum* to the plant just described, for which I have retained the name *Lastrea Oreopteris* although it was not until 1789 that Ehrhart named it *Polypodium Oreopteris*: but, according to Milde, Lamarck had previously (1778) applied the name *Polypodium montanum* to the Fern now known as *Cystopteris montana*. Mr. Newman, who adopted the name "montana" instead of "Oreopteris," used the name *myrrhidifolia* for *Cystopteris montana*, as it was named *Polypodium myrrhidifolium* by Villars in 1875, considering that the name *montanum* was given to it by Allioni in 1785, which would make Allioni's *P. montanum* later than Vogler: but Vogler's *P. montanum* is really later than Lamarck's. Linnaeus seems to have confounded *P. Oreopteris* with his *P. fragrans*, and Hudson, in the 2nd edition of his 'Flora Anglica,' gave it the name of *Polypodium fragrans*, but this has no claim to be retained.

Mountain Fern.

SPECIES III.—**LASTREA FILIX-MAS.** Presl.

PLATE 1850.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 23.

Nephrodium Filix-mas, Richard. Hook. fil. Stud. Fl. p. 465. Hook. & Bak. Syn. Fil. ed. ii. p. 272.

Aspidium Filix-mas, Swartz. Sm. Eng. Bot. ed. i. No. 1458, and Eng. Fl. Vol. IV p. 288. Fries, Summ. Veg. Scand. p. 82. Rabenh. l. c. No. 23.

Polystichum Filix-mas, Roth. Koch, Syn. Fl. Germ. et Helv. ed. ii. p. 978. Gren. & Godr. Fl. de Fr. Vol. III. p. 631.

Polypodium Filix-mas, Linn. Spec. Plant. p. 1551.

Dryopteris Filix-mas, Schott. Newm. Hist. Brit. Ferns, ed. iii. p. 184.

Lophodium Filix-mas, Newm. Phytol. 1851, Append. p. 20.

Caudex short, very thick, separating into few large divisions or crowns, which are also very thick, short or rather short, and decumbent or more rarely erect, covered by the imbricated bases of former fronds. Fronds all similar, many produced close together from the extremity of each crown, erect or inclined outwards, deciduous or sub-evergreen. Stipes short or rather short ($\frac{1}{10}$ to $\frac{1}{2}$ of the length of its lamina), very stout, flattened or very slightly channelled on the anterior face, containing 5 or 7 or more vascular bundles, without glands or with a few glands beneath, with very numerous lanceolate acuminate entire or denticulate often ciliated pale or dark brown glabrous or slightly glabrous scales, which are partially or wholly

persistent. Lamina firm or subcoriaceous, bright green, usually without glands, oblong or strapshaped or oblong-elliptical, gradually or suddenly acuminate or cuspidate, rather abrupt at the base, bipinnate or once pinnate with the pinnae pinnatipartite or deeply pinnatifid; lowest pair of pinnae triangular-strapshaped or triangular, shorter than the succeeding pair, but not very greatly so; all of them very shortly stalked or sessile, pinnate or pinnatipartite or pinnatifid, flat or concave; pinnules or ultimate segments oblong or strapshaped-oblong, or the basal ones triangular-oblong, scarcely at all falcate, decurrent on the posterior side of the base, obtuse or subacute, serrate or crenate-serrate, especially towards the apex, more rarely inciso-serrate or even pinnatifid throughout, at least in those nearest the rachis, with the margins not recurved over the sori; the serratures sharp, but not spinous, pointed. Ultimate veins running from the midrib to just within the margin of the segments, with one or more with branches, according to the size of the lobes into which they run, one branch at least of each vein running into a tooth. Sori confined to the pinnae of the upper half or third of the frond attached to the back of the anterior fork of the ultimate veins, forming a line on each side of the main vein rather more approximate to it than to the margins of the pinnule or segment, usually confined to the lower two-thirds of the pinnule, and sometimes on the basal lateral veins only. Indusium firm or subcoriaceous, persistent, reniform or roundish-reniform, convex, often very greatly so, glabrous or sprinkled with minute glands over the whole surface. Spores granulated. No sterile fronds dissimilar to the fertile ones.

Var. *a. genuina*.

Fronde erect. Stipes short; scales rather numerous, subdiaphanous, ultimately pale brown, slightly ciliate or pectinate-ciliate, the lowest ones broadly lanceolate, the upper ones linear, intermixed with a few rather flexuous hair-like ones, the greater number of them falling off early and leaving the rachis nearly naked. Lamina firm, bright green with very pale brown subhyaline scales when it is unfolding, ultimately rather dull green, a little paler beneath where it is sometimes sparingly glandular on the rachis, narrowly oblong or strapshaped-oblong, pinnate; pinnae all narrow, flat or rarely concave, and all, except a few pairs near the base, pointing towards the apex of the frond, and so making an acute angle with the rachis, pinnate or pinnatipartite (at least towards the base); pinnules or ultimate

segments contiguous, oblong, attached by a base broader than the rest of the pinnule or segment, scarcely tapering towards the obtuse apex, crenate-serrate or entire, flat or (in small specimens) with the apices slightly incurved. Indusium rather large, regularly convex, with the margins not incurved round the sporangia, glabrous. Spores with a few rather large rounded separate tubercles.

Var. (?) *β. affinis*. Bab.

L. Filix-mas, var. *incisa*, Moore, Nat. Print. Brit. Ferns, 8vo. ed. Vol. I. p. 177.

Nephrodium Filix-mas, var. *affine*, Hook. *fil.* Stud. Fl. p. 495; and Hook. & Bak. Syn. Fil. p. 272.

Aspidium affine, Fischer & Meyer in Hohenücker, Enum. Plant. quas itin. per prov. Talysch leg. 1838, p. 10. *Milde*, l.c.

Polystichum affine, Ledebour, Fl. Ross. Vol. IV. p. 515.

Dryopteris affinis, Newm. Nat. Hist. Brit. Ferns, ed. iii. p. 187.

Fronds commonly arching backwards, at least when large. Stipes rather short; scales rather numerous, diaphanous pale brown, slightly ciliate, the lowest ones broadly lanceolate, the upper ones linear, intermixed with numerous flexuous-like ones, almost all falling off early and leaving the rachis naked. Lamina rather flaccid, bright glistening green, with white hyaline scales when it is unfolding, ultimately bright green, a little paler beneath, where it is not glandular even on the rachis, broadly elliptical-oblong or oblanceolate-oblong, pinnate; lowest pinnæ broader than the others and more triangular, and as well as those up to the middle of the frond spreading or even decurved, all of them flat, pinnate; pinnules not contiguous, strap-shaped or the lower ones triangular-strapshaped, attached by a base which is narrower than the lower part of the pinnule, inciso-serrate, or some of them near the base even pinnatifid, with the serrature sometimes again serrate, tapering towards the subobtuse or subacute apex, flat. Indusium rather large, regularly convex, with the margins not incurved round the sporangia, glabrous. Spores with a few small rather inconspicuous separate tubercles.

Var. *γ. paleacea*. Moore.

L. pseudo-mas, Wollaston, Phyt. ser. ii. 1855, p. 172. Lowe, Nat. Ferns, Vol. I. p. 280.

L. Filix-mas, var. *Borreri*. Bab. Man. Brit. Bot. ed. vii. p. 447.

Nephrodium Filix-mas, var. *Borreri*, Hook. *fil.* Stud. Fl. p. 465.

Aspidium paleaceum, Don, Prod. Fl. Nepaul, p. 4.

A. patentissimum, Wallich, Cat. p. 340.

A. Donnianum, Spreng. Syst. Veg. Vol. IV. pp. 2. 320.

A. Wallichianum, Spreng. Syst. Veg. Vol. IV. p. 101.

A. parallelogramum, Kunze, Linnea, Vol. XIII. p. 146.

A. crinitum, Martius & Galeotti, Foug. Mex. p. 66.

A. adnatum, Blume, Enum. Fil. Ger. p. 62.

Dichasium patentissimum, A. Braun, Fl. 1841, p. 710.

D. parallelogramum, A. Braun, Fl. 1841, p. 710.

(I rely on Dr. Milde and Mr. Moore for the above synonyms. See Nat. Print. Brit. Ferns, 8vo. ed. pp. 178-179.)

Dryopteris Borreri, Newm. Hist. Brit. Ferns, ed. iii. p. 189.

Fronds erect. Stipes rather short; scales very numerous, firm, at first brown, ultimately dark fulvous or maroon, generally with a maroon-coloured spot or stripe at the base, ciliate, the lowest ones broadly lanceolate, the upper ones linear, intermixed with very numerous firm hair or bristle-like ones, almost all persistent so that the rachis is permanently scaly. Lamina subcoriaceous, yellowish-green tinged with olive, with bright fulvous scales when it is unfolding, ultimately dark green, conspicuously paler and sometimes subglaucous beneath, where it is not glandular even on the rachis, oblong or narrowly elliptical-oblong, pinnate; lowest pinnae very slightly broader than the others, and as well as those in the middle of the stem spreading at right angles to the rachis or slightly pointing towards the apex of the frond, pinnate, all of them flat or slightly concave; pinnules contiguous, strapshaped or oblong-strapshaped, attached by a base which is commonly broader than the rest of the pinnule, or in very luxuriant specimens narrower than the lower part of the pinnule, not tapering to the very obtuse apex, faintly crenate-serrate, or rarely inciso-serrate, flat or with the apices slightly bent inwards. Indusium small, very convex, with the margins incurved over the sporangia, glabrous. Spores with a few rather large blunt separate tubercles.

Var. (?) *δ. pumila*. Moore.

“*Aspidium Filix-mas*, var. *recurvum*, Francis, Anal. Brit. Ferns, p. 36,” teste Newman, Hist. Brit. Ferns, ed. iii. p. 193.

Fronds inclining backwards. Stipes very short; scales numerous, rather thin, pale ferruginous concolorous, fimbriate-ciliate, studded with a few minute glands, the lower ones lanceolate, the upper ones linear, intermingled with rather numerous flexuous hair-like ones, most of them subpersistent so that the rachis is permanently more or less scaly. Lamina subcoriaceous, bright green with very pale scales when it is unfolding, afterwards dark green, only slightly paler beneath, where it is minutely glandular elliptical or oblong-elliptical, pinnate; lowest pinnae a little broader and more triangular

than the others, and as well as those near the bottom of the stem deflexed; the rest spreading at right angles, pinnatipartite or pinnatifid, more or less concave; pinnules or ultimate segments contiguous or overlapping, oblong, attached by a base which is wider than the rest of the segment, not tapering to the very obtuse apex, crenate-serrate or inciso-serrate, more or less twisted, and with the apices bent inwards. Indusium small, very convex, with the margins incurved over the sporangia, sprinkled all over with minute glands. Spores with numerous minute contiguous tubercles.

Var. *ε. abbreviata.* Bab.

L. abbreviata, *Wollaston*, *Phyt.* 1855, p. 172.

L. propinqua, ‘*Wollaston.*’ *Lowe*, *Nat. Ferns*, Vol. I. p. 280 (1865) (non *Presl* and *J. Smith*).

Nephrodium Filix-mas, var. *abbreviatum*, *Hook. fil.* *Stud. Fl.* p. 465?

Aspidium abbreviatum, *Poiret*, *Encyc. Bot. Suppl.* Vol. I. p. 516?

A. Filix-mas, var. *glandulosum*, *Milde*, *Fil. Europ.* p. 123.

Polystichum abbreviatum, *DC.* *Fl. Fr.* Vol. II. p. 560?

P. Filix-mas, var. *abbreviatum*, *Gren. & Godr.* *Fl. de Fr.* Vol. III. p. 631?

Dryopteris abbreviata, *Newm.* *Hist. Fil.* ed. iii. p. 192?

Fronds inclining backwards. Stipes very short; scales numerous, rather thin, pale ferruginous concolorous, fimbriate-ciliate, studded with numerous minute glands, the lower ones ovate-lanceolate, the upper linear, intermingled with a few flexuous hair-like ones, most of them deciduous, so that ultimately the rachis is nearly naked. Lamina firm but scarcely subcoriaceous, bright green, with very pale scales when it is unfolding, afterwards rather dull green, only slightly paler beneath, where it is thickly and minutely glandular, oblong or narrowly oblong, pinnate; lowest pinnæ scarcely broader than the others, and as well as those about the middle of the lamina spreading nearly at right angles to the rachis, the uppermost ones inclining a little towards the apex of the frond, pinnate, slightly concave; pinnules not contiguous, strapshaped-oblong, attached by a base which is narrower than the rest of the segment, tapering scarcely or but slightly to the obtuse apex, inciso-crenate or serrate, with the crenatures often again crenate, very slightly twisted and with the apices slightly bent inwards. Indusium small, very convex, with the margins incurved round the sporangia, sprinkled all over with minute glands. Spores with very numerous and very minute contiguous tubercles.

Var. *α*, common in pastures or heaths, and by roadsides, rarely in woods, generally distributed in England, Scotland, and Ireland.

Var. β , common in woods and bushy places, more rarely in open ground, but generally distributed.

Var. γ , in open ground and woods, common and probably generally distributed, extending north to Orkney, where I have seen it at Ramsdale, Orphir, and in Firth.

Var. δ , apparently rare, and according to Mr. Moore "it seems confined to North Wales and to alpine localities," Snowdon (Mr. D. Cameron), and Llysgwyn (Mr. S. O. Gray). I have a specimen from Teesdale, collected by the late Mr. A. O. Black; this is named *abbreviata*, but it is not the plant intended by me under that name. Probably some of the stations for *abbreviata* belong to what I regard as *pumila*. The plant growing in Scalpa Bay seems to be Moore's *crispa*, which I refer to *pumila*. Var. *subintegra*, Moore, I have not seen, but judging from descriptions, it must be referred to *pumila*; it was gathered at Ennis, county Clare, Ireland.

Var. ϵ , apparently scarce. Langdale (Mr. G. B. Wollaston); Borrowdale, Cumberland (Mr. R. D. Harrison), judging from plate of *abbreviata cristata* of Lowe's 'Native Ferns.' Ashurst Park, Tunbridge Wells (Mrs. Bolland), judging from figure 188 of Lowe's 'Native Ferns.'

England, Scotland, Ireland. Perennial. Summer, Autumn.

Very variable in size, according to its place of growth. Var. α has a stout caudex, with a few short decumbent divisions about the thickness of a man's wrist; the fronds are 9 inches to 3 feet high, by 3 to 8 inches wide; the stipes is stout (in large specimens the size of a goose-quill), 3 to 7 inches long, and contains at least 5 vascular bundles, generally 7, and near the base often a greater number. The sori occupy the apical half or two-thirds of the frond. Rachis unrolling in advance of the pinnæ, the apex of the frond hanging down like a shepherd's crook, afterwards becoming erect.

Var. β is probably merely a nemoral form of var. α ; it grows to a much larger size, often 4 or 5 feet high, or even more, by 9 to 15 inches broad, or even more. The stipes is 6 inches to 1 foot long. The texture of the frond is thinner, more shining, and is less rigid than var. α ; the pinnules are more separated, more tapering, much more strongly serrate or incised, and often those near the base of the lower pinnæ are pinnatifid or pinnatipartite, with the divisions again serrate. The indusia, however, are rather smaller if not absolutely at least comparatively, and the sori are generally less numerous, not occupying such a large part of the apical portion of the frond. The spores of the specimens I have examined are smaller, and with less elevated tubercles.

Var. γ is a firmer and more upright plant than either of the preceding; it is about a week or ten days later in unfolding its fronds in spring than the plants of the other form growing side by side with it, and it bears a greater degree of frost; for although in Fife it is always killed by the winter's frosts on exposed hillsides, in woods the fronds survive the winter, and, unless broken down by snow, remain upright as well as green until early spring; while var. *a* growing with it hardly ever survives as long as the new year, and even if the fronds remain green till then, the stipes, which is weaker, gives way, and they lie flat on the ground. The much greater number of scales on the stipes and rachis, and their persistence, is also a marked feature; but perhaps the most striking is the shape of the indusium. In all forms of *Filix-mas* the indusium is firmer, more convex, and more persistent, than in any other British Fern; but in var. *paleacea* these characters are most pronounced. In vars. *genuina* and *affinis* the free or anterior margin of the indusium is not incurved; it looks like a watch-glass over the sporangia, with the notch where it is attached to the vein not reaching the middle of the indusium, and represented by a shallow pit connected by a furrow with the reniform posterior margin. In var. *paleacea* the free margins are incurved, and the notch extends further into the indusium, so that it is not merely reniform in outline, but actually resembles a miniature sheep's kidney with the ends brought together. In size it varies much, according to its place of growth. I have Monmouthshire specimens in good fruit less than a foot long by 4 inches broad, and in woods at Balmuto it grows 5 feet long by 1 foot broad, with a stipes the thickness of a man's little finger, and containing 11 vascular bundles when cut halfway between the caudex and the beginning of the lamina. I much regret that the name *Borreri*, by which the plant is generally known in this country, cannot be retained, in accordance with the rigid rules of Fern-nomenclature, as Don described it under the name of *Aspidium paleaceum*, fifty-one years before Newman published it as *Dryopteris Borreri*.

Var. δ . *pumila* much resembles a dwarf form of *genuina*, but the scales are more numerous and darker. The chief distinction lies in the minute glands, with which not only the under-surface of the frond but even the indusium is dotted. I have no authentic wild specimens. The cultivated plant I obtained from Messrs. Sang, nurserymen, Kirkcaldy, and believe it to be correctly named. It has fronds 6 or 7 inches long by 2 broad, and is remarkable for the extreme shortness of the stipes, which is only $\frac{1}{2}$ to 1 inch long. The points of the pinnae are bent upwards and slightly twisted, so as to give a crisped appearance to the frond. Mr. Black's Teesdale specimens, which I refer to *pumila*, are 8 or 9 inches long by 3 inches broad, with petioles about $1\frac{1}{4}$ inch long. Both of these have but from 1 to 3 sori on each pinna or ultimate segment, so that they are in a row on each side of the midrib, which appears to be one of the

characters relied on to distinguish the var. *abbreviata* from ordinary Filix-mas. But this is simply the effect of depauperisation. Starved plants of vars. *genuina* and *paleacea* may be found in the same condition: when such do produce sori, the difference can only be relied on as an evidence that *pumila* and *abbreviata* belong to a smaller form or race than vars. α , β , and γ ; for these three when so small as ordinary wild specimens of vars. *pumila* and *abbreviata* produce no sori at all. The form called *crispa* by Mr. Moore seems the same as a plant which I gathered at Scalpa, and is much more robust than *pumila*, being from 8 to 18 inches high. The 8-inch specimens have mostly but 1 or 2 sori on each pinnule, while the larger examples have 6 or 8 on the basal ones. It has much the habit of *paleacea*, but has scales like those of *pumila*, and glandular fronds and indusia. It is remarkable for its crowded overlapping pinnules, which are imbricated one over the other, the anterior edge of each being turned upwards. Each pinnule has its edges reflexed, so that it is convex on the upper side, but the apex is bent upwards, so that the pinna, taken as a whole, is concave.

Var. ϵ agrees with *pumila* in its very short rachis and numerous glandular scales with toothed margins, thicker and darker-coloured than those of vars. *genuina* and *affinis*, but thinner and less bristly than those of *paleacea*. The fronds and the indusia have more numerous glands than in var. δ . *pumila*; the pinnules, at least towards the base of the pinnae, are separate from each other, and much less twisted. The lower pair of pinnae are not so much shorter than the succeeding pair, and the frond when fully developed is more parallel-sided, and thinner in texture and of a yellower green. Indeed, but for the short stipes and firmer indusium they might be mistaken for those of *L. rigida* by a casual observer. A cultivated plant which I had from Messrs. Sang, of Kirkcaldy (who got it from the late Dr. Lyell, of Newburgh) has the fronds 10 to 15 inches long by 3 to 5 inches broad, and the stipes 1 to 2½ inches long; but others received from Mr. Wollaston, originally from Langdale, have the fronds 3 feet 6 inches long and 7 inches broad; and the stipes 5 or 6 inches long. Mr. Moore says ('Nat. Print. Brit. Ferns,' 8vo. ed., vol. i. p. 129), "Indusium fringed with glands." But I have never seen this; they are *dotted* with glands, but not fringed.

Mr. Lowe says of his *abbreviata* that "specimens would have readily divided into no less than 20 distinct plants, and this seemed to be quite a character of the variety." I have not had the opportunity to verify this record, which would make *abbreviata* a multiceps form, not a pauciceps form, as ordinary Filix-mas.

Mr. G. B. Wollaston, who has paid great attention to the Ferns of the Filix-mas group, thinks there are 3 distinct species included under this name: 1, *L. Filix-mas*, which includes vars. *genuina* and *affinis*; 2, *L. pseudo-mas*, equivalent to var. *paleacea*; and 3, *L. abbreviata* (Phyt. 1855, p. 172) or *L. propinqua* (Lowe, 'Native Ferns,'

vol. i. p. 234). Apparently his *abbreviata* in the 'Phytologist' included the var. *pumila*, but in Lowe's 'Native Ferns' *pumila* is arranged under *pseudo-mas* (Lowe, l. c. p. 280).

If we had merely the forms *affinis*, *paleacea* and *abbreviata*, I should certainly have described them as subspecies, but with vars. *genuina* and *pumila* the chief forms are so connected that I am unable to separate them as subspecies.

The present species is readily distinguished from *L. Oreopteris* by having the frond much less tapered towards the base, and the sori remote from the margins of the pinnules. The indusium is very different, being firm, reniform, and persistent.

L. Filix-mas is one of the Ferns which delight fern-growers, from the number of abnormal forms of the fronds which occur. Some of these, which have the ends of the pinnæ and apex of the stem cleft, are extremely beautiful, while others in which the pinnæ are much reduced are at least curious, if not beautiful.

The caudex of the male fern has long had a reputation as an anthelmintic or vermifuge. The caudex must be gathered between the end of May and the middle of September, and after being dried in the shade, powdered and kept in well-closed bottles. The powder loses its virtue if kept much longer than a year.

Male-fern, or Male Shield-fern.

SPECIES IV.—**LASTREA RIGIDA.** *Presl.*

PLATE 1851.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 89.

Nephrodium rigidum, Desv. Hook. fil. Stud. Fl. p. 465. Hook. & Bak. Syn. Fil. ed. ii. p. 275.

Aspidium rigidum, Swartz. Hook. in Suppl. Eng. Bot. No. 2724. Milde, Fil. Europ. p. 126. Fries, Summ. Veg. Scand. p. 82. Rabenh. l. c. No. 89.

A. fragrans, Gray, Nat. Ar. Brit. Pl. p. 9.

Polystichum rigidum, DC. Koch, Syn. Fl. Germ. et Helv. ed. ii. p. 979. Gren. & Godr. Fl. de Fr. Vol. III. p. 632.

P. strigosum, Roth, Tent. Fl. Germ. p. 86.

Polypodium rigidum, Hoffm. Deutschl. Fl. Vol. II. p. 6.

P. fragrans, Villars, Hist. Plant. Dauph. Vol. III. p. 43, non Linn.

Lophodium fragrans, Newm. Phyt. 1851, App. p. xxi.

L. rigidum, Newm. Hist. Brit. Ferns, ed. iii. p. 176.

Caudex short, stout, thick, separating into numerous small divisions, which are moderately thick, very short, and closely packed together, closely covered by the imbricated bases of former fronds. Fronds all similar; several produced close together from the extremity of each crown, erect or ascending, deciduous. Stipes rather long (one-fifth as

long to nearly as long as the lamina), rather stout, flattened or only slightly channelled on the anterior face, even in the upper part containing 5 vascular bundles, thickly sprinkled with minute sessile glands, and rather thickly clothed with numerous lanceolate or ovate-lanceolate acuminate denticulate brown conspicuously glandular scales, which are subpersistent, or more rarely partially or wholly persistent. Lamina firm, dull greyish-green, thickly sprinkled with glands on both sides at least when young, strapshaped-oblong or narrowly triangular-oblong, tapering gradually to the apex, very abrupt at the base, bipinnate; lowest pair of pinnae triangular or triangular-strapshaped, about as long as any of the succeeding pairs, all of them shortly stalked, pinnate, flat or slightly concave; ultimate pinnules oblong or oblong-strapshaped, or strapshaped-triangular, scarcely falcate, not decurrent on either side of base, obtuse or subacute, pinnatifidly lobed, with the lobes serrate, the serratures generally very sharp but not spinous-pointed. Ultimate veins running from the midrib to just within the margins of the lobes or ultimate segments of the pinnules, with each venule running into a tooth. Sori placed on the pinnae of the upper half or two-thirds of the frond, attached to the back of the anterior venule of the ultimate lobes, forming a line on each side of the main vein of the pinnules considerably more approximate to it than to the margin of the pinnule, extending nearly to the apex of the pinnules, sometimes at the base of the pinnules, also on 2 or more branches of the vein. Indusium firm, persistent, roundish-reniform, convex, often very much so, sprinkled with conspicuous glands over the whole surface. Spores bluntly tuberculate with a few large blunt tubercles. No sterile fronds dissimilar to the fertile ones.

On rocks and amongst broken limestone in mountainous districts, very local. Silverdale, near the top lock, Lancaster and Kendal Canal, North Lancashire; Allermine rocks, above Settle; south-east side of Ingleborough; White Scars, above Ingleton, Yorkshire; Arnside Knot, Hutton Roof Craigs, and Farlton Knot, Westmoreland; and indeed over the whole tract between Arnside Knot and Ingleborough. It is recorded from Wolston Moss, near Warrington, Mr. W. Christy, but this requires confirmation. A single plant was found near Bath, probably planted; and it has been gathered in Ireland, on a clay slate wall near Towaly, Drogheda, no doubt planted (Cyb. Hib.).

England, [Ireland]. Perennial. Summer, Autumn.

Stipes from the thickness of a crow-quill to that of a goose-quill, 3 inches to 1 foot long; in the latter case (a plant from Ingleborough collected by Mr. Baker) the lamina is 14 inches long and 5 inches broad; in another Ingleborough specimen from the late Mr. A. O. Black, the rachis is 10 inches long, and the frond 14 inches by 5 inches. The colour and texture of the lamina is not unlike that of *Polypodium Robertianum*, no doubt on account of the small whitish glands with which the plant is so thickly sprinkled even on the upper side. The under side of the frond is much paler than the upper. The scales on the lower part of the stipes vary from ovate-lanceolate to lanceolate; those on the upper part of the stipes, rachis, and secondary rachides are much narrower. The pinnae are spreading or ascending-spreading, and do not decrease in size towards the base, indeed the lowest pair is frequently actually longer than the succeeding pairs. The pinnules are not contiguous, the lower ones at least attached by a narrow base, which is frequently more or less auricled on account of their lowest lobes being larger than the rest, they taper slightly towards the apex. They are conspicuously fringed with minute stalked glands. Indusia yellow, but ultimately appearing lead-colour from the dark-coloured sporangia showing through, as in *Filix-mas*.

L. rigida is not unlike the *abbreviata* form of *Filix-mas*, but has a much longer stipes, a more opaque frond, which is very much more glandular, and is more abrupt at the base from the great size of the lower pair of pinnae. The indusia are thinner, less deeply notched and with much larger and more conspicuous glands, which are evidently stalked. The multicaps caudex is very different from that of any form of *L. Filix-mas* I have seen.

I am indebted to Mr. Charles Bailey, of Manchester, for a living plant from Arnside Knot.

Rigid Shield-fern.

SPECIES V.—**LASTREA REMOTA.** *Moore.*

PLATE 1852.

Nephrodium remotum, *Hook. fil. Stud. Fl.* p. 466.

N. spinulosum, var. *remotum*, *Hook. & Bak. Syn. Fil.* ed. ii. p. 275.

Aspidium remotum, *A. Braun. Milde, Fil. Europ.* p. 125.

A. rigidum, β . *remotum*, *A. Braun in Döll. Fl. Rheinl.* p. 16.

“*A. Filix-mas*, var. *elongatum*, *Hook. Spec. Fil. Vol. IV.* p. 117.” *Milde.*

“Caudex stout, unusually upright” (Clowes, in lit.). Fronds all similar, erect, “deciduous” (Lowe). Stipes rather long (about one-fourth the length of the lamina), channelled on the anterior face, containing 7 vascular bundles, without glands and with very numerous scales, the lowest of which are ovate, acuminate or cuspidate and

pale brown, the upper lanceolate intermixed with hair-like ones; these two last commonly having a darker shade in the centre towards the base; all of them more or less persistent. Lamina firm, bright green, without glands, elliptical-strapshaped or strapshaped-oblong, rather abruptly acuminate and rather abrupt at the base, bipinnate; lowest pair of pinnæ triangular-strapshaped, shorter than the succeeding pair, but not very much so, all of them shortly stalked, pinnate, flat; pinnules oblong or oblong-elliptical, or the basal ones triangular-lanceolate, not falcate, not decurrent on either side of the base, subobtuse or subacute, the basal ones pinnatipartite, with the lobes serrate at the apex, the others inciso-serrate; serratures very sharp, but not spinous-pointed. Ultimate veins running from the midrib to just within the margins of the lobes or ultimate segments of the pinnules, once forked or simple, with each posterior venule running into a tooth. Sori occupying the whole of the frond, attached to the back of the anterior venule of the ultimate lobes, or on the largest lobes to two or three of the lowest ultimate venules of the lobe, forming a line on each side of the main vein of the pinnules, much nearer to it than to the margin of the pinnules, extending nearly to the apex of the pinnules. Indusium rather firm, persistent, roundish-reniform, erose on the margins, without glands. Spores bluntly tuberculated. No sterile fronds dissimilar to the fertile ones.

Windermere, Westmoreland; first observed by Mr. Isaac Huddart growing in company with *L. Filix-mas*, vars. *incisa* and *abbreviata*, *L. spinulosa*, and *L. dilatata*, and about 5 miles from limestone rocks, where *L. rigida* is abundant. (Mr. Frederick Clowes in *Phyt.* 1860, p. 227.)

England. Perennial. Autumn.

Fronde resembling in outline that of *L. Filix-mas*, var. *genuina*, but with a longer stipes, 3 to 4 feet high, of which the stipes is 9 inches to 1 foot long. Pinnæ pointing upwards at an acute angle, longest in the middle of the frond, the longest 5 or 6 inches long; pinnules in the middle of the frond $\frac{1}{2}$ to 1 inch long.

L. remota differs from *L. Filix-mas* in its longer stipes and more compound fronds. The pinnules are not contiguous and are attached by a narrow base to the partial rachis; they are nearly equally cut in on both the anterior and posterior sides, so that the basal ones are almost stalked, with a tendency to be broadest near the middle or a little below it, and are so deeply pinnatipartite that the frond becomes almost tripinnate. The partial rachis is winged, with a narrow

herbaceous stripe connecting the pinnules, which are less decidedly opposite than those of *L. Filix-mas*; and the lobes of the pinnules have a more decided mid-vein giving off branches than even var. *affinis* of *L. Filix-mas*, though it does obtain to some extent in the more divided forms of that variety; even in these, however, the pinnules, except those at the bottom of the pinnæ, are narrowed at the base only on the anterior side and decurrent on the posterior side. In *L. remota* the sori are placed in a line which is much closer to the midrib of the pinnules than in *L. Filix-mas*. The scales also are different, being more varied in form on the same individual, and those at the base of the stipes are broader. The indusium is smaller, thinner in texture, and with the depression of the notch less marked than in *Filix-mas*, and the edges are finely denticulate.

From *L. rigida* it differs in its much longer fronds, which have the basal pinnæ conspicuously smaller than the succeeding ones, and all of them making a much smaller angle with the rachis. The pinnules are much larger, and are not to be auricled at the base, as is so frequently the case with *L. rigida*; and there is an absence of the conspicuous glands with which the rachis scales, upper and under sides of the lamina and indusia are studded. The ultimate veins are more clavate at the apex than in any of the preceding species of *Lastrea*.

Its difference from *L. spinulosa* will be noticed under that species.

Of this plant I have seen no living specimens, nor do I possess dried native specimens. I have received dried cultivated specimens from Windermere, from Mr. G. B. Wollaston, through the kindness of Messrs. F. Currie and C. E. Broome; and also from Messrs. E. Sang and Sons, Kirkcaldy, who had the frond from Mr. Lowe, of Nottingham. The caudex and vernation I am therefore unable to describe from personal experience; but Mr. F. Clowes writes concerning the former, "A single crown of it, if let alone, will grow up like a tree-fern, and requires support to prevent it being broken by the wind." In his paper in the 2nd ser. of 'Phytologist,' 1860, p. 220, of the vernation he says, "Forms side loops like *spinulosa*; tip not so disengaged as to form the 'shepherd's crook';" and of the pinnæ he says, "Lower ones obliquely triangular from the greater length of posterior basal pinnules; the surface more or less twisted upwards." Here we have two additional differences from *Filix-mas* in which the well-known "shepherd's crook," formed by the top uncurling frond, is particularly observable and forms a marked feature (though it is said to be imperfectly formed in var. *abbreviata*), while the second point is the twisting of the pinnæ as in *L. spinulosa* and *L. uliginosa*, so that their plane does not coincide with that of the frond as a whole, which it does in *Filix-mas*.

Milde says that the original discoverer of this plant, the late Professor A. Braun, now (1867) considers this plant a form of *Filix-mas*; but Milde himself inclines to the opinion that it is a hybrid

between *Filix-mas* and *spinulosa*; and Mr. Clowes writes, "I have no doubt that *L. remota* of Moore and Braun is a hybrid. It has been sown over and over again, and always produced *L. Filix-mas*, var. *paleacea*. I do not know whether *L. dilatata* or *spinulosa* has ever come up from its spores; but as the plant called *L. remota* has never come from its spores, I cannot think it a species or variety. I do not know whether it is a hybrid between *L. Filix-mas* and *L. dilatata* or *L. spinulosa*."

It appears to be a plant of extreme rarity, as only 3 stations are known for it—namely, near the Cataract of Geroldsau, in the Grand Duchy of Baden, where it was found growing with *L. spinulosa* and *Filix-mas* by A. Braun in 1834; in the Aachener-Busch, between Aix-la-Chapelle and Altenberg, found by Braun in 1859; and at Windermere, in 1854, by Messrs. Huddart and Clowes, but it was not recognised till sent to Mr. T. Moore in 1859. In 1870 the late Mr. J. Ward sent to the Botanical Exchange Club some examples of a Fern from the Black Plantation, near Richmond, Yorkshire, July 1870. The specimens were named by Mr. Ward '*L. dilatata*, var.' Mr. H. C. Watson named them '*spinulosa*.' I was inclined to refer them to *Filix-mas*, var. *incisa*. The specimens are almost barren, and evidently malformed; but, except for the shorter and broader fronds ($1\frac{1}{2}$ to 2 feet by 5 to 8 inches), less acute teeth, and the shorter stipes, they agree best with *L. remota*. It is to be hoped that some botanist will examine the locality.

Remote Shield-fern.

SPECIES VI.—**LASTREA CRISTATA.** Presl.

PLATE 1853.

- Rabenh.* Crypt. Vasc. Europ. Exsicc. No. 17.
L. cristatum (type) *T. Moore*, Phyt. 1851, p. 149, and Nat. Print. Brit. Ferns, 8vo. ed. Vol. I. p. 209. *Bab. Man. Brit. Bot.* ed. vii. p. 447.
L. cristatum a. Callipteris, *Hook. & Arn.* Brit. Fl. ed. viii. p. 585.
L. Callipteris, *Newm.* Hist. Brit. Ferns, ed. ii. p. 12.
Nephrodium cristatum, *Mich.* (type). *Hook. fil.* Stud. Fl. p. 465. *Hooker & Baker*, Syn. Fil. ed. ii. p. 273.
Aspidium cristatum, *Swartz.* *Smith*, Eng. Bot. No. 2125; and Eng. Flora, Vol. IV. p. 289. *Fries*, Summ. Veg. Scand. p. 82. *Rabenh.* l. c. No. 17.
A. cristatum (type), *Milde*, Fil. Europ. p. 129.
Polystichum cristatum, *Roth.* *Koch*, Syn. Fl. Germ. et Helv. ed. ii. p. 978. *Gren. & Godr.* Fl. de Fr. Vol. III. p. 631.
P. Callipteris, *DC.* Fl. Fr. ed. iii. Vol. II. p. 562.
Polypodium cristatum, *Linn.* Sp. Plant. p. 1551.
P. Callipteris, *Ehrhart*, Beitr. zur Naturk. Vol. III. p. 77, non 'Wilms.' (*Milde*).
Lophodium Callipteris, *Newman*, Phyt. 1851, App. p. xix.; and Hist. Brit. Ferns, ed. iii. p. 170.

Caudex elongate, rather thick, separating into numerous small divisions which are moderately thick, elongate, and creeping, except where the plant grows in dry ground (when the crowns are closely packed together), partially covered by the more or less separated bases of former fronds. Fronds of 2 kinds, a few produced close together from the extremity of each division or crown, deciduous, sub-evergreen. Fertile fronds quite erect. Stipes rather long (from one-third as long to as long as the lamina), stout, deeply channelled on the anterior face, containing 5 vascular bundles, without glands, more or less sparsely clothed with broadly-ovate cuspidate concave entire very pale brown subpersistent scales. Lamina firm, rather pale yellowish-green, glabrous and without glands, strapshaped, abruptly acuminate at the apex, very abrupt at the base, pinnate; lowest pair of pinnæ deltoid or deltoid-triangular, about the same length and form as 3 or 4 of the succeeding pairs, but shorter than those in the middle of the frond, which are triangular, all of them shortly stalked, pinnatipartite, or the lower ones almost pinnate towards the base; pinnules or ultimate segments oblong, attached by the whole breadth of their base, decurrent on the lower side, the lowest pair on each pinna alone partially separated on both sides from the wing of the partial rachis to which the segments are attached, more or less serrate or doubly serrate; those nearest the rachis sometimes lobed or almost pinnatifid; teeth incurved upwards, acute, or some of them mucronate. Ultimate veins slightly impressed on the upper surface, running from the midrib to the margin of the segments, clavate, forked or alternately branched, according to the size of the lobe; some at least of the venules running into teeth. Sori confined to the pinnæ of the upper half of the frond, attached to the back of the anterior branch of the ultimate veins, forming a line on each side of the mid-vein of the segment of the pinna nearly equidistant from it and the margin of the pinnule or segment and extending nearly to the apex of the pinnules, sometimes also at the base of the pinnule on 2 or more branches of the vein. Indusium thin, soon shrivelling, subpersistent, roundish-reniform, flat, slightly erose, but without glands either on the margin or surface. Spores tuberculate, with large sparse rounded tubercles. Barren fronds numerous, arching greatly backwards, much shorter than the fertile fronds, and with a short, slender stipes. Lamina oblong or elliptical-oblong, tapering gradually from $\frac{2}{3}$ of the frond to the apex, thinner in texture than that of the fertile frond, pinnate; pinnæ approximate, pinnatipartite; ultimate segment

broadly oblong, closely approximate, rounded or obtuse at the apex, evenly toothed and with the teeth shorter than in the fertile frond, and not mucronate.

In bogs and on wet heaths, especially among Alder bushes. Very local. At Tritton Decoy, near the old decoy at Mestleton, and Bexley Decoy, near Ipswich, Suffolk; Edgefield Heath, near Holt (Mr. Wingham); Lurlingham Broad (Rev. W. S. Hoare); Lezeak, (Rev. John Freeman); Higham Sounds, near Burnley Hall (A. O. Black); Holt Lows (Rev. W. H. Girdlestone); Derlingham and Bawsey Heath, near Lynn; Fakenham and Wymondham, Norfolk; Huntingdonshire (Rev. M. J. Berkeley); Madeley bog, near Newcastle-under-Lyme, Staffordshire; Oxtou bogs, Nottingham; Achmere, Delamere Forest (J. F. Robinson); Wybunbury bog, Cheshire; Malton, Yorkshire, "Messrs. Monkman and J. Mackle" (Lowe). Reported also from Bedford and Worcestershire. In Scotland the only known station is in a bog beyond Crofthead, near Neilston, Renfrewshire, 12 miles south-west of Glasgow.

England, Scotland. Perennial. Autumn.

Caudex slowly creeping, sometimes 2 feet long, about as thick as a man's thumb or more, the branches terminated by crowns, which advance each year; but when growing in dry soil the plant becomes tufted, as the divisions of the caudex do not elongate, but remain closely packed together, forming a many-headed caudex. Fertile fronds 18 inches to 3 feet high, of which the lamina is 9 to 18 inches, and 3 to 5 inches broad, very stiffly erect, with the pinnæ rather distant, 5 or more of the lower pairs broader shorter and more spreading than the succeeding ones; all of them slightly twisted, so that their upper surface makes an angle with the general plane of the frond; in veneration they are flat, and applied to the rachis. Barren fronds 6 to 18 inches long by 3 to 6 inches broad, the pinnæ decreasing from the middle towards both base and apex, closer together, less acute than in the fertile fronds, and with the segments contiguous. Stipes slender, 3 to 6 inches long. Rachis of both barren and fertile fronds usually bare of scales.

I am indebted to Dr. J. Fraser for specimens of the barren fronds from Wybunbury bog; and also to Mr. J. F. Robinson, from Achmere. These fronds appear to be rare in herbaria, botanists satisfying themselves with collecting the fertile ones. I have never seen them deficient in the cultivated plant; and though when weak it produces nothing else, yet as they are present whenever it is growing vigorously, they may be considered as a normal feature of its growth.

This plant cannot well be confounded with any British Fern, except *L. uliginosa*. The differences will be mentioned hereafter. Strangely enough, *L. Filix-mas* was figured in the original edition of 'English Botany,' No. 1949, for it. Smith says Mr. Sowerby was deceived by a wrong specimen sent from the Isle of Wight, but that *Filix-mas* was never mistaken for *cristata* by him. I have long had the plant in cultivation from Edgefield and Bawsey Heath, sent me by the Rev. Kirby Trimmer; it is much less vigorous than *L. uliginosa* and *spinulosa* growing beside it.

Crested Shield-fern.

SPECIES VII.—**LASTREA ULIGINOSA.** *Newman.*

PLATE 1854.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 19. Newm. Phyt. 1849, p. 678.

L. cristata, var. *β. uliginosa*, *Moore, Phyt. 1851, p. 149*; and *Nat. Print. Brit. Ferns, Svo. ed. Vol. I. p. 210. Bab. Man. Brit. Bot. ed. vii. p. 447. Hook. & Arn. Brit. Fl. ed. viii. p. 585.*

Nephrodium cristatum, β. uliginosum, Hook. fil. Stud. Fl. p. 465. Hook. & Bak. Syn. Fil. ed. ii. p. 273.

Aspidium cristatum, var. uliginosum, Milde, Fil. Europ. p. 130.

A. spinulosum × cristatum, Milde, Verhandl. der Schles. Gesellsch. 1855, p. 64; and *Nov. Act. 1858, p. 532. Laseh. in Bot. Zeit. 1856, p. 435, teste Milde. Rabenh. l. c. No. 19.*

Lophodium uliginosum, Newm. Phyt. 1851, p. 371; and *App. XIX. Hist. Brit. Ferns, ed. iii. p. 163.*

Caudex short (or elongate when growing in bogs?), rather thick, separating into numerous rather small divisions or crowns, which are moderately thick, short, and closely packed together (probably more elongate and creeping when growing in moist bogs?), covered by the imbricated bases of former fronds. Fronds of two kinds, several produced close together round the extremity of each division or crown, deciduous. Fertile fronds stiffly erect. Stipes rather long ($\frac{1}{6}$ to nearly $\frac{1}{2}$ the length of the lamina), stout, deeply channelled on the anterior face, containing 5 vascular bundles, without glands, more or less sparsely clothed with broadly-ovate cuspidate concave entire very pale brown subpersistent scales. Lamina firm, deep yellowish-green, glabrous and without glands, strapshaped, tapering gradually to the apex, abrupt at the base, pinnate; lowest pair of pinnae deltoid-triangular, with the basal pinnules nearly equally long both above and below, about as long as the succeeding pair, the others becoming gradually longer and narrower till about the middle

of the lamina where they are narrowly triangular, after which they gradually diminish in length to the apex; all of them shortly stalked, pinnate; pinnules flat, elliptical-oblong, or those next the rachis oblong-triangular, attached by only a portion of their base, decurrent on the lower side; the lowest pair on each pinna quite separated and almost stalked, deeply pinnatifid or pinnatipartite with the lobes inciso-serrate; the pinnules towards the apex of the pinnae less deeply pinnatifid, and those towards the apex simply inciso-serrate; teeth incurved, acute, most of them mucronate. Ultimate veins deeply impressed on the upper surface, running from the midrib of the segments of the pinnules to their margins, clavate, all except the anterior one (which runs into the notch between the teeth), running into the teeth. Sori usually occupying the whole frond, attached to the back of the anterior branch of the ultimate veins, forming a line on each side of the ultimate segment of the pinnule in the lower pinnules, and of the pinnule or segment itself towards the apex of the pinnae, about midway between the mid-vein and the margin of the segment or pinnule, as the case may be, and extending nearly to the apex. Indusium thin, soon shrivelling, subpersistent, roundish-reniform, flat, slightly erose, but without glands either on the margin or surface. Spores abortive in all the specimens I have examined. Barren fronds numerous, arching backwards, much shorter than the fertile ones, and with a short, slender stipes. Lamina oblong, tapering gradually from the middle of the frond to the apex, thinner in texture than those of the fertile fronds, pinnate; pinnae approximate, pinnatipartite; ultimate segments oblong, closely approximate, obtuse at the apex, doubly serrate, with the teeth incurved, short and scarcely mucronate.

In bogs, growing in company with *L. cristata* and *L. spinulosa*, very local. Bawsey Heath, Norfolk; Wybunbury bogs, Cheshire; Oxtun bogs, Nottingham (Newman); Malton, Yorkshire (Monkman). Reported from Epping Forest, Essex; Castle Howard, Yorkshire, and Derwentwater, where *L. cristata* does not grow, but I doubt it being the true plant.

England. Perennial. Autumn.

Rootstock in the cultivated plant breaking into numerous crowns, which remain closely packed together; they attain a larger size than those of *L. cristata* before they break, having often 6 or 8 fronds growing from a single one. No botanist seems to have published

any results of examination of the caudex of this Fern in its native localities, but it is very probable that the branches of the caudex, when it is growing in boggy soil, creep like those of *L. cristata* and *spinulosa*, both of which assume a tufted condition when grown in ordinary garden soil; but *L. uliginosa* certainly forms larger crowns than either of the others when cultivated under precisely similar circumstances. Fertile fronds 18 inches to 3 feet high, and 4 or 5 inches broad; pinnæ rather distant, the lower ones spreading, the uppermost ones ascending, all somewhat twisted round so as to turn their upper surface to the sky. Barren fronds 8 to 12 inches long, by $2\frac{1}{2}$ to 4 inches broad.

Occasionally late in the year fertile fronds shorter and less divided than the ordinary ones, and consequently much more resembling those of *L. cristata* than the ordinary ones, are produced; but, as far as my experience goes, this is by no means a usual occurrence. It seems as if sori were produced on what ought to have been barren fronds.

A very puzzling plant, quite intermediate between *L. cristata* and *L. spinulosa*. It differs from the former in its longer, narrower, and more acute pinnæ and more separated pinnules or ultimate segments, many of those next the rachis being pinnatifid, and with their lobes, as well as the margins of the segments towards the apex of the pinnæ, much more deeply toothed, and the teeth more decidedly mucronate. The basal pinnules, from being more divided, instead of giving off veins from the midrib of the pinnule which run to the margin, give off flexuous veins, running into each lobe, and from this flexuous vein are given off ultimate veins, of which all but the first anterior branch run into the teeth, and terminate in a clavate apex before reaching the point of the tooth. All the veins are much more deeply impressed on the upper surface than those of *L. cristata*, consequently the surface of the frond is less smooth; in fact, but for its rigid upright-ness and more spreading pinnæ, it closely resembles the less divided and narrower states of *L. spinulosa*. I have never found mature spores in the sporangia of my cultivated plants, but that arises, no doubt, from their growing in too dry ground.

The barren fronds are much more like those of *cristata* than the fertile ones, indeed it would be scarcely possible to separate them if mixed up among each other; usually, however, those of *L. uliginosa* are broader, with the pinnæ more acute, the ultimate segments more nearly divided from each other, and more distinctly serrated. They are darker in colour and less smooth on the surface.

I have very little doubt of *L. uliginosa* being a hybrid between *L. cristata* and *L. spinulosa*. It appears to be found in company with them, but is certainly less abundant than *L. cristata*, and much less so than *L. spinulosa*: now if it were an intermediate state connecting these two we should expect to find it, if not more abundant than either, more plentiful than one of them. If it really be an intermediate form I think Mr. T. Moore's view is the only one tenable,

viz., that we must consider *L. cristata*, *L. uliginosa*, and *L. spinulosa* as one species. In the 'Phytologist' for 1852, p. 694, Mr. Newman states that "he had possessed for at least 6 years a plant of that form of *Lastrea* usually known as *cristata*, but to which he wished to restrict the name *Callipteris*, by Ehrhardt. This plant originally came from Bawsey, and was most rigidly typical of its kind; cultivated in a dry London atmosphere, it had strictly retained its original characters, except that, getting weaker year after year, it has grown small by degrees and beautifully less. The weather at last proved too dry, and this individual plant was planted in bog earth, abundantly supplied with water and placed in a close greenhouse, where the thermometer frequently rose above 90° Fahrenheit. Its growth became vigorous in the extreme, but this was not all. Frond after frond appeared, each receding more than the last from the typical figure of *Callipteris*, and approaching that of *uliginosa*, and at the present moment it has fronds evidently from the same cormus, which would serve admirably as representatives of both supposed species." I have tried treating *L. cristata* in this way for six years, but it has retained its typical form. Mr. Newman says that in spring it is 20 days later than *multiflora* (*dilatata*) in expanding, 10 days later than *L. spinulosa*, and from 10 to 15 days earlier than *Callipteris* (*cristata*), which accords pretty well with my own experience, except that I find 10 instead of 20 days the difference between *dilatata* and *spinulosa*; but Mr. Moore has never found any constancy in this respect with cultivated plants. The fronds of *L. uliginosa* last till December in ordinary years.

Milde quotes *Aspidium Boottii*, Tuckerman (*A. spinulosum* var. *Boottii*, Gray, Man. Bot. U. S.) as a synonym of *L. uliginosa*, and I have characteristic specimens of it from Christiania, sent by the late Professor Blyth, under the name "*Polystichum spinulosum*, var. *ferre* P. *Boottii*, Americanorum," but in Gray's Manual the involucre of *Boottii* is said to be glandular, and the plant to be closely allied to the European form *A. remotum*, Braun, while in Hook. and Bak. Syn. Fil. it is referred to *L. spinulosum*, and *L. collina*, Newman, is given as a synonym of var. *Boottii*. I have no specimens of it, and therefore I have not ventured to quote the American name.

Lloyd's Shield-fern.

SPECIES VIII.—**LASTREA SPINULOSA.** Presl.

PLATE 1855.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 18.

L. spinosa, *Newm. Nat. Hist. Brit. Ferns*, ed. ii. p. 209.

L. cristata, var. *spinulosa*, *Moore, Nat. Print. Brit. Ferns*, 8vo. ed. Vol. I. p. 210.

Nephrodium spinulosum, "*Desv.*" *Hook. fil. Stud. Fl.* p. 466.

N. spinulosum, *a, Hook. & Bak. Syn. Fil.* ed. ii. p. 275.

- Aspidium spinulosum*, *Swartz.* *Sm. Eng. Bot.* No. 1460; and *Eng. Fl.* Vol. IV. p. 292 (?)
Milde, Fil. Europ. p. 132.
- A. spinulosum*, var. *a.*, *Fries*, *Summ. Veg. Scand.* p. 82.
- A. cristatum*, var. *spinulosum*, *Hook. & Arn. Brit. Fl. ed. viii.* p. 885.
- Polystichum spinulosum*, *a. vulgare*, *Koch*, *Syn.* "Fl. Germ. et Helv. ed. ii. p. 979." *Gren. & Godr. Fl. de France*, Vol. III. p. 632.
- P. spinosum*, *Roth*, *Fl. Germ.* Vol. III. p. 91, teste *Newm.*
- Polypodium spinulosum*, *Muller*, "Fl. Fridrichsdal, 193, No. 841, t. ii. f. 2," teste *Moore.*
- Lophodium spinosum*, *Newm. Phyt.* 1851, p. 371, and *App. XVIII.*; and *Hist. Brit. Ferns*, ed. iii. p. 157.

Caudex short or elongate, rather thick, separating into numerous small divisions, which are moderately thick, more or less elongate and creeping, but sometimes (when growing in dry ground short and with the crowns closely packed together), partially covered by the more or less separated bases of former fronds. Fronds all similar, a few produced from the extremity of each division or crown, sub-evergreen, erect, or more rarely inclining backwards. Stipes long (from one-third to quite the length of the lamina), rather stout, deeply channelled on the anterior face, containing 5 vascular bundles, usually without glands, rather sparsely clothed with ovate cuspidate concave entire very pale brown subpersistent scales, sometimes intermixed with lanceolate ones. Lamina firm, yellowish-green or deep green, glabrous and usually without glands, strapshaped or oblong-strapshaped or lanceolate-oblong, tapering gradually towards the apex, abrupt at the base, bipinnate or almost tripinnate; lowest pair of pinnæ unequally triangular or deltoid-triangular, with the basal pinnules longer on the lower than on the upper side of the midrib, about as long as the succeeding pair of pinnæ, the others becoming gradually longer and narrower as far as a little below the middle of the lamina, where they are narrowly triangular, after which they gradually diminish in length; all of them shortly stalked, pinnate; pinnules flat or convex, elliptical oblong, or the lower ones oblong-triangular, attached by a very small portion of the centre of their base, the basal ones of the lower pinnæ not decurrent and frequently shortly stalked, usually only those towards the apices of the upper pinnæ decurrent; lower ones pinnatifid or deeply pinnatifid, with the lobes inciso-serrate, those pinnules towards the apex of the pinnæ less deeply pinnatifid, and those at the apex only inciso-serrate; teeth scarcely incurved, strongly mucronate. Ultimate veins deeply impressed on the upper surface, all except the anterior one (which runs into the notch between the lobes) running into the teeth. Sori usually occupying the whole frond, except the lowest pair of pinnæ,

but sometimes confined to its upper half, attached to the back of the anterior branch of the ultimate veins, forming a line on each side of the midrib of the ultimate segment of the pinnule nearer the midrib than the margin of the pinnule or segment as the case may be, and extending nearly to its apex. Indusium thin, soon shrivelling, subpersistent, roundish-reniform, flat, entire or remotely denticulate, but without glands either on the margin or surface. Spores tuberculate, with sparse large rounded tubercles. No barren fronds unlike the fertile ones.

Var. *α. elevatum.*

Aspidium spinulosum, var. *elevatum*, *A. Braun.* *Milde*, Fil. Europ. p. 133.

Rachis without glands. Lamina firm, yellowish-green, without glands, strapshaped or oblong-strapshaped, nearly parallel-sided. Indusium nearly entire, without glands on the margin.

Var. *β. exaltatum.*

Aspidium spinulosum, var. *exaltatum*, *Lasch.* *Milde*, Fil. Europ. p. 132.

Rachis without glands. Lamina thin, deep green without glands, oblong-lanceolate or ovate-lanceolate, more or less curved-sided. Indusium nearly entire, without glands on the margin.

Var. *γ. decipiens.*

Rachis sprinkled with minute stalked glands. Lamina firm, yellowish-green, with minute clavate glands beneath, oblong-strapshaped or lanceolate-oblong. Indusium dentate, with the teeth usually without glands.

Var. *α* in bogs and on heaths. Var. *β* in woods. Both forms rather common, and generally distributed in England. More rare in Scotland, and certainly occurring as far north as Aberdeen, Perth and Inverness, and recorded as far north as Elgin, Ross and the Isle of Lewis. Sparingly distributed throughout Ireland from south to north. Var. *γ*, wood below Linley, near Broseley, Salop, Mr. G. Moore (*sub nom.* "L. dilatata *β.* glandulosa"); roadside between Inver Cloy and Brodick Castle, Arran. Perhaps some of the forms referred to *L. glandulosa*, which are said to have creeping caudices, belong to this variety of *spinulosa*, though Mr. F. Clowes distinguishes 'glandulose *spinulosa*' from 'glandulosa' at Windermere.

England, Scotland, Ireland. Perennial. Summer, Autumn.

Caudex slowly creeping when growing in boggy soil or leaf-mould, in which case the divisions extend and separate the crowns from each other, but when the plant grows in dry soil the divisions do not elongate and the crowns remain close together, so that the plant has a number of small tufts. Fronds 9 inches to 3 feet high or more, of which the stipes is usually about half, but sometimes less, and sometimes a little more. Var. α has the lamina firm, nearly parallel-sided, 6 inches long by $2\frac{1}{4}$ inches broad to 18 inches long by 5 broad, yellowish-green, with the pinnæ pointing upwards; in this state it closely resembles the fertile fronds of *L. uliginosa*, but the frond is more divided; the basal pinnæ have most of their pinnules separated, and the two pinnules at the bottom of the pinnæ on the lower side of the pinnules are much longer than on the upper side, and though this occasionally happens in *L. uliginosa* it is to a far less extent. The pinnæ are longer, and form a more acute angle with the rachis, they are not so much twisted out of the plane of the lamina, so that their upper surface is not so horizontal. Var. β attains a considerably larger size, and is broader and less parallel-sided, being from a foot long by 5 inches broad to 2 feet long by 11 inches broad; the frond is much thinner and of a deeper green, and the lower pinnules are often again pinnate. The sori are smaller than in var. α , and do not become confluent as they often do in it. Var. γ appears to be a form which Milde refers to under var. *elevatum*. “*Hujus varietatis formam eximiam in montibus Moraviæ observavi. Pagina subtus glandulosa; glandulæ longæ, clavatæ, unicellulares; dentes laciniarum longissimi, in glandulam exeuntes. Indusium glabrum. Rachis dense paleaceæ; petiolus dense rufopaleaceus, brevior (5–8" longus). Ceterum lamina angusta, rigida, flavescens.*”—*Fil. Europ.* p. 133. This agrees well with my var. γ .

The creeping caudex with its numerous small divisions, or when in dry ground the caudex dividing into numerous small heads, and the more parallel-sided frond distinguish it from *L. glandulosa*.

The broad concolorous scales, many-headed caudex, and narrower fronds, separate it from *L. dilatata*.

The spores are similar to those of *L. spinulosa*, with a few large, rounded tubercles, not closely and finely muricated as in *L. glandulosa* and *dilatata*.

Vars. α and β look very different when growing wild, but when brought into the garden they lose most of their peculiarities, and it is probable that instead of being true varieties they are states affected by their place of growth.

I have genuine *L. spinulosa* from Amherstburg, Canada, collected by Dr. P. W. MacLagan.

Lastrea remota is referred by some botanists to *L. spinulosa*, but it differs in the far more numerous scales, many of them narrowly lanceolate, by the greater number of pinnæ in fronds of equal size,

by the veins being less impressed above, but chiefly by the indusium being firm and very convex, and retaining its shape like that of *L. Filix-mas* instead of being thin, flat, and soon crumpled up when the spore-cases swell and raise its edges. Still there can be no doubt that it is a form connecting *L. spinulosa* and *L. Filix-mas*.

Narrow Shield-fern.

SPECIES (?) IX.—**LASTREA GLANDULOSA.** *Newman.*

PLATE 1856.

Newman, Phyt. 1851, p. 256.

L. dilatata, var. *glandulosa*, *Moore* (in part ?), *Handbk. Brit. Ferns*, ed. ii. p. 124 ; and ed. iii. p. 127 ; *Nat. Print. Brit. Ferns*, 8vo. ed. Vol. I. p. 226 (in part). *Bab. Man. Brit. Bot.* ed. vii. p. 448.

Nephrodium dilatatum, var. *glandulosum*, *Hook. fil. Stud. Fl.* p. 466.

Lophodium glandulosum, *Newm. Phyt.* 1851, Ap. xviii. and *Hist. Brit. Ferns*, ed. iii. p. 154.

L. glanduliferum, *Newm. Phyt.* 1851, p. 371 (a misprint for *glandulosum* ?)

Caudex short, very thick, separating into few divisions or crowns, which are very thick and erect or “creeping.” Fronds all similar, many produced from the extremity of each division or crown, sub-evergreen, “semi-erect” (*Newman*). Stipes long (two-thirds to as long as the lamina), stout, deeply channelled on the anterior face, containing 5 vascular bundles, thickly sprinkled with minute clavate or stalked glands and rather thickly clothed with broadly-ovate cuspidate and lanceolate tapering entire pale brown nearly concolorous sub-persistent scales. Lamina firm, dull green, sprinkled beneath with very numerous clavate glands, narrowly oblong or lanceolate-oblong, tapering more or less gradually towards the apex, abrupt at the base, bipinnate or almost tripinnate ; lowest pair of pinnae unequally triangular with the 2 basal pinnules on the lower side of the secondary rachis much longer than those on the upper side, nearly as long as the succeeding pair of pinnae ; the others becoming gradually longer and narrower as far as a little below the middle of the lamina, after which they at first gradually and then rapidly decrease in length ; all of them shortly stalked, pinnate ; pinnules “flat or convex,” lanceolate-oblong ; those towards the base of the lamina shortly stalked and pinnatipartite, or sometimes almost pinnate ; those towards the apex of the frond decurrent at the base ; ultimate segments adnate by a broad base and decurrent on the lower side, oblong inciso-serrate, with the teeth hooked upwards and strongly mucronate. Ultimate veins rather faintly impressed on the upper surface, running to the

teeth of the ultimate segments, except the first anterior branch. Sori occupying the whole frond, except sometimes the lowest pair of pinnae, attached to the back of the first anterior branch of the ultimate mid-veins forming a line on each side of the ultimate pinnules or ultimate segments, about equidistant from the midrib and the margin of the pinnule or segment, and extending nearly to its apex. Indusium rather thin, but retaining its form, subsistent, roundish-reniform, slightly convex, with a few clavate or stalked glands round the margin, and sometimes a few on its surface. Spores finely muricate, with very numerous small acute tubercles. No barren fronds unlike the fertile ones.

Darley Dingle, Shropshire; boggy places on Ankerberry Hill, near Sedbrook, Forest of Dean, Gloucester; and "Epping Forest, Essex" (Mr. Doubleday; Newman). *L. glandulosa* has been reported from several other stations, but I do not feel sure that these are the same as plant so-called by Mr. Newman.

England. Perennial. Summer, Autumn.

Lamina 14 inches by 7 inches to 2 feet by 8 inches, remarkable for the number of minute glands sprinkled on its lower surface.

L. glandulosa is a very puzzling form, being intermediate between *L. spinulosa* and *L. dilatata*, and to some extent between *L. remota* and *L. dilatata*. The caudex I have never seen, but from Mr. Newman's description and from the recollections of the Rev. W. H. Purchas I conclude it must resemble those of *L. remota* and *L. dilatata*, in not breaking into a number of small crowns, and in the divisions keeping an upright position and attaining a large size, with very numerous fronds arranged shuttlecock-fashion. But if a plant found at Windermere, Westmoreland, by Mr. F. Clowes, really belong to *L. glandulosa* and not to *L. spinulosa*, it has a caudex "nearly, if not quite, as creeping as that of *spinulosa*" ('Phyt.,' ser. ii. 1860, p. 229). The scales are intermediate in character between *L. remota*, *L. spinulosa*, and *L. dilatata*, most like those of the first, perhaps, but more highly coloured, and not denticulate at the margins; the larger ones resemble those of *spinulosa*, but have generally a more decided dark shade in the centre, though less so than those of *dilatata*, and they are also thinner in texture than those of the last-named plant. The lamina is most like that of *L. spinulosa* in outline and in the shape of the pinnules, but the pinnae are longer and narrower, and the teeth more incurved, and (judging from dried specimens) the veins are but very faintly impressed on the upper surface: still, were it not for the stout caudex, which does not break into numerous crowns, the narrower and often darker-centred scales, and, above all, the finely muricated (not coarsely and sparsely tubercled) spores,—the plant might be considered a broad-fronded and extremely

glandular form of *L. spinulosa*. Most authors place it as a variety of *L. dilatata*, with which at least Mr. Newman's original plant seems to agree in the caudex, and certainly does completely in the finely muricated spores and gland-fringed indusium. But the lamina is narrower and less divided, the pinnules having their segments connected quite as much, or even more so than, in *spinulosa*.

From *L. remota* it differs in having a much shorter frond in proportion to its width, and with fewer and broader pinnae, with distinctly mucronate teeth. The lowest pinnae of *L. remota* do not present such a broadly and obliquely triangular outline, as *remota* has not the first and second, or even the third pinnule on the lower side of the pinna much larger than those on the upper side. The indusium of *L. remota* is also firmer and more convex than that of *L. glandulosa*, and the spores are bluntly tubercled, not finely muricated.

I cannot help suspecting that *L. glandulosa* is a hybrid between *L. spinulosa* and *L. dilatata*. Were it as abundant as either of the two, instead of being very scarce we might consider it as a form from which *L. spinulosa* on one side, and *L. dilatata* on the other, were diverging; and the same might be said of *L. uliginosa*, from which *L. cristata* diverges in one direction and *spinulosa* in the other; and lastly, we have *L. remota*, which connects *L. spinulosa*, or (as seems to me more probable) *dilatata* with *L. Filix-mas*. Surely it would be difficult to accept an aggregate species containing *Filix-mas* and *dilatata*. Dr. Göppert, in Cohn's 'Kryptogamen Flora von Schlesien,' makes *dilatatum*, *spinulosum*, and *cristatum* subspecies of *Aspidium spinulosum*, but he makes *Filix-mas* with this form *A. remotum* a distinct species, which seems to me an untenable position.

Bennett's Shield-fern.

SPECIES X.—**LASTREA DILATATA.** *Presl.*

PLATE 1857.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 40.

L. multiflora, *Newm. Hist. Brit. Ferns*, ed. ii. p. 216.

Nephrodium dilatatum, *Desv. Hook. fil. Stud. Fl.* p. 466.

N. spinulosum, β . *dilatatum*, *Hook. & Bak. Syn. Fil.* ed. ii. p. 275.

Aspidium dilatatum, *Swartz. Sm. Eng. Bot.* No. 1461; and *Eng. Fl. Vol. IV.* p. 293.

Milde, Fil. Europ. p. 136. *Rabenh. l. c.* No. 40.

A. spinulosum, α . *multiflorum*, *Hook. & Arn. Brit. Fl.* ed. viii. p. 586.

A. spinulosum, var. *dilatatum*, *Fries, Summ. Veg. Scand.* p. 82.

Polystichum spinulosum, β . *dilatatum*, *Koch, Syn. Fl. Germ. et Helv.* ed. ii. p. 979.

Gren. & Godr. Fl. de Fr. Vol. III.

P. multiflorum, *Roth, Fl. Germ. Vol. III.* p. 87.

Polypodium multiflorum, *Roth, Cat. Bot. Fasc. i.* p. 35.

Lophodium multiflorum, *Newm. Phyt.* 1851, p. 371, and *App. xvii.*; and *Hist. Brit. Ferns*, ed. iii. p. 148.

Caudex short, very thick, separating into few divisions which are

very thick and erect or ascending, closely covered by the persistent bases of former fronds, without dark stripes in their interior when cut longitudinally. Fronds all similar, many produced from the extremity of each division or crown, ascending or erect, and arching backwards, sub-evergreen. Stipes long (one-third as long to as long as the lamina), stout, deeply channelled on the anterior face, containing 5 or 7 vascular bundles, usually more or less thickly sprinkled with minute stalked glands, but often glabrous and without glands, rather thickly clothed with lanceolate and strapshaped tapering entire or subdenticulate brown scales, which have almost always a dark central stripe, and are mostly persistent. Lamina firm or subcoriaceous, dull green, usually sprinkled beneath with more or less numerous clavate glands, but sometimes without glands, oblong-lanceolate or oblong-ovate or ovate-lanceolate, rarely triangular-ovate or triangular-lanceolate (at least in mature and healthy plants), tapering gradually towards the apex, abrupt or truncate at the base, tripinnate or quadripinnate, rarely only bipinnate; lowest pair of pinnæ unequally triangular, with the 2 basal pinnules on the lower side of the secondary rachis much longer than those on the upper side, nearly as long as the succeeding pair of pinnæ; the others usually becoming gradually longer and narrower as far as one-third of the lamina, after which they gradually decrease in length (or rarely the second pair of pinnæ or even the first are longer than the others), shortly stalked, bipinnate, more rarely tripinnate or only pinnate; pinnules convex or flat, lanceolate-oblong; those towards the base of the lamina stalked and pinnate, more rarely bipinnate, and very rarely only pinnatifid; those towards the apex of the frond usually separate from each other and pinnatifid or inciso-pinnatifid; most of them adnate by a narrow base, but decurrent upon the lower side; ultimate pinnules or ultimate lobes flat or with the margins recurved, inciso-serrate, with the teeth strongly incurved and very strongly mucronate. Ultimate veins rather faintly impressed on the upper surface, all running to the teeth of the ultimate segments except the first anterior branch. Sori occupying the whole frond, attached to the back of the first anterior branch of the ultimate mid-veins, forming a line on each side of the ultimate pinnules or ultimate segments about equidistant from the mid-vein and the margin of the pinnule or segment, and extending nearly to its apex. Indusium thin, soon shrivelling, subpersistent, roundish-reniform, nearly flat or slightly convex, with a few clavate or stalked glands round the

margin. Spores finely muricate, with very numerous small acute tubercles. No barren fronds unlike the fertile ones.

Var. *α. genuina*.

Rachis and under side of lamina sparingly glandular or nearly without glands; scales brown with a dark central stripe or blotch. Lamina firm, lanceolate-ovate or oblong-ovate, tripinnate or bipinnate, with the pinnules pinnatipartite; lowest pinnæ unequal-sided from the greater development of the 1st and 2nd pinnules on the lower side of the secondary rachis. Sori large.

Var. *β. tanacetifolia*. Moore.

Polystichum tanacetifolium, DC. Fl. Fr. Vol. II. p. 562; according to a specimen from Professor Fée, Moore.

Rachis and under side of lamina sparingly glandular or nearly without glands (rarely very glandular); scales lanceolate, brown with a dark central stripe or blotch. Lamina rather thin, triangular-ovate or ovate, tripinnate or almost quadripinnate, with the ultimate pinnules pinnatipartite; lowest pinnæ unequal-sided from the great development of the 1st and 2nd pinnules on the lower side of the secondary rachis. Sori small.

Var. *γ. dumetorum*. Moore.

Lastrea multiflora, var. *nana*, Newm. Hist. Brit. Ferns, ed. ii. p. 222.

Aspidium dumetorum, Sm. Eng. Fl. Vol. IV. p. 281 (*vide* H. C. Watson, Compend. Cyb. Brit. Part. III. p. 456).

Lophodium nanum, Newm. Hist. Brit. Ferns, ed. iii. p. 153.

Rachis and under side of lamina sparingly glandular, or nearly without glands; scales brown with a dark central stripe or blotch. Lamina firm, oblong-ovate, bipinnate, with the pinnules pinnatipartite; lowest pinnæ somewhat unequal-sided from the rather greater development of the 1st and 2nd pinnules on the lower side of the secondary rachis. Sori small.

Var. *δ. collina*. Bab.

Lophodium collinum, Newm. Phyt. 1851, App. xviii.; and Hist. Brit. Ferns, ed. iii. p. 144.

Rachis and under side of lamina thickly sprinkled with stalked glands; scales brown, with a dark central stripe or blotch. Lamina

firm, strapshaped-lanceolate or triangular-lanceolate, bipinnate with the pinnules pinnatipartite; lowest pinnae somewhat unequal-sided from the rather greater development of the 1st and 2nd pinnules on the lower side of the secondary rachis; pinnae more distant and narrower than in the preceding forms. Sori rather small.

Var. *ε. alpina*. Moore.

Rachis and under side of lamina sparingly glandular or nearly without glands; scales ovate-lanceolate, reddish-brown, often without a dark central stripe. Lamina thin, oblong or oblong-strap-shaped, more rarely ovate-oblong, tripinnate or bipinnate, with the pinnules pinnatipartite; lowest pinnae unequal-sided from the great development of the 1st and 2nd pinnules on the lower side of the secondary rachis; pinnules shorter in proportion than in the other forms. Sori rather large.

(?) Var. *ζ. lepidota*. Moore.

Rachis and under side of lamina rather sparingly sprinkled with stalked glands; scales broadly lanceolate, intermixed with ovate cuspidate ones, dark reddish-brown, nearly concolorous, numerous not only on the stipes and main rachis, but also on the secondary and tertiary rachides. Lamina deltoid or broadly triangular-ovate, quadri-pinnate or tripinnate with the lower pinnules pinnatipartite; lowest pinnae unequal-sided, from the much greater development of the 1st and 2nd pinnules on the lower side of the secondary rachis; pinnules more separated from each other, as well as more deeply divided than in the other forms. Sori small.

Var. *α* common, and generally distributed in hedgebanks, woods and moors, and hillsides.

Var. *β* common in shady woods.

Var. *γ* common in upland districts, on moors, and among rocks and stony places.

Var. *δ. collina* appears to be local. Newman says it occurs in the lake district in Westmoreland, Lancashire and Yorkshire. I have a specimen collected by Mr. Baker on the top of Little Ingleborough, and what I believe to be the same form I gathered at Hobbister rocks, Orphir, Orkney. Mr. Moore's figure of his variety *L. Chanteriae*, given in his 'Handbook of British Ferns,' so closely resembles Mr. Newman's figure of *collina* in his 'Hist. Brit. Ferns,' that I

must refer them to the same form; the Rev. Mr. Chanter's plant was found at Hartland, on the north coast of Devon.

Var. ϵ . *alpina* is frequent on mountains and on upland bogs.

Var. ζ . *lepidota* is not known in the wild state; it was said to have been procured from Yorkshire.

England, Scotland, Ireland. Perennial. Summer, Autumn.

An extremely variable plant, though it can scarcely be divided into varieties in a botanical sense, so insensibly do the different forms merge into one another; whether we place the forms under two or twenty varieties makes very little difference, with the exception of the form *lepidota*, which is a doubtful native, and is certainly distinct enough to be called a true variety, if not a subspecies. The rootstock is remarkable for not breaking, *i.e.*, it continues to grow until it has attained a large size before it divides and forms new crowns, in this forming a marked contrast to that of *L. spinulosa*. The divisions of the caudex in the large wood forms of the plant are often as thick as a man's arm, and are generally erect; but sometimes the branches of the caudex when growing amongst dead leaves or bushes, or even in bogs, become as slender and creeping as those of *L. spinulosa*, but they differ in not constantly forming new crowns before they have attained a large size. I suspect that this may account for the statements of forms of *L. dilatata* "being nearly, if not quite, as creeping as *spinulosa*" ('Phyt.' ser. ii. 1860, p. 229).

I have numerous specimens, collected in Fife, with slender creeping offshoots, produced from large crowns of ordinary *L. dilatata*. The most puzzling forms are specimens of var. *alpina*, which I collected in 1875, in the parish of Orphir, Orkney, growing in Naversdale and Ryssdale. These had small crowns and often decidedly creeping branches, and in many instances the scales were broad and pale-coloured and the lamina narrow and parallel-sided. At the time I collected these, I supposed them to be referable to the glandular form of *L. spinulosa*, but a root which I brought to Balmuto has produced much divided triangular-deltoid fronds, which are clearly referable to *L. dilatata*, although the scales are still broader than those of the ordinary plant and concolorous. Usually the scales of *L. dilatata* are broadly lanceolate and tapering, intermixed with smaller ones, they are entire or slightly fimbriate, and have a brown or pitchy stripe down the centre, but in the forms which Mr. Moore calls *alpina* (which is probably a true variety) they are often broader and nearly concolorous.

The shape of the lamina varies greatly, but it is almost always broader than in *L. spinulosa*. I have fertile specimens from 5 inches long by $2\frac{1}{2}$ wide, to 3 feet long by 15 inches wide, while in a very handsome form of *alpina* from Orkney the frond is 15 inches long and 5 wide, with the fronds very delicate in texture and much divided, and the scales broad, ferruginous, and nearly concolorous.

The texture of the lamina is also variable, it is generally firm, more so indeed than that of *L. spinulosa* when growing in the same localities, but in the form *alpina*, and to a less extent in the wood-form *tanacetifolia*, it is thin, but is never at all translucent.

In most of the forms the pinnules are more or less convex, when they are exposed to the direct rays of the sun. I have found that a flat pinnuled plant brought into a sunny part of the garden, produces fronds with convex pinnæ. As a general rule, the more luxuriant the plant the more divided is the frond.

The number of glands on the stipes, rachis, lamina and margin of the indusium is also liable to great variation, though I have never observed the indusium, at least in the young state, without some stalked or clavate glands. The fronds remain green all winter in sheltered stations, but the stipes breaks over near the base, and the fronds are prostrate. In vernation the frond occasionally forms loops, but more commonly it unfolds regularly as in other Ferns.

The marking of the spores seems very constant; instead of a few large rounded tubercles as in *L. spinulosa*, they are thickly covered with small conical acute tubercles.

The variety *lepidota* is probably a distinct species, though its native locality is doubtful; it is much more divided than any of our British forms, quite as much as or even more so than the North American *L. intermedia* (which also occurs in Madeira), and it agrees with this in the lamina having a triangular or deltoid-ovate outline (though more ovate in *lepidota* than in *L. intermedia*), but it differs conspicuously in the shorter broader blunter and paler scales, and in the first pair of pinnules of the basal pinnæ being longer than the second, as in all the British forms of *L. spinulosa*, *dilatata* and *æmula*, and also in not having the pinnæ spreading at right angles to the rachis, and the pinnules at right angles to the secondary rachides. One of the most striking peculiarities of *lepidota* is the number of broad cuspidate and narrow piliferous scales which clothe the under surface and sides of the primary, secondary, and tertiary rachides; the teeth of the segments are strongly incurved, and terminate in conspicuous mucros. Lamina 6 inches to 1 foot long, by 4 to 8 inches broad. I obtained the plant I have in cultivation from Messrs. Sang's nursery in Kirkealdy, and have no doubt it is the same as that described by Mr. Moore.

Broad Shield-fern.

SPECIES XI.—**LASTREA ÆMULA.** *Brackenridge.*

PLATE 1858.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 117.

L. Fœnisecii, Watson, Phyt. 1846, p. 568.

L. recurva, Newman, Nat. Alm. 1844, p. 23; and Hist. Brit. Ferns, ed. ii. p. 226.

Nephrodium æmulum, Baker. Hook. fil. Stud. Fl. p. 466. Hook. & Bak. Syn. Fil. ed. ii. p. 279.

N. Fœniseeii, *Lowe*, *Cambr. Phil. Trans.* Vol. IV. p. 7.

Aspidium æmulum, *Swartz* (1800). *Milde*, *Fil. Europ.* p. 140. *Rabenh.* l. c. No. 117.

A. recurvum, *Bree*, *Phyt.* 1843, p. 773.

A. dilatatum, var. *recurvum*, *Bree*, *Mag. Nat. Hist.* Vol. IV. p. 162. *Hook. & Arn.* *Brit. Fl.* ed. viii. p. 586.

A. spinulosum, var. γ , *Hook. & Arn.* *Brit. Fl.* ed. vii. p. 586.

Polypodium æmulum, *Ait.* *Hort. Kew.* Vol. III. p. 466.

Lophodium recurvum, *Newm.* *Phyt.* 1851, p. 371.

L. Fœniseeii, *Newm.* *Phyt.* 1851, App. p. xvi.; and *Hist. Brit. Ferns*, ed. iii. p. 136.

Caudex short, stout, separating into numerous small divisions, which are moderately thick, very short, and closely packed together, closely covered by the imbricated bases of former fronds, marked with dark stripes in the interior when cut longitudinally. Fronds all similar, several produced close together from the extremity of each crown, ascending or slightly arching backward, evergreen. Stipes rather long, from one-third as long to a little longer than the lamina, rather stout, distinctly but not deeply channelled on the face, containing 5 vascular bundles, thickly sprinkled with minute sessile glands, and sparingly clothed with a few lanceolate and strapshaped acuminate denticulate and partially lacinate rather dark brown, concolorous scales, which are partially deciduous. Lamina firm, but not at all coriaceous, bright green, thickly sprinkled both above and below with minute sessile subglobular glands, triangular or deltoid-triangular, or more rarely triangular-lanceolate, tapering gradually towards the apex, truncate at the base, tripinnate or quadripinnate; lowest pair of pinnae very unequally triangular, with several of the basal pinnules on the lower side of the secondary rachis much longer than those on the upper side, longer than the succeeding pair (rarely a little shorter), the others becoming gradually shorter towards the apex of the frond, shortly stalked, bipinnate; pinnules triangular-oblong or strapshaped-concave; those towards the base of the lamina stalked and pinnate, those towards the apex of the frond separate from each other, and pinnatipartite or incised, and then adnate by a narrow base and decurrent on the lower side. Ultimate pinnules or lobes with the apices incurved, inciso-serrate, with the teeth not incurved, more or less distinctly mucronate; ultimate veins not impressed on the upper surface, all running to the teeth of the ultimate segments. Sori occupying the whole frond, attached to the back of the first anterior branch of the ultimate mid-veins, forming a line on each side of the ultimate pinnules or ultimate segments, about equidistant from the mid-vein and the margin of the

pinnule or segment, and extending nearly to its apex. Indusium rather firm, persistent, roundish-reniform, convex (often very much so), denticulate, with a few sessile and globular glands round the margin, and in some cases with very slender jointed filaments terminated by minute glands. Spores bluntly tuberculate, with a few sparse large rounded tubercles. No sterile fronds dissimilar to the fertile ones.

On rocks and banks, and in woods. Local. Frequent in the south-west of England, extending east to Sussex and to Kent, near Tunbridge Wells; north of this it occurs in Hereford, Salop, Glamorgan, Pembroke, Merioneth, Carnarvon, Anglesea, North Lancashire, West Yorkshire, Cumberland, and the Isle of Man, with outlying stations in Forge Valley near Scarborough, Chevington Wood near Workworth, Rugely Wood near Alnwick, and several stations near Embleton, Northumberland. Dumbarton, the Clyde Isles, Mull and Skye, and the Hebrides; recorded from Berwick, Roxburgh and Forfar. It is abundant in the Wauk Mill Bay, Orphir, Orkney; and the late Dr. T. Anderson found it rather common in Hoy, but there I have only seen it on Hoy Hill, and in Fara and Calf of Flotta; Dr. H. Halero Johnson informs me that it is abundant on the Calf of Cava, in Scalpa Flow. In Ireland it is distributed from north to south, but it is most plentiful in the west.

England, Scotland, Ireland. Perennial. Summer, Autumn.

Caudex producing a number of crowns, which are closely packed together, in this respect resembling the caudex of *L. rigida*. Fronds 8 inches to 3 feet high, of which the stipes is usually about half; it is, for more or less of its length from the base upwards, tinged with purplish-brown, and is not so deeply furrowed as in *L. dilatata* and *L. spinulosa*. Lamina vivid green, crisped, from the tips of the ultimate pinnules and segments being turned upwards, covered on both sides with minute glands like those of *L. rigida*, which it also resembles in the texture of its fronds, which are firm and almost rigid, without being coriaceous. Veins clavate towards the apex, as in the other species, and not extending quite to the teeth of the lobes. Sori large, with the indusium much more convex than in the other spinulose *Lastreae*, almost as much so as in *L. rigida*. In British specimens the jointed filaments round the edge of the indusia can seldom be found, though I have observed them in Plymouth specimens; but in those from the Azores they are much more frequently met with. The spores resemble those of *L. Filix-mas*, *L. rigida*, *L. cristata*, and *L. spinulosa*, in having a few large rounded tubercles and no minute acute ones.

This Fern has been confounded with *L. dilatata*, but it is scarcely possible to mistake them when the plants are alive. The bright green colour of the frond, its crisp texture and concave pinnæ, readily distinguish it. It has also a peculiar sweet scent, which has been compared to the odour of fresh hay, though I do not myself perceive the resemblance. When protected from frost the fronds are truly evergreen, the old ones remaining until the young ones appear in May, and the fronds begin to decay at the extremity, and not near the base of the rachis. The scales are fewer, narrower, and some of them lacinate, with one or two large acute segments, and they are destitute of the dark stripe which is so commonly found in those of *L. dilatata*; the lowest pair of pinnæ are much larger, generally longer than any of the succeeding pairs, and the frond is sprinkled with round, sessile, not stalked or clavate glands; the sori are generally more abundant; the indusia are much more convex, and the spores are not muricated.

Hay-scented Fern.

GENUS IX.—**POLYSTICHUM.** *Roth.*

Fronds produced from the extremity of the caudex, approximate and tufted, or solitary, usually coriaceous, once or more times pinnate. Stipes not articulated to the caudex. Veins all free. Sori punctiform, round, at the extremity of the ultimate veins or attached to some portion of their back. Indusium roundish, peltate, attached by the centre: rarely the indusium is absent or fugacious.

Name from *πολύ* (*polu*) much, and *στικτός* (*stiktos*) spotted or punctured, from the numerous sori.

SPECIES I.—**POLYSTICHUM LONCHITIS.** *Roth.*

PLATE 1859.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 43.

Aspidium Lonchitis, Swartz. Sm. Eng. Fl. Vol. IV. p. 284. Hook. fil. Stud. Fl. p. 464.

Hook. & Baker, Syn. Fil. ed. ii. p. 250. Milde, Fil. Europ. p. 104. Koch, Syn.

Fl. Germ. et Helv. ed. ii. p. 976. Fries, Summ. Veg. Scand. p. 82. Gren. & Godr.

Fl. de Fr. Vol. III. p. 630. Rabenh. l. c. No. 43.

Polypodium Lonchitis, Linn. Sp. Pl. 1518. Sm. Eng. Bot. ed. i. No. 797.

Caudex rather short and thick, decumbent, not breaking into separate crowns for many years. Fronds numerous, all similar, arranged in shuttlecock fashion, spreading-ascending, evergreen. Stipes very short, thickly clothed with large and small triangular-ovate

or ovate-lanceolate erose-denticulate brown concolorous scales. Lamina coriaceous, rigid, dark green, shining, much paler beneath, strapshaped, tapering gradually at the base and apex, pinnate; rachis thickly clothed with lanceolate, and the under surface of the frond sparingly clothed with linear scales, many of which are deciduous; pinnæ very shortly stalked, oblong-triangular or strapshaped-triangular, the lower ones deltoid, all more or less auriculate at the base on the anterior side, and more or less evidently doubly serrate, with the middle tooth of each serrature prolonged into a rigid spine. Ultimate veins not impressed on the upper surface, but deeply so beneath, running from the mid-vein of the pinna and auricle to the margin, and giving off one or two branches, which run to the base of the teeth. Sori commonly confined to the upper half or third of the frond, but occasionally extending further down, round, attached to the first anterior branch of each of the ultimate veins, and forming a line on each side of the mid-vein of the pinna, about equidistant from the mid-vein and the margin, with a loop at the base extending into the auricle, and in luxuriant plants sometimes with a second short line between the primary one and the margin on the base of the upper side of the pinnæ immediately above the auricle. Indusium umbilicate, circular, dentate at the margin, soon shrivelling. Spores tuberculate, with rather large very prominent obtuse tubercles, intermingled with numerous smaller and more acute ones.

Among rocky débris on mountains. On Snowdon and the neighbouring mountains; the Yorkshire mountains; Teesdale, Durham, nearly, if not quite extinct; Helvellyn, Cumberland; Westmoreland; between Alwick and Morpeth, Northumberland. Frequent in the Scotch Highlands, extending to Sutherland; Hoy Hill, Orkney (Dr. J. Anderson), and in fissures of rocks, Greenigoe, Hoy (Dr. A. A. Duguid). Mangerton and Brandon mountain, county Kerry; Ben Bulbin and the neighbouring mountains, co. Sligo; Glenade mountain, Leitrim. "Near Lough Eske, Donegal, and also Rosses and Fanet," are probably errors. (See 'Journal of Botany,' 1881, p. 240.) The 'Cybele Hibernica,' in addition to these localities, mentions that a single root was found near Edgworthstown, Longford, and a single root on a hedgebank near Dungannon, Tyrone.

England, Scotland, Ireland. Perennial. Autumn.

Caudex apparently of very slow growth, rarely above $1\frac{1}{4}$ inch in diameter. Fronds 3 to 18 inches long, by 1 to $2\frac{1}{4}$ broad, very rigid,

appearing in June or July, and remaining after the fronds of the succeeding year are developed. Stipes very short, sometimes consisting only of the dilated base, which remains permanently attached to the caudex, and is rarely above 1 or 2 inches long, containing 5 vascular bundles, clothed with very large scales, intermixed with much smaller ones. Pinnæ twisted so as to make an angle with the general plane of the frond, with the spines variable in length, but usually about $\frac{1}{10}$ inch long. Sori rather large, and ultimately confluent.

Alpine Holly-fern.

SPECIES II.—**POLYSTICHUM LOBATUM.** *Presl.*

PLATE 1860.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 22.

P. aculeatum, *Roth.* *Bab. Man. Brit. Bot. ed. vii. p. 449.* *Moore*, *Handbk. Brit. Ferns*, ed. iii. p. 81; and *Nat. Print. Brit. Ferns*, 8vo. ed. Vol. I. p. 123. *Newm. Hist. Brit. Ferns*, ed. iii. p. 111.

Aspidium lobatum, *Schkuhr.* *Kunze*, *Bot. Zeit.* 1848, p. 356. *Milde*, *Fil. Europ.* p. 105.

A. aculeatum, *Willd.* *Sp. Plant.* Vol. V. p. 258.

A. aculeatum, *a. vulgare*, *Döll.* *Koch*, *Syn. Fl. Germ. et Helv.* ed. ii. p. 976. *Gren. & Godr.* *Fl. de Fr.* Vol. III. p. 630.

Polypodium lobatum, *Huds.* *Fl. Ang.* p. 459.

Caudex short, thick, decumbent or erect, not breaking into separate crowns for several years. Fronds numerous, all similar, arranged in shuttlecock fashion, ascending or slightly arching backwards, evergreen. Stipes very short, thickly clothed with large and small triangular-ovate or ovate-lanceolate erose-denticulate dusky brown concolorous scales. Lamina coriaceous, rigid, dark green, shining, much paler beneath, narrowly elliptical-oblong or oblong-strapshaped, tapering gradually at the base and apex, bipinnate; rachis rather thickly clothed towards the base with lanceolate scales, and throughout its whole length with numerous reddish-brown hair-like scales, many of which are deciduous; pinnæ very shortly stalked, strapshaped-acute, the lower ones deltoid triangular or triangular, much shorter than the succeeding pair, pinnate; pinnules usually pointing towards the apex of the pinna, oblong or ovate, falcate or rhomboidal, commonly more or less distinctly auricled at the base on the anterior side, with the basal angle by which they are attached usually less than a right angle; those towards the base of the pinnæ more or less distinctly stalked, all coarsely spinous-serrate, more rarely doubly serrate; serratures prolonged into rigid spines.

Ultimate veins scarcely impressed on the upper surface, but deeply so beneath, running from the mid-vein of the pinnule and auricle to the margin, giving off 1 or 2 branches, which run to the base of the teeth. Sori commonly confined to the upper half of the frond, round, attached to the first anterior branch of each of the ultimate veins, and forming a line on each side of the mid-vein of the pinnule about equidistant from the mid-vein and the margin, with a loop at the base extending into the auricle, and in luxuriant plants sometimes with a few sori between the line and the margin on the anterior side of the pinnule, immediately above the auricle. Indusium flattish, strongly umbilicate, circular, denticulate at the margin, soon shrivelling. Spores tuberculate, with rather large very prominent obtuse tubercles, intermingled with numerous smaller and more acute ones.

Var. *a. genuinum*.

Aspidium lobatum, *Smith*, Eng. Bot. ed. i. No. 1563; and Eng. Fl. Vol. IV. p. 291.

Hook. & Arn. Brit. Fl. ed. viii. p. 582. *Hook. fil.* Stud. Fl. p. 465.

A. aculeatum, var. *a. lobatum*, *Hook. & Bak.* Syn. Fil. ed. ii. p. 252.

Caudex attaining a considerable age before dividing; the crowns of very old plants cæspitose. Fronds spreading-ascending, arching backwards when large, rather rigid, tapering greatly towards the base; lowest pair of pinnæ usually very short, and shorter than the succeeding pair; pinnules not distinctly stalked, but attached by a narrow base, which is decurrent on the lower side, many of them towards the apex of the pinnæ, and the whole of them towards the apex of the frond, not separated from each other; so that these pinnæ, and parts of pinnæ, are only pinnatipartite or pinnatifid—not pinnate.

Var. *β. aculeatum*.

Aspidium aculeatum, *Sm.* Eng. Bot. ed. i. No. 1562; and Eng. Fl. Vol. IV. p. 290.

Hook. & Arn. Brit. Fl. ed. viii. p. 582. *Hook. fil.* Stud. Fl. p. 465 (?).

A. aculeatum, *β. aculeatum*, *Hook. & Bak.* Syn. Fil. ed. ii. p. 252.

Caudex attaining a great age before dividing, and even in very old plants sometimes undivided. Fronds spreading-ascending, not arching backwards, very rigid, not tapering very much towards the base, and sometimes almost abrupt; lowest pair of pinnæ usually scarcely shorter than the succeeding pair; many of the pinnules distinctly stalked, set on more at right angles to the rachis of the pinna than in var. *lobatum*, and fewer of them towards the apex of

the pinnae, and frond confluent. Fronds of a darker green than in var. *a*.

On rocks, hedgebanks, and woods; rather sparingly but widely distributed over England and Scotland, north to Skye, Ross-shire; Hoy, Orkney (Dr. H. H. Johnston). Local, but widely distributed in Ireland.

Var. *β* apparently much rarer, and probably not extending north to Scotland: but the authors of the 'Cybele Hibernica' speak of the form *A. lobatum*, Sm., as being rare in Ireland, so that we may infer that the var. *β* is the commoner in that island.

England, Scotland, Ireland. Perennial. Summer.

Caudex $1\frac{1}{2}$ inch or more in diameter, breaking into a few crowns when old, which remain close together, so that the plant becomes tufted. Stipes short and thick, from 2 to 5 inches, closely covered with large scales, intermixed with minute ones. Fronds 1 to 2 feet long, 3 to 7 inches broad, more parallel-sided when large than when small, at first with scattered hair-like scales beneath; appearing in May, and not perishing until the young fronds of the succeeding year.

Var. *β* has larger more rigid and more divided fronds (2 to 3 feet long); and, except in being more rigid than in var. *a*, it has the frond more resembling that of *P. angulare*; its caudex takes a longer time to form new crowns.

Young seedling plants of *P. lobatum* bear a very close resemblance to *P. Lonchitis*, being simply pinnate; they may always be distinguished, however, by their more parallel-sided fronds of much thinner texture, and having no fructification upon them: by the time they are sufficiently developed to have sori, the pinnae have become at least deeply pinnatifid or pinnatipartite at the base; this form, which is sometimes called var. *lonchitidoides*, cannot be considered a true variety, because, if cultivated, it always develops into unmistakable *P. lobatum*. On the other hand, when *P. lobatum* is weakened or starved, it tends to revert to the form *lonchitidoides*. On this account it is impossible to agree with Bernhardt in uniting *P. Lonchitis* and *P. aculeatum* as forms of one species, though they are certainly very closely allied. *P. lobatum*, var. *a*, becomes more developed, stronger, and more divided, but does not change into *β. aculeatum*, though it is often impossible to distinguish dried specimens of vars. *a* and *β* from each other.

Hard Holly-fern.

SPECIES III.—**POLYSTICHUM ANGULARE.** *Presl.*

PLATE 1861.

Aspidium angulare, *Willd. Sm. Eng. Fl. Vol. IV. p. 291. Hook. & Arn. Brit. Fl. ed. viii. p. 583. Hook. fil. Stud. Fl. p. 465.*

A. aculeatum, *Milde, Fil. Europ. p. 106.*

A. aculeatum, var. *angulare*, *Gren. & Godr. Fl. de Fr. Vol. III. p. 630. Hook. & Bak. Syn. Fil. ed. ii. p. 252.*

Polypodium aculeatum, *Huds. Fl. Angl. p. 459.*

“*P. setiferum*, *Forsk. Fl. Ægypt. Arab. p. 185*” (teste *Moore*).

Caudex short or elongated, very thick, decumbent or erect, breaking into several crowns after a few years. Fronds very numerous, all similar, arranged in shuttlecock fashion, ascending, sub-evergreen. Stipes short or rather short, very thickly clothed with large triangular-ovate erose-denticulate ferruginous scales, intermingled with numerous hair-like ones, and very numerous small whitish scurf-like scales. Lamina firm, but not coriaceous, flaccid, bright green, scarcely shining, much paler beneath, narrowly elliptical-oblong or oblong-strapshaped, tapering at the apex, abrupt at the base, bipinnate or tripinnate; rachis thickly clothed towards the base with lanceolate scales, and for about half-way up with whitish fimbriated scurf-scales, and for its whole length with very numerous reddish-brown hair-like scales, most of which are persistent; pinnæ very shortly stalked, pinnate or bipinnate, strapshaped, acute, the lower ones similar to the others, and not much shorter than the succeeding pair; pinnules ovate and falcate, rarely rhomboidal, commonly auricled at the base on the anterior side, with the basal angle by which they are attached commonly greater than a right angle, most of them distinctly stalked, inciso-spinous-serrate or doubly-serrate or pinnatifid or even pinnate; serratures prolonged into weak spines. Ultimate veins scarcely impressed on the upper surface, but very deeply so beneath, running from the mid-vein of the pinnæ, auricles and larger lobes, giving off one or two branches which run to the base of the teeth, the first anterior branch usually to the notch between the teeth. Sori occupying the upper half or two-thirds of the frond, attached to the first anterior branch of the ultimate veins, and forming a line on each side of the mid-vein of the pinnule, nearer the mid-vein and the margin, with a loop at the base extending into the auricle, then (in luxurious plants) sometimes with a few sori between the principal line and the margin on the anterior

side of the pinnule immediately above the auricle. Indusium convex, slightly umbilicate, circular, denticulate at the margin, and soon shrivelling. Spores tuberculate, with rather large very prominent obtuse tubercles, intermingled with numerous smaller and more acute ones.

Var. *a. genuinum*.

Pinnules broad, spinous-serrate or inciso-serrate, not decurrent, with their basal angle a right angle or more than a right angle.

Var. *β. hastulatum*. Kunze.

Pinnules broad, more or less deeply pinnatifid or pinnatipartite or pinnate, not decurrent, with their basal angle a right angle or more than a right angle.

Var. (?) *γ. alatum*. Moore.

Pinnules broad, faintly spinous-serrate, decurrent on the posterior side, and united to the narrow wing along the rachis to the pinna, with their basal angle a right angle or more than a right angle.

Var. *δ. gracile*. Wollaston.

Pinnules narrow, inciso-serrate, not decurrent, with their basal angle less than a right angle.

On hedgebanks and in woods. Frequent in England. Rare in Scotland, extending north to the counties of Berwick, Roxburgh, and Ayr, and the Clyde islands; it is also reported from Loch Gilphead, Argyleshire; but the only Scotch specimen I have seen is from the Cumbræ, kindly sent me by Mr. G. Horn. It occurs throughout Ireland, and is abundant in many parts of the west and south of that island. Var. *β*, in various forms, is not uncommon in damp shady situations in the south of England and Ireland. Var. *γ*, Selworthy, Somersetshire, and near Ottery St. Mary's, Devonshire (Mr. Wollaston). Var. *δ*, Devon, Somerset, and Ireland; but it is rather a monstrosity than a true variety.

England, Scotland, Ireland. Perennial. Summer.

Fronds 18 inches to 4 feet high or more, and 4 to 10 inches wide. Stipes 2 to 6 inches long, containing 5 vascular bundles, as in *P. Lonchitis* and *P. lobatum*; but it is much more densely scaly, and the scales are much brighter in colour, being reddish-brown instead of dusky brown. The under side of the frond has more numerous hair-like scales, and these are more persistent. The frond is much

softer in texture, of a brighter and yellower green, more abrupt at the base, from even the lowest pinnæ being elongated so that the frond does not taper insensibly to the base; the pinnules are smaller in proportion, more distinctly stalked, and with a greater basal angle than those of *P. lobatum*, and fewer of them towards the apex of the pinnæ and towards the apex of the frond are confluent. The indusia are larger and more convex.

The seedling form of *P. angulare* apparently never has the close resemblance to adult *P. Lonchitis* which that of *P. lobatum* has, for it has an elongated stipes and an abrupt-based frond, with deeply pinnatifid lower pinnæ, even though it may be but a couple of inches long.

P. angulare is much more sensitive to frost than *P. lobatum*. In Balmuto Garden the former has its fronds always destroyed during the winter; while those of *P. lobatum* remain green until the new fronds are developed in summer.

Var. β , which Wilde considers the *Aspidium hastulatum* of Tenore, bears much the same relation to the ordinary form of *P. angulare* that the var. *affinis* of *Lastrea Filix-mas* bears to the var. *genuina* of that species.

The var. *alatum* of Moore shows an approximation to *P. lobatum*, var. *aculeatum*, in having the pinnæ running into a narrow herbaceous wing along the rachis; but in texture, form of frond, and pinnæ it agrees with the type of *P. angulare*.

Var. *gracile*, with other forms, called by fern-cultivators *lineare*, *grandidens*, *confluens* and *proliferum*, are remarkable for their narrow lanceolate incised pinnæ, with wedge-shaped bases, not strongly curved on the posterior side, so that in this they also show some approach to *P. lobatum*, but the forms are usually malformed or monstrous.

P. angulare is a special favourite with fern-growers, as it produces a great number of curious and abnormal deviations, there being over 150 named forms in cultivation.

It is remarkable that *P. Braunii* (*Aspidium Braunii*, Milde, Fil. Europ. p. 108) growing in continental Europe has not occurred in Britain; it appears to be the only one of the group of plants included in the *Polypodium aculeatum* of Linnæus which occurs in Norway and Sweden, and in North America. Mr. Moore considers it as a variety of *P. angulare*; but Milde regards it as a subspecies equally distinct from *P. angulare* (which he calls *aculeatum*) and from *P. lobatum*, under which he includes the *aculeatum* of Smith. In texture and habit it agrees with *P. angulare*, but the fronds taper insensibly to the base, and have a very short stipes, as in *P. lobatum*. The pinnæ are larger in proportion than *P. angulare*, and have numerous hair-like scales when young, not only on the lower, but on the upper surface, which is not the case in *P. angulare* or *P. aculeatum*; and the sori are larger than those of *P. angulare*, and much less numerous.

I have not seen the plant alive, but the large scales of the stipes seem paler in colour than in *P. angulare*; and, judging from dried specimens, the seedling state is more similar to the adult.

Soft Holly-fern.

GENUS X.—WOODSIA. *R. Brown.*

Fronds produced from the upper part of the caudex and its branches, approximate or tufted, once pinnate, rarely bipinnate, often scaly beneath. Stipes not articulated to the caudex, but with an articulation at some distance above the base. Veins all free. Sori punctiform, round, attached to the back of the ultimate veins below their apex. Indusium calyciform, surrounding the sorus, cut into long segments nearly to the base,

Name in honour of Joseph Woods, a celebrated English botanist.

SPECIES I.—WOODSIA ILVENSIS. *R. Brown.*

PLATE 1862.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 15.

W. rufidula, Beck. Milde, Fil. Europ. p. 164.

W. Raiana, Newm. Hist. Brit. Ferns, ed. ii. p. 140, and ed. iii. p. 73 (a suggested name only).

W. hyperborea, β. rufidula, Koch, Syn. Fl. Germ. et Helv. ed. ii. p. 975.

Acrostichum Ilvense, Linn. Spec. Plant. p. 1528.

Polypodium Ilvense, Swartz, Syn. Fil. p. 39.

Aspidium rufidulum, Swartz, Syn. Fil. p. 58.

Lastrea rufidula, Presl, Pter. p. 76.

Caudex short, dividing into a number of small crowns, which are closely packed together. Stipes breaking off by an articulation a little below the middle, reddish, with broadly-lanceolate pale brown scales at the base, and numerous narrow and hair-like mostly deciduous scales in the upper part. Lamina oblong-strapshaped or triangular-strapshaped, pinnate or bipinnate; pinnæ triangular-oblong or triangular-strapshaped, deeply pinnatifid or pinnatipartite, or even pinnate towards the base, usually thinly clothed above and thickly clothed beneath with long hairs, which are at first whitish, afterwards reddish-brown and partially deciduous; lobes oblong or ovate, obtuse or rounded, crenate or entire; rachis and mid-veins of the pinnæ with numerous long linear acute scales. Indusium saucer-shaped, divided into numerous filiform segments, which are much longer than the undivided portion, and incurved over the sori.

On ledges of rock. Rare and very local. In Carnarvonshire Clogwyn-y-Garnedd, and Llwyn-y-Cwm on Glyder Vawr (Mr. W. Wilson); Pass of Llanberis, left-hand side, looking towards Capel Curig (Mr. L. Clark); on Falcon Clints, Teesdale, Durham, now nearly or quite extinct (Mr. J. G. Baker); in Westmoreland, on three different mountains; and Cumberland (Messrs. T. Huddart and F. Clowes). Abundant on steep crumbling rocks, on the hills dividing Dumfries from Peebles-shire; Ben Chouzie, Perthshire (Prof. Balfour); Glen Fiadh, Clova mountains, Forfar (Mr. H. C. Watson).

England, Scotland. Perennial. Summer, Autumn.

Fronde ascending, annual, perishing in autumn, usually not more than 2 or 3 inches high in British specimens; but I have one 5 inches long, from the Rev. W. Little, from hills north of Moffat, and Norwegian ones, 6 or 7 inches, of which the stipes is about half in the larger specimens, but in some of the smaller only a quarter; the extreme breadth is $\frac{1}{2}$ to $\frac{1}{4}$ the length: the specimens with the longest lamina are narrower in proportion than those with the lamina shorter. The frond is of a dull green above, with a somewhat velvety texture, and ultimately more or less reddish beneath, from the abundant scales and hairs, and hair-like segments of indusium. Pinnæ varying considerably in the degree of separation between the lobes, which are sometimes reduced to crenatures. Ultimate veins free. Sori near the apex of the ultimate veins, at length confluent. Spores with a few large blunt tubercles.

Oblong Woodsia.

SPECIES (?) II.—**WOODSIA HYPERBOREA.** *R. Brown.*

PLATE 1863.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 82.

W. Arvonica, Milde, Fil. Europ. p. 161.

W. alpina, Newm. Nat. Alm. 1844, p. 13; and Hist. Brit. Ferns, ed. iii. p. 79. Moore,

Nat. Print. Brit. Ferns, 8vo ed. p. 283; and Handbk. Brit. Ferns, ed. iii. p. 251.

Acrostichum hyperboreum, Liljelblad, Stock. Trans. 1793, p. 201.

A. alpinum, Bolton, Fil. Brit. p. 76 (1790).

Polypodium hyperboreum, Swartz. Sm. Eng. Bot. No. 2023.

P. Arvonicum, Sm. Fl. Brit. Vol. III. p. 1115.

Caudex dividing into a few small crowns, which are closely packed together. Stipes breaking off by an articulation a little below the middle, reddish, with broadly lanceolate pale brown scales at the base, and a few narrow and hair-like deciduous scales. Lamina linear-strap-shaped or oblong-strap-shaped, pinnate; pinnæ deltoid or deltoid-

triangular, rarely oblong-triangular, pinnatifid, very thinly clothed with long hairs above and beneath; lobes roundish or oval-obovate, entire; rachis with very few scales, and mid-veins of the pinnæ with none. Indusium saucer-shaped, divided into numerous filiform segments, which are much longer than the undivided portion and incurved over the sori.

On ledges of rock, very rare and local. In Carnarvonshire, on Clogwyn-y-Garnedd, Snowdon, on precipices facing east and north-west; rocks facing the east above Glas-Lwyn (L. Clark); Moel Lachog, Pass of Llanberis (Mr. L. Clark and Mr. T. Moore). Perthshire, Ben Chouzie, near Crieff (Dr. Balfour); Ben Lawers (Mr. Dickson and Mr. W. Wilson); and in addition to these stations, Dr. Buchanan White has seen it on Larig-au-Lochan, Cam Creag, and Ben Laoigh; it is reported from Craig Challiach and Mael-dun-Crosk; I have gathered it on Catjaghiamman and on the mountains which separate Glen Lochy from Glen Dochart. Glen Isla, Clova, Forfar (Mr. J. Roy).

England, Scotland. Perennial. Summer, Autumn.

Plant growing in tufts of smaller size than in *W. Ilvensis*, and with the fronds more persistent and usually smaller, 1 to 2 inches being the average length, and 6 inches the largest I have seen, of which the petiole is generally less than one-half. Breadth of lamina $\frac{1}{4}$ to $\frac{3}{4}$ inch. Pinnæ shorter and broader at the base than in *W. Ilvensis*, with fewer and shallower lobes; and above all, without the thick covering of reddish hairs and scales which are on the under side of the fronds of *W. Ilvensis*.

Mr. Roy's specimens from Glen Isla have broader fronds, with longer, narrower, and more deeply divided pinnæ, more like those of *W. Ilvensis* than of *W. hyperborea*, but they are destitute of scales on the mid-veins of the pinnæ; but some of the Moffat specimens of *W. Ilvensis* are almost destitute of these scales, while in others they are abundant, so that I think it very probable those authors are right who treat them as merely subspecies. Mr. Wollaston informed the late Mr. Newman that in *W. hyperborea* the frond has its clusters of capsules very conspicuous, even in its youngest state and immediately it begins to unfold, and that its fronds are nearly persistent. In *W. Ilvensis* the sori are not apparent until the frond has attained its full size, and the fronds wither in autumn.

Alpine Woodsia.

GENUS XI.—CYSTOPTERIS. *Bernh.*

Fronds produced from the upper part of the caudex and its branches, approximate or solitary, once or more times pinnate, not scaly beneath. Stipes not articulated to the caudex, nor in any portion of its length. Veins all free. Sori punctiform, round, attached to the back of the ultimate veins. Indusium hooded, attached below the sorus, entire.

Name from *κύστις* (*kustis*) a bladder, and *πτέρις* (*ptēris*) a fern, on account of the hooded indusium.

SPECIES I.—CYSTOPTERIS FRAGILIS. *Bernh.*

PLATES 1864, 1865, 1866, 1867.

Polypodium fragile and *P. regium*, *Linn. Spec. Plant.* 1553.

Caudex short, rather stout, dividing into numerous short branches or crowns, clothed with the more or less approximate bases of former fronds. Fronds several, close together at the apex of each branch or crown of the caudex. Stipes from one-third as long as to as long as the lamina, slender, very brittle, rarely stouter and tough, with sparse pale linear-lanceolate scales at the base, and a few hair-like deciduous ones in the upper part, but no glands. Lamina perishing in autumn, or sub-evergreen, oblong-lanceolate or strapshaped-lanceolate, sub-tripinnate or bipinnate, lowest pair of pinnae almost always smaller than the succeeding pair, and never conspicuously larger; pinnules serrate or crenate or pinnatifid or pinnatipartite; teeth of ultimate segments usually entire, with the ultimate veins running in their apices, or notched with the veins running into the notches; rachis and lamina usually without glands. Indusium generally without glands, rarely glandular. Spores muricated with numerous long slender acute spine-like tubercles, or tuberculated with sparse large blunt tubercles.

SUBSPECIES I.—Cystopteris eu-fragilis.

PLATES 1864, 1865.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 14.

C. fragilis, *Milde, Fil. Europ.* p. 147.

Caudex short, rather stout, not creeping, dividing into several short branches or crowns, clothed with the more or less approximate bases of former fronds. Fronds several, close together at the apex of each

branch or crown of the caudex. Stipes from one-third as long as to as long as the lamina, slender and very brittle, with sparse pale linear-lanceolate scales at the base, and a few hair-like deciduous ones in the upper part, but no glands. Lamina perishing in autumn, oblong-lanceolate or strapshaped-lanceolate, subtripinnate or bipinnate; lowest pair of pinnae almost always smaller than the succeeding pair, and never conspicuously larger; pinnules serrate or crenate or pinnatifid, or more rarely pinnatipartite; teeth of ultimate segments usually entire, with the ultimate veins running into their apices; rachis and lamina almost always without glands. Indusium without glands, usually denticulate. Spores muricated with numerous long slender acute spine-like tubercles.

Var. *a. genuina*.

PLATE 1864.

Cyathea fragilis, *Sm.* Eng. Bot. No. 1587; and Eng. Fl. Vol. IV. p. 298.

Lamina oblong-lanceolate, subtripinnate.

Var. *β. dentata*. Hook.?

PLATE 1865.

Cyathea dentata, *Smith*, Eng. Fl. Vol. IV. p. 300; and *Cyathea angustata*, *Sm.* Eng. Fl. Vol. IV. p. 301; and *Sowerby*, E. B. S. No. 2790.

Lamina strapshaped-lanceolate, more parallel-sided and narrower than that of var. *α*, bipinnate or subpinnate.

On ledges of rock, and on walls, and among loose stones. Sparingly distributed throughout England and Scotland, except in mountainous districts where it is common; from Cornwall, Devon and Dorset, extending north to Hoy Hill and Ronsay in Orkney. Local, but widely distributed throughout Ireland.

Var. *β* appears to be confined to mountainous districts; at least I have not seen it except from such.

England, Scotland, Ireland. Perennial. Summer, Autumn.

Plant growing in small tufts. Branches of the root-stalk elongating but little, the crown covered with ovate-lanceolate pale brown glabrous scales. Fronds 3 inches to 1 foot high (rarely more), of which the stipes is usually about one-third and rarely one-half, brown at the base, green and widely channelled above the middle, and containing 2 vascular bundles with oval sections. Lamina thin and flaccid, deep green when growing in shade, and yellowish-green

when exposed to the sun, not shining, very variable in its degree of division and in the shape of its ultimate segments, which are sometimes acute, sometimes obtuse, and vary from pinnatifid to serrate or crenate, with the bases sometimes greater than a right angle, at other times wedge-shaped, often more or less decurrent on the lower side. From this extreme variability of shape and cutting of the pinnules or segments, I have been compelled to adopt the general outline of the frond as the mode of separating *C. eu-fragilis* into two varieties.

Var. *dentata* when typical has the frond not more than bipinnate, sometimes scarcely even bipinnate, and both the pinnæ and the pinnules are blunter at the apex than in the common form. Professor Babington states that the spores of var. *dentata* are "warted," but in all the specimens named '*dentata*' I have examined they have the long sharp spur-like tubercles characteristic of *C. eu-fragilis*.

Milde, under var. *dentata*, gives an Algerian form from Blidah, collected by G. Munby, which has verrucose spores. This I have not seen, but certainly should not refer it to *eu-fragilis* at all, as the striking difference between the spores seems to me the only tangible difference between *C. eu-fragilis* and *C. alpina*.

C. angustata, Sm., appears rather a finely cut form of var. *dentata* than a narrow form of var. *genuina*.

Brittle Bladder-fern.

SUBSPECIES (?) II.—*Cystopteris alpina*. *Desv.*

PLATES 1866, 1867.

Milde, *Fil. Europ.* p. 150.

Caudex short, rather stout, dividing into several short branches or crowns, clothed with the more or less approximate bases of former fronds. Fronds several, close together at the apex of each branch or crown of the caudex. Stipes from one-third as long as to as long as the lamina, slender and very brittle, with pale linear-lanceolate scales at the base, and a few hair-like deciduous ones in the upper part, but no glands. Lamina perishing in autumn, oblong-lanceolate or strap-shaped-lanceolate, subquadripinnate or subtripinnate or rarely bipinnate; lowest pair of pinnæ always smaller than the succeeding pair, and generally conspicuously smaller; pinnules bipinnatifid or bipinnatifid, rarely only pinnate; teeth of ultimate segments mostly notched, with the ultimate veins running into the notches; rachis and lamina without glands. Indusium without glands, denticulate. Spores tuberculate, with sparse large blunt tubercles.

Var. *a. genuina.*

PLATE 1866.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 32.*C. alpina*, *Link*; *Hook. fl.* Stud. Fl. ed. ii. p. 495. *Hook. & Baker*, Syn. Fil. ed. ii. p. 103. *Hook. & Arn.* Brit. Fl. ed. viii. p. 588. *Gren. & Godr.* Fl. de Fr. Vol. II. p. 634.*C. regia*, *Presl*; *Moore*, Nat. Print. Brit. Ferns, 8vo. ed. Vol. II. p. 269. *Koch*, Syn. Fl. Germ. et Helv. ed. ii. p. 980.*Cyathea regia*, *Forst. Sm.* Eng. Fl. Vol. IV. p. 302, in part.*C. incisa.* *Sm.* Engl. Bot. ed. i. No. 163.*C. fragilis*, var. *alpina*, *Bab. Man. Brit. Bot.* ed. vii. p. 450.*Aspidium alpinum*, *Swartz*, Syn. Fil. p. 60.*Polypodium alpinum*, *Wulfen. Jacq. Collect.* Vol. II. p. 171.*Polypodium regium*, *Linn.?* Sp. Plant. No. 1553.

Fronde subquadripinnate or tripinnate; pinnules attached by a slender base, pinnatifid or bipinnatifid; ultimate segments oblong and merely deeply notched, or oblanceolate and cut into oblong deeply-notched smaller segments. Ultimate veins almost all running into the notches of the segments.

Var. *β. Dickieana.* Milde.

PLATE 1867.

Milde, Fil. Europ. p. 151.*C. Dickieana*, *R. Sim.* Gard. Journ. 1848, p. 308. *Newm.* Phyt. 1851, App. XXVI.; and *Hist. Brit. Ferns*, ed. iii. p. 94.*C. dentata* (part), *Bab. Man. Brit. Bot.* ed. iii. p. 412; and ed. vi. p. 438.*C. fragilis*, var. *Dickieana*, *Moore*, Handbk. Brit. Ferns, ed. i. p. 81; ed. iii. p. 234; and *Nat. Print. Brit. Ferns*, 8vo. ed. Vol. II. p. 256. *Bab. Man. Brit. Bot.* ed. vii. p. 450. *Hook. fl.* Stud. Fl. ed. ii. p. 494.

Fronde subbipinnate; pinnules mostly attached by a broad base (except those next the rachis), inciso-crenate or pinnatifid; ultimate segments roundish, indistinctly notched or subentire. Ultimate veins running into the notches when these are present, or into the middle of the crenatures when these are not notched.

On rocks and walls, very rare. Var. *α.* Teesdale, Durham. Mr. Backhouse, 1872. Mr. Moore has received authentic specimens "said to have been gathered in Derbyshire and in Yorkshire, but without more particular habitats assigned," from Mr. H. Shepherd; but he "has not seen a native mountain specimen of *C. regia*, unless it be one from Saddleback in Cumberland, gathered many years since by Mr. S. O. Grey." ('*Nat. Print. Brit. Ferns*,' 8vo. ed. Vol. II. p. 271.) It used to grow on a garden wall at Low Leyton in Essex, and I believe it

is still to be seen on some walls in that village ; but doubtless it has originally been an escape from cultivation.

Var. β . In a cavern south from the harbour of Cove, Kincardineshire, but now almost or quite extinct ; originally found there by the late Professor Knight of Aberdeen, and distributed in a living state by Dr. Dickie. The late Mr. C. Barter states he found it on rocks about two miles beyond the Cove towards Lighthouse Point, where a small rill falls over the rocks (Phyt. series ii. 1855-56, p. 509) : I do not know if this statement has been authenticated by competent authority. Dr. Dickie writes that he "saw it on dripping walls and rocks near the road about 3 or 4 miles north from Dunkeld, Perthshire." Very probably some of the stations given for *C. eu-fragilis*, var. *dentata*, belong to *C. alpina*, var. *Dickieana*.

England, Scotland. Perennial. Summer, Autumn.

Plant very similar to *C. eu-fragilis*, and about the same size. Fronds 3 inches to 1 foot long, or a little more. Var. α has the lamina commonly much more divided, and the primary pinnæ commonly shorter and more ovate in outline, and usually more abruptly pointed than in *C. eu-fragilis* : the narrow ultimate segments give the pinnæ some resemblance to those of *Chærophyllum Anthiscus*.

Var. β bears a very close resemblance to *C. eu-fragilis*, var. *dentata*. In the wild plant of which I have seen but a single frond, both the pinnæ and the pinnules are crowded ; the pinnæ slightly twisted and the basal pinnules decurrent, and those towards the extremity of the pinnæ confluent, so that the pinnæ are pinnatifid at the base and simply pinnatifid towards the apex. When cultivated, however, seedlings present not only this form of frond, but others which are much more deeply divided, so that the pinnæ become bipinnate at the base and pinnatifid towards the apex, and cease to be contiguous. The spores are precisely similar to those of *C. alpina*, having blunt rounded slightly elevated tubercles, and not long spine-like ones such as we find on the spores of *C. eu-fragilis*. This peculiarity of the spores Mr. Moore believes to have been first pointed out by Mr. Wollaston, and it is I think conclusive that Dr. Milde is right in referring the form *Dickieana* to *C. alpina* and not to *C. eu-fragilis*. As far as my experience goes, the sculpture of the spores is one of the most constant characters to be found among ferns ; and after cultivating *C. Dickieana* for many years, I have come to the conclusion that the tuberculation of the spores remains constantly identical with that of *C. alpina*, and distinct from all the forms of *C. eu-fragilis*. In the more finely divided seedling plants there is a decided approach to the less divided forms of *C. alpina*, var. α , and the general outline of the frond is more like that of *alpina* than of *C. eu-fragilis* var. *dentata*, which resembles

Dickieana in the degree of division of the pinnæ and the rounded pinnules or segments. Besides the similarity of the spores Dickieana agrees with alpina in many of the ultimate veins running into the notches at the margin of the frond, and not into the teeth which border the notches. The notches, however, are much deeper in *C. alpina*, var. *a*, than in var. *Dickieana*, and in the latter the veins frequently run to the margin of the segment, where there is neither tooth nor notch. In *C. eu-fragilis* the veins, with scarcely any exception, run into projecting teeth. When first I read that Milde put *Dickieana* under *alpina*, I doubted, now I am quite convinced he was right.

Under *C. alpina* Milde includes *Cystopteris Canariensis* of Presl, which has the indusium studded with cylindrical hair-like glands; to this Milde refers the *C. sempervirens* of Moore, 'Nat. Print. Brit. Ferns,' 8vo ed. p. 268, which has been reported from Tunbridge Wells, Kent and Devon; but it seems probable it has either been planted or has escaped from cultivation in both places; it may be a distinct subspecies, as it has a tough (not fragile) stipes, and a frond which is evergreen if protected from frost, which is not the case with the fronds of either *eu-fragilis*, *alpina*, or *Dickieana*. I have specimens from the Canaries, from the late Mr. P. B. Webb, name *Cyathea gracilis*, Sm. These have the spores quite similar to those of *C. alpina*; but Moore says the spores of his *C. sempervirens* are muricate, so probably *Canariensis* and *sempervirens* are not identical.

Alpine Bladder-fern.

SPECIES II.—**CYSTOPTERIS MONTANA.** *Beruh.*

PLATE 1868.

Rabenh. Crypt. Vasc. Exsicc. No. 62.

C. myrrhidifolia, *Newm. Hist. Brit. Ferns*, ed. iii. p. 97.

C. Allioni, *Newm. Phyt.* 1851, App. xxv.

Cyathea montana, *Sm. Mem. Acad. Roy. Sc. Journ.* Vol. V. p. 417.

Aspidium montanum, *Swartz in Schrad. Journ. Bot.* Vol. II. p. 42 (1800).

Polypodium montanum, *Lam. Fl. Fr.* Vol. I. p. 23 (1778).

P. myrrhidifolium, *Villars, Fl. Delph.* p. 114 (1785).

Caudex elongated, slender, creeping, dividing into elongate slender branches, not covered by the approximate bases of former fronds. Fronds solitary, distant, produced from the sides of the branches of the caudex. Stipes from as long as to three or four times as long as the lamina, slender, not very brittle, with a few ovate-lanceolate acuminate entire very pale brown or white and hyaline gland-fringed and gland-tipped scales towards the base, and a few scattered narrowly lanceolate deciduous ones in the upper part, and also numerous minute cylindrical glands. Lamina perishing in autumn, deltoid,

subternately tripinnate or subquadripinnate ; lowest pair of pinnae very much larger and more compound than the rest ; pinnules incised, bipinnatifid or bipinnatifid ; teeth of the ultimate segments commonly notched, with the ultimate veins running into the notches ; rachis and lamina more or less thickly sprinkled with minute cylindrical glands. Indusium thinly sprinkled with glands, or almost glabrous. Spores muricated, with numerous short rather thick blunt spine-like tubercles.

On wet mossy shady rocks. Rare and very local. It was first found in Britain by the late Mr. W. Wilton, on Ben Lawers, Perthshire, in 1836 ; Messrs. W. Gourlay and W. Adamson found it in 1841 on the Glenloch Mountain, at a place called Corrach Uachdar, on Maol Oufillach, opposite Maol Ghaordie, where several other botanists have gathered it ; Mr. Westcomb found it in the same district 6 or 8 miles from this last station ; I have specimens from the late Rev. W. Little and Mr. G. Maw from Glenloch ; from Maol Ghaordie, Glenlyon, collected by Dr. Buchanan White, and Mr. J. Sadler, and from Ben Laoich, gathered by Dr. Buchanan White and Dr. H. H. Johnson. All these stations are in Perthshire. Mr. J. Backhouse has found it at the head of Canlochan Glen, Forfarshire ; and it was found by Mr. A. Croall on the north side of shady rocks on the south side of Glen Callater, near its head, Aberdeenshire. I believe all the Scotch stations for this plant are on rocks of mica-slate facing the north, but the Aberdeenshire station may be an exception.

Scotland, Perennial. Summer, Autumn.

Caudex resembling that of *Phegopteris Dryopteris*, about the thickness of a stocking-wire, nearly black, the younger portion green clothed with large ovate hyaline scales. Fronds generally about $\frac{3}{4}$ inch apart, but often more. Stipes from $1\frac{1}{2}$ inch to 1 foot long, with a shallow furrow on the anterior side, nearly as thick as the rootstock at the base where it is dark-coloured, tapering upwards, where it becomes green ; the upper part is remarkable for the gland-fringed and gland-tipped scattered deciduous scales. Lamina $1\frac{1}{4}$ to 5 inches long, and nearly the same in width, resembling that of *Phegopteris Dryopteris*, but much more finely cut, and less evidently ternate.

Mountain Bladder-fern.

TRIBE IV.—ASPLENIEÆ.

Caudex not growing in advance of the fronds. Stipes not articulated to the caudex, and not separating from it. Sori oblong or linear, straight or curved, attached to the side of the veins, which are oblique to the midrib and margin of the frond or segment, generally furnished with an indusium attached longitudinally to the veins: rarely the indusium is absent.

GENUS XII.—**ATHYRIUM**. *Roth.*

Fronds produced from the apex of the caudex, usually approximated or tufted, rarely solitary, membranous, decomposed. Stipes not articulated to the caudex, containing 2 vascular bundles which unite upwards, giving a horseshoe-shaped section towards the back of the stipes. Veins simple or forked, free. Scales composed of elongate cells, with their boundaries not thickened and uniform in colour with the rest of the cell. Sori oblong, rarely round, often curved or even horseshoe-shaped, attached along the side of the veins. Indusium attached to the vein of and the same shape as the sorus, sometimes crossing the vein and part of it attached to each side, sometimes rudimentary and fugacious or even absent.

Name from *a* without, and *θυρεός* (*thureos*), a shield, from not having a shield-shaped indusium.

In a natural arrangement of Ferns, *Athyrium* would occupy a place between *Phegopteris* and *Lastrea*; it has no affinity with *Asplenium* or any of the allied genera.

SPECIES I.—**ATHYRIUM FILIX-FŒMINA**. *Roth.*

No. 1869.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 24.

Asplenium Filix-fœmina, Bernh. Hook. fil. Stud. Fl. ed. ii. p. 493. Hook. & Baker, Syn. Fil. ed. ii. p. 227. Koch, Syn. Fl. Germ. et Helv. ed. ii. p. 981. Fries, Summ. Veg. Scand. p. 82. Gren. & Godr. Fl. de Fr. Vol. III. p. 635.

Aspidium Filix-fœmina, Swartz. Sm. Engl. Bot. ed. i. No. 1459; and Engl. Fl. Vol. IV. p. 295.

Polypodium Filix-fœmina, Linn. Sp. Pl. 1551.

Caudex stout, erect or oblique, closely covered with the bases of former fronds, dividing early into numerous divisions or crowns, which remain closely packed together. Fronds several from each

crown, arranged shuttlecock-fashion, dying in autumn. Stipes stout or rather stout, thickened immediately above the base, channelled on the anterior face, variable in length, thickly clothed at the base with lanceolate or ovate-lanceolate persistent brown scales, and rather sparingly above with lanceolate or strapshaped mostly deciduous brown scales. Lamina erect or spreading, elliptical-ob lanceolate or narrowly elliptical-oblong or lanceolate-oblong, more or less attenuated towards or abrupt at the base, subbipinnate or subtripinnate or tripinnate; ultimate segments crenate or serrate or inciso-serrate; ultimate veins running into the teeth. Sori distributed over the whole of the frond, placed mostly on the anterior side of the first anterior branch of the veins running into the ultimate segments, oblong and more or less crescent-shaped or recurved at the apex, so as to be hooked or even horseshoe-shaped, rarely round. Indusium subpersistent, strongly fimbriate on the free margin, of the same form as the sori, the shape of which indeed is determined by that of the indusium; rarely it is fugacious or apparently wanting, in which case the sori are round and naked. Spores yellowish or yellowish-brown, nearly smooth, with a few small remote bluntish tubercles, rarely with numerous tubercles.

Var. *a. genuinum.*

Fronds spreading or arching backwards. Stipes short, one-sixth to one-third the length of the lamina. Lamina flaccid, elliptical oblanceolate or broadly elliptical, conspicuously convex-sided, tapering from above the middle to the apex, and longly attenuated towards the base; pinnae decreasing in size downwards until the lowest pair is often not more than twice as long as broad; ultimate pinnules or segments oblong or oval-oblong or lanceolate, flat. Spore yellowish, nearly smooth.

Var. *β. erectum.*

A. Rhaticum, 'Roth.' Moore, Handbk. Brit. Ferns, ed. ii. p. 136.

A. convexum, Newm. (part) Phyt. 1851, App. xiii., and Hist. Brit. Ferns, ed. iii. p. 212.

Fronds suberect. Stipes often rather long, from one-sixth to one-half the length of the lamina. Lamina rather firmer than in var. *a*, oblong elliptical or oblong, subparallel-sided, tapering more towards the apex than towards the base, which is rather abrupt; pinnae not decreasing so much in length downwards as in var. *a*, and the lowest pair being many times longer than broad; ultimate

pinnules or segments strapshaped or linear-triangular, often convex, with the edges recurved, at least when grown in exposed places. Spores yellowish, nearly smooth.

Var. γ . *Watsoni*.

A. incisum, 'Roth.' *Newm.* (?) *Hist. Brit. Ferns*, ed. iii. p. 215. *Watson in Lond. Cat. Brit. Pl.* ed. vii. p. 27. See *H. C. W. in Comp. Cyb. Brit.* p. 622; and *Top. Bot.* p. 496.

Fronds suberect. Stipes long, about half the length of the lamina in the specimens I have seen. Lamina very firm, lanceolate-oblong or subtriangular-oblong, tapering towards the apex, but very little towards the base, which is very abrupt; pinnæ scarcely decreasing in length downwards, the lowest pair often as long as the succeeding pair; ultimate pinnules strapshaped-triangular, flat. Spores yellowish-brown, with numerous small blunt tubercles.

In woods, banks of streams, and on hillsides, moors, and ledges of rock. α and β common, and generally distributed.

Var. γ very scarce, and known only from roots in Mr. H. C. Watson's garden, which he supposes to have been brought from South Wales.

England, Scotland, Ireland. Perennial. Summer, Autumn.

Caudex dividing soon into a number of crowns, so that a patch of the plant increases rapidly, and assumes a tufted appearance from the numerous small crowns remaining together. Stipes commonly rather stout, containing two vascular bundles, which are very conspicuous in section, looking like two letters c turned back to back. Scales more or less numerous, brown, sometimes with a dark central stripe, the upper ones narrower than the lower, which are always most abundant on the thickened portion at the base of the stipes. Fronds very variable in the degree of approximation of pinnæ and pinnules, in the degree to which the latter are divided, and in the size to which they attain; fronds sufficiently developed to bear fructification, being found as small as 9 inches long, while in rich woods they attain 3 or 4 feet in height.

The different forms, however, vary so much when cultivated, not merely in size but in the approximation of the pinnæ and pinnules, as well as in the general shape and division of the latter, that it seems best to distribute the ordinary forms under two varieties only, and very often even these are distinguished with difficulty.

Var. α has the fronds ascending, and, when large, recurved at the apex, so as to be drooping. The stipes and rachis seem to be always green, the frond thin in texture, and the ultimate pinnæ flat. *Athy-*

rium molle, Roth, Newman, appears to me merely a young or weak form of var. α : it has the pinnules approximate, only serrate or crenate, and often connected by a wing on each side of the partial rachis, so that the frond is scarcely so much as bipinnate; but wild specimens having these characters, although large enough to bear sori, on being transplanted into rich soil and cultivated, have developed into the larger and more compound forms of var. α , which we find growing naturally in woods. If these small forms be cultivated in pots or on dry rock-work, the dwarf and little-divided state of the fronds remains constant, and it is perhaps from treating them in this manner that the idea has originated that *molle* is a permanent variety. Var. *marinum*, Moore, var. *confluens*, Moore, var. *allatum*, Moore, and var. *latifolium*, Bab., seem to me all small forms of var. α , while the beautiful form "*plumosum*" (*Phegopteris plumosa*, J. Smith, 'Ferns British and Foreign,' p. 28), which has tripinnate fronds and strapshaped serrate or inciso-serrate, longly-acuminate ultimate pinnules, can only be considered as a monstrosity, as it either does not fruit at all, or produces round sori without an indusium or with a very rudimentary one. The original plant of *plumosum* was found near Skipworth in Yorkshire, by Mr. J. Horsefall, and from the spores of these, plants similar to the parents have been raised. This propagation of abnormal forms by spores may perhaps, as previously stated, be owing to asexual production of plants from the prothallia similar to that observed in *Pteris serrulata*; these plants would then be merely produced by budding, and therefore retain all the peculiarities of the individual from which they were derived. Forms more or less approximating to *plumosum* have been found in various localities. I am favoured with a specimen cultivated from Mr. G. B. Wollaston, labelled from Dorsetshire, J. S. Wells. This, however, is not so completely tripinnate as the Yorkshire plant, though very nearly so, and the ultimate segments are shorter and broader. I possess one received from Messrs. Sang of Kirkcaldy, in which some of the fronds are like the ordinary fronds of the less divided forms of var. α ; while in others the pinnæ are deeply pinnatifid, and again cut into oblong lobes. This is named "*plumosum* Axminster fertile;" but it is much less finely divided than the Todmorton form, and that called var. *dissectum* Wollaston.

In Orkney I found a small form, which I suppose would be called *molle* by those who retain this as a variety, in which a large portion of the sori were round and without indusium; but as these fronds were gathered in the end of July, the sori may have had an indusium when younger. A plant of this form which I brought home died, so I was unable to make further observations.

Var. β , when growing in exposed situations, is remarkable for its pinnæ being convex, the margins being reflexed, so that the pinnæ appear very narrow and disconnected; but a plant of this form under a foot high has developed in cultivation into a plant 3 feet high, with

flat or nearly flat pinnules, and from having a pale green colour tinged with reddish-brown, it has become deep green. It has, however, retained the erect habit and narrower parallel-sided form of frond much more abrupt at the base than in var. *a*. Specimens similar to this garden form abound in woods. They have usually a long stout stipes, which is sometimes green, but perhaps more often dull vinous-red, which colour is continued through the rachis.

Var. *γ* should perhaps be regarded as a subspecies. I know it only from specimens and a living root sent me by Mr. H. C. Watson. It has more the aspect of var. *β* than of var. *a*, but has a still stouter and longer green stipes, with the scales more numerous, more persistent, and of a darker maroon colour than is usual in vars. *a* and *β*, and has a more rigid lamina, broader in proportion to its length, and tripinnate, with the ultimate segments linear-oblong, with two or three narrowly triangular teeth towards the apex. The dimensions of a well-developed specimen are stipes 2 feet, lamina 2 feet 6 inches by 1 foot; lowest pinnæ 5 to 5½ inches in length; the lamina broadest, about ⅓ of its length above the base, not beyond the middle, as in var. *a*. The spores have the yellow colour more tinged with brown, and a surface with more conspicuous and more numerous blunt tubercles than in vars. *a* and *β*. Mr. Watson considers this the *Athyrium incisum* of Newman, and it is very probable that Mr. Newman's description was taken from var. *Watsoni*; but he says the "geographical range" of his *incisum* is "general, it requires only damp vegetable soil, shade, and absence from molestation." I have therefore little doubt that under his *incisum* he included the large and more divided forms of vars. *a* and *β*. Mr. T. Moore's var. *incisum*, which he describes with "fronds drooping," must be a divided form of our var. *a*. *Aspidium irriguum*, Sm. Engl. Bot. No. 2199, and Engl. Fl. vol. iv. p. 296, found at Tunbridge Wells, is a young state of var. *β*.

Lady-fern.

SPECIES II.—**ATHYRIUM ALPESTRE.** *Milde.*

PLATES 1871, 1872.

Milde, Fil. Europ. p. 53.

Asplenium alpestre, *Mettenius* in Abh. Senkenb. Naturf. Gesellsch. 1859, p. 242.

Phegopteris alpestris, *Mettenius*, Fil. Hort. Soc. Lips. p. 83.

Polypodium alpestre, *Hoppe*. *Moore*, Nat. Print. Brit. Ferns, Vol. I. p. 76. *Hook. fil.* Stud. Fl. ed. ii. p. 498. *Hook. & Baker*, Syn. Fil. ed. ii. p. 311. *Koch*, Syn. Fl. Germ. et Helv. ed. ii. p. 974.

P. Rhaticum 'Pallas,' *Fries*, Summ. Veg. Scand. p. 82. *Gren. & Godr.* Fl. de Fr. Vol. III. p. 628. (Non *Linn.* teste *Moore*.)

Aspidium alpestre, *Schkuhr*, Krypt. Gen. p. 58.

Aspidium Rhaticum, *Swartz*, Syn. Fil. p. 59.

Caudex rather stout, erect or oblique, closely covered by the bases

of former fronds, dividing into several divisions or crowns, which remain closely packed together. Fronds several from each crown, arranged shuttlecock-fashion, dying in autumn. Stipes rather stout, thickened immediately above the base, nearly flat on the anterior face, variable in length, but usually short, rather thickly clothed at the base, and sparingly above, with broadly-ovate and triangular lanceolate, acuminate hyaline or very pale brown scales, intermingled with numerous minute hair-like ones, most of which are deciduous. Lamina suberect or ascending or spreading, narrowly elliptical-oblong or oblong, or strapshaped-lanceolate, more or less attenuated towards the base, bipinnate or subtripinnate; ultimate segments crenate or serrate or inciso-serrate. Ultimate veins running into the teeth. Sori distributed over the whole of the frond, except the base or the apex, placed on the first anterior branch of the vein running into the ultimate segments, or on several of the branches, circular. Indusium very minute, very finely lacerate, fugacious, often absent. Spores brown, tuberculate, with numerous small blunt unequal tubercles.

SUBSPECIES I.—*Athyrium eu-alpestre*.

PLATE 1870.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 84.

Pseudathyrium alpestre, *Newm.* Phyt. 1851, p. 370; and App. xix. and 1853, p. 974; and *Hist. Brit. Ferns*, ed. iii. p. 200.

Asplenium alpestre, *Rabenh.* l. c. No. 84.

Phegopteris alpestris, *J. Smith*, *Hist. Fil.* p. 33.

Polypodium alpestre, *Bab. Man. Brit. Bot.* ed. vii. p. 445.

Caudex stout, erect or oblique, closely covered by the bases of former fronds, dividing into several divisions or crowns, which remain closely packed together. Fronds several from each crown, arranged shuttlecock-fashion, dying in autumn. Stipes rather stout, straight, thickened immediately above the base, nearly flat on the anterior face rather short, one-sixth to one-fourth the length of the lamina, rather thickly clothed at the base and sparingly above with broadly-ovate and triangular-lanceolate acuminate very pale brown scales, intermingled with numerous hair-like ones, most of which are deciduous. Lamina suberect or ascending, elliptical-oblong or narrowly oblong, attenuated towards the base and apex, bipinnate or subtripinnate; lower pinnæ spreading, upper ones ascending, not more distant than the lower ones; pinnules or ultimate segments broadest at the base, crenate or crenate-serrate or inciso-crenate; lobes entire or toothed at the apex.

Ultimate veins running into the teeth. Sori distributed over the whole of the frond, except a few pairs of pinnæ towards the base, placed on the first anterior branch of the vein running into the pinnules or ultimate segments, or on several of the branches. Indusium very minute, very finely lacerate, fugacious, often absent. Spores brown, tuberculate, with numerous small blunt unequal tubercles.

Var. *a. genuinum.*

Fronde narrowly oblong, sometimes strapshaped-oblong, subparallel-sided towards the middle; pinnæ acuminate; pinnules strapshaped-lanceolate or narrowly lanceolate, acute, separated, sometimes convex from the margins being reflexed.

Var. *β. obtusatum.*

Fronde oblong-elliptical, with the sides more or less curved outwards towards the middle; pinnæ tapering gradually towards the apex, but not acuminate; pinnules oval-oblong or oblong, approximate, obtuse, generally flat.

Amongst stones and on rocks in alpine districts, frequent on highland mountains above 1800 to 4000 feet. It occurs on all the high mountains of Perthshire; on the Clova Mountains, Forfarshire; and Braemar Mountains, Aberdeen; first found on mountains near Dalwhinnie and on Ben Alder, Inverness-shire, in 1841, by Mr. H. C. Watson. It is recorded also from the counties of Banff, Argyle, and Sutherland.

Var. *a.*, judging from the specimens I have, appears much more frequent than var. *β.*, which grows side by side with var. *a.* I have it from Lochnagar, Canlochan, Ben Hope, Ben Lawers, and the Clova Mountains.

Scotland. Perennial. Summer, Autumn.

Fronde 1 to 3 feet high, extremely similar to those of *A. Filix-fœmina*, var. *a* simulating *A. Filix-fœmina* var. *erectum*, and var. *β* *A. Filix-fœmina genuinum*, though the two forms of eu-alpestre are less distinct than the above-named vars. of *Filix-fœmina*: *A. alpestre*, var. *a* having the frond attenuated towards the base, and var. *β* having the frond narrower than in *Filix-fœmina genuinum*; but even in the barren state eu-alpestre may be distinguished by its stipes being scarcely channelled above (there the rachis is), and with much broader and paler scales, which are almost white and hyaline when the frond first begins to expand. The most striking difference, however, lies in the round sori, which arises from their shape not being

modified by a firm and persistent indusium; the spores also are darker coloured and conspicuously tuberculate, in this respect very different from the yellow, nearly smooth, spores of *A. Filix-fœmina* vars. α and β ; but in *A. Filix-fœmina* var. *Watsoni* the spores show some approximation towards those of *A. eu-alpestre*.

The great majority of botanists place the present plant in the genus *Polypodium* or in the genus *Phegopteris* when they separate the latter from the former. The late Mr. E. Newman founded the genus *Pseudathyrium* upon it, but I think there is no doubt that Milde is right in placing it in the genus *Athyrium*, with which it agrees in every character except in the round naked sori; but then in several abnormal forms of *A. Filix-fœmina* the sori are round and naked, or with an imperfectly developed indusium, and in some otherwise ordinary forms of the same Fern the indusium falls away early, and the sori become round. On the other hand, in the very early stages of *A. alpestre* a rudimentary indusium may be found at least occasionally. The disposition of the curved vascular bundles of the petiole is precisely similar in the two plants, as well as their mode of growth, vernalion, and venation. I myself have doubts whether *A. alpestre* should not be considered as merely a subspecies of *A. Filix-fœmina*. (See Duval Juve in 'Annot. Fl. de Fr. et d'All.,' pub. par C. Billot, pp. 57 and 149 to 151.)

Alpine Lady-fern.

SUBSPECIES (?) II.—*Athyrium flexile*.

- A. alpestre* var. *flexile*, *Milde*, Fil. Europ. p. 53.
Pseudathyrium flexile, *Newm.* Phyt. 1853, p. 974; and Hist. Brit. Ferns, ed. iii. p. 201.
Phegopteris flexilis, *J. Smith*, Hist. Fil. p. 233.
Polypodium flexile, *Moore*, Handb. Brit. Ferns, ed. ii. p. 225. *Bab. Man.* Brit. Bot. ed. vii. p. 445.
P. alpestre, var. *flexile*, *Moore*, Handb. Brit. Ferns, ed. iii. p. 59; and Nat. Print. Ferns, 8vo. ed. vol. i. p. 76. *Hook. & Baker*, Syn. Fil. ed. ii. p. 311.
P. alpestre, β . *pumile*, *Hook. & Arn.* Brit. Fl. ed. viii. p. 581; and *Hook. fil.* Stud. Fl. ed. ii. p. 498.

Caudex stout, erect or oblique, closely covered by the bases of former fronds, dividing into several divisions or crowns, which remain closely packed together. Fronds several from each crown arranged shuttlecock-fashion, dying in autumn. Stipes rather stout, bent backwards and thickened immediately above the base, nearly flat on the anterior face, very short, often reduced merely to the enlarged portion above the base, and rarely more than one-eighth the length of the lamina, rather thickly clothed throughout with ovate and lanceolate pale brown scales, intermingled with hair-like ones, most of which are deciduous. Lamina spreading or spreading-ascending, strap-

shaped lanceolate, more attenuated towards the apex than towards the base, bipinnate; lower pinnæ deflexed, upper ones spreading and more distant; pinnules narrowed at the base, inciso-serrate; lobes toothed at the apex; ultimate veins running into the teeth. Sori distributed over the basal half of the frond, the apex being destitute of them, placed on the first anterior branch of the veins running into the pinnules or on several of the branches. Indusium very minute, very finely lacerate, fugacious, but rarely absent when the fronds unfold. Spores brown, tuberculate, with rather numerous small blunt irregular tubercles.

Very rare and local. At the head of Glen Prosen, Clova, Forfarshire. Great Corrie on Ben Alder, Inverness-shire.

Scotland. Perennial. Summer, Autumn.

Fronds 3 to 12 inches long, with an extremely short stipes; in cultivation the stipes is often confined to the enlarged basal portion which remains attached to the caudex. Scales more numerous and more of them ovate-triangular than in *A. eu-alpestre*. Lamina narrower—in wild specimens from Ben Alder collected by Dr. Buchanan White, with lamina between 3 and 4 inches long, the breadth is from 1 to $1\frac{1}{4}$ inch at the broadest part, which is about one-third above the base. Pinnules narrowed towards the base, while in *P. eu-alpestre* they are broadest towards the base. The most remarkable feature in this Fern is that the sori appear not to be produced on the apical portion of the frond, they are most numerous in the basal third, and it is but rarely that any can be found in the apical third.

I have great hesitation in separating this as a subspecies from *A. eu-alpestre*, because the character of the basal part of the frond being soriferous and not the apex, is so unusual among Ferns, that it may be suspected to be an abnormal form or monstrosity, and as this I should have regarded it had Mr. Backhouse's original station in Glen Prosen been the only one in which it occurred. But the Ben Alder specimens are similar, and in cultivation the plant becomes even more dissimilar from *A. eu-alpestre* than the wild specimens. I have had cultivated plants from Glen Prosen, where I believe it is now almost extinct, from Mr. Backhouse, and from Ben Alder from Mr. A. Craig Christie and Dr. F. Buchanan White. Mr. A. C. Christie tells me that *A. flexile* fruits when only 3 inches long, and *A. alpestre* growing with it not under 9 or 10 inches.

Dr. F. Buchanan White, who is one of the few botanists who have published detailed descriptions of *A. eu-alpestre* and *A. flexile*, after having observed both forms in their native localities, says, in the 'Scottish Naturalist,' 1881, p. 45: "The general appearance and habit of *flexile* afford one of the best points of distinction. *Alpestre*

has erect fronds with a general appearance, as is well known, very similar to that of *Athyrium Filix-fœmina*, for which indeed it was long mistaken. *Flexile* on the other hand, has somewhat narrower and more tapering fronds, with the stipes bent or elbowed a little above its attachment to the rachis (caudex? Ed.), and in consequence the frond is far from erect, and, in fact in many cases is nearly parallel to the surface of the earth, which, with the deflexed pinnæ and the pinnules narrowed at the base, give a very distinct appearance. In addition, it is almost invariably smaller than *alpestre*—generally very much smaller—and, though the name implies a more pliant structure than *alpestre*, I think in reality it is more rigid.”

Flexile Lady-fern.

GENUS XIII.—ASPLENIUM. *Linn.*

Fronds produced from the apex of the caudex, usually approximated, rarely solitary, often coriaceous or subcoriaceous, varying from simple to decomposed, not densely scaly beneath. Stipes not articulated to the caudex, containing 1 or 2 vascular bundles which unite upwards, and give a 3- or 4-lobed section in the centre of the stipes. Veins simple or forked, free. Scales composed of short cells, with their boundaries greatly thickened, and of a much deeper brownish-red colour than the rest of the cell. Sori oblong or linear, straight or slightly curved, attached along the side of the veins. Indusium attached along the vein, of the same shape as the sorus.

Name from *a* (α) without, and *σπλήν* (splen) the spleen, which like the English name (Spleenwort), indicates the belief formerly entertained that the plant was a remedy for disorders of the spleen.

SPECIES I.—ASPLENIUM FONTANUM. *Beruh.*

PLATE 1872.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 33.

A. Halleri, *Spreng. Koch*, Syn. Fl. Germ. et Helv. ed. ii. p. 982. *Gren. & Godr.* Fl. de Fr. vol. iii. p. 635. *Rabenh.* l. c.

Athyrium fontanum and A. Halleri, *Roth*, Fl. Germ. vol. iii. pp. 59 and 60.

Aspidium fontanum, *Swartz.* Sm. Eng. Bot. No. 2024.

Polypodium fontanum, *Linn.* Spec. Plant. p. 1550.

Caudex short, dividing into several scaly crowns; scales strap-shaped-triangular, entire, very acute. Fronds several from each crown, ascending or spreading. Stipes wiry, much shorter than the lamina, purplish-brown at the base, green at the upper part, margin with a

few linear-triangular dark brown quickly deciduous scales. Lamina firm but not coriaceous, glabrous, dim, evergreen, strapshaped-oblan- ceolate or strapshaped-elliptical, longly tapering towards the base, and acuminate at the apex, bipinnate or subbipinnate; lowest pair of pinnæ very minute and smaller than the succeeding pair, deltoid-ovate, pinnate or pinnatipartite, more or less deflexed, the middle ones triangular-ovate or oblong, spreading; basal pinnules roundish, narrowed at the base, somewhat palmately inciso-serrate, with mucronate teeth. Rachis green, usually glabrous, margined, winged; partial rachides broadly winged so as to connect the bases of the pinnules. Pinnules with a flexuous mid-vein which gives off simple branches running to the teeth. Sori shortly oblong, often slightly curved, attached to the ultimate veins nearer to the midrib of the pinnules than to their margin, often ultimately confluent. Indusium entire or nearly so. Spores brown, muricato-tuberculate, with short rather large pointed tubercles.

On rocks and walls. A very doubtful native. On a garden wall at Ashfield Lodge near Petersfield, Hants, Rev. W. H. Hawker; on an old garden wall at Furze Down, Tooting, Surrey (station now destroyed), 1845, Mr. Gibbs; formerly on Amersham Church, Berks, found by Mr. Bradney according to Hudson; at "Swanage Cove, near Tillevilly, Isle of Purbeck, Dorset, and between Lang-Vwlch and Tremaddock," 1852, Dr. Power, Moore; near Matlock, Derbyshire, Mr. H. Shepherd; rocks in Wharnclyffe Wood, Yorkshire, 1838, Mr. R. M. Redhead; Northumberland, Mr. J. Backhouse, Bab. Man., but not included in Baker's 'Flora of Northumberland and Durham,' 1868; rocks near Alhwick Castle, T. Moore; "Mr. Hudson gathered the same plant in a stony situation near Wybourn in Westmoreland, or rather, perhaps, Wiborne in Cumberland," Smith. "We have also been informed by Mr. D. Hutchison, formerly gardener at Bexley Abbey, Kent, that he has himself gathered this species in 1842, on moist rocks near the sea, a short distance north-east of Stonehaven, Kincardineshire, in a spot that has since been disturbed by the formation of the Aberdeen railway, so that in 1849 he was not successful in refinding it." (Moore, Nat. Print. Brit. Ferns, 8vo ed. vol. ii. 1863.) "Mr. W. O. Needham of Farnham, gave me the enclosed specimen of *Asplenium fontanum*, which he informs me were gathered by himself on the Cave Hill near Belfast, Co. Antrim, Ireland." (Edward Newman on label of specimen purchased at sale of collection of Botanical Society of London.) Not included in the 'Cybele Hibernica.'

England? Scotland? Ireland? Perennial. Summer, Autumn.

Stipes $\frac{1}{6}$ to $\frac{1}{2}$ the length of the lamina. Lamina $2\frac{1}{2}$ inches long by $\frac{5}{8}$ inch wide, to 9 inches long by $1\frac{1}{4}$ inch wide, decreasing gradually towards the base as in *Athyrium Filix-fœmina*, var. *genuinum* and *Lastrea Oreopteris*, a character which distinguishes it from all the other British species of *Asplenium*. The texture of the fronds though firm, is not coriaceous, they are of a bright deep-green colour, and not shining.

Koch makes two varieties of this plant, viz. *a. pedicularifolium*, and *β. angustatum*. The latter differs merely in its smaller size and less divided pinnæ, which are scarcely again pinnate. These varieties seem mainly to be dependent on situation, which causes one form to be more luxuriant than the other.

Smooth Rock Spleenwort.

SPECIES II.—**ASPLENIUM LANCEOLATUM.** *Huds.*

PLATE 1873.

Rabenh. Crypt. Vasc. Europ. Exsicc. Nos. 113 and 114.

Caudex short, dividing into several scaly crowns; scales subulate, dentate, with setaceous points. Fronds several from each crown, ascending or spreading or pendent. Stipes wiry, shorter than the lamina, purplish-brown throughout, or rarely green in the upper part, faintly channelled above, with a few scattered hair-like dark-brown scales. Lamina firm but not coriaceous, glabrous, dim, evergreen, lanceolate or strapshaped-lanceolate, more rarely strapshaped, scarcely attenuated towards the abrupt base, acuminate towards the apex, bipinnate or rarely only once pinnate; lowest pair of pinnæ a little smaller than the succeeding pair, oblong or oblong-triangular, sessile or very shortly stalked, spreading or occasionally deflexed; middle pinnæ similar to the basal ones, but usually a little longer; pinnules or ultimate segments obovate or oblanceolate or ovate-rhombic, wedgeshaped at the base, dentate or crenate-dentate, with mucronate teeth towards the apex, the larger ones often inciso-pinnatifid. Rachis mostly purplish at the base, especially on the underside, green on the upper part, margined, with hair-like scales; partial rachides narrowly winged, sometimes often connecting the bases of the pinnules. Pinnules with a flexuous mid-vein which gives off forked or simple branches running to the teeth. Sori shortly oblong, straight, attached to the ultimate veins, nearer to the margin of the pinnules than to the midrib. Indusium entire. Spores brown, muricate-tuberculate, with rather large pointed tubercles.

Var. *a. genuinum*.

Fronds bipinnate, or when small pinnate; pinnae pinnatifid or pinnatifid, acute or subacute; pinnules or ultimate segments obovate or oblanceolate or rhombic-ovate, with large acuminate mucronate teeth, which are as long as, or longer than broad.

Var. *β. obovatum*. Gren. and Godr.

A. obovatum, *Viviani*. Guss. Fl. Sic. Syn. p. 662.

Fronds pinnate; pinnae pinnatifid or pinnatifid, more rarely again pinnate, obtuse; ultimate segments large, roundish-obovate, with large rounded apiculate or shortly mucronate teeth, which are not so long as broad.

Var. *γ. microdon*. Moore.

A. marinum var. *microdon*, Moore, Ferns of Great Brit. Nat. Print. folio ed. sub tab. 38.

“Frond pinnate; pinnae undulated, with apiculate-dentate margins, the lower ones distinct, obtuse, obliquely triangular, or unequally cordate-subhastate, lobate below; upper ones narrower, confluent. Sori short.” (Moore, Handb. Brit. Ferns, 8vo. ed. vol. ii. p. 67.)

On ledges of rock, and walls and banks. Local. Frequent in Devon, Cornwall, and Somerset; it also occurs at Tunbridge Wells, on both the Sussex and Kent side of the stream which divides these counties, near the high rocks, and also on rocks in Eridge Park, Sussex; at Frenchey, Beechly, and near Stapleton, Gloucestershire; and in the counties of Pembroke, Glamorgan, Merioneth, Denbigh, Carnarvon. Very rare in Ireland; on both sides of the town of Kinsale, Cork, Mr. I. Carroll, from whom I have specimens, and on an old tower at Reencahirne, and on Ballycabery Castle, near Cahirciveen, Rev. S. Madden, Sup. ‘Cyb. Hib.’ Of var. *β* I have specimens from Mr. I. W. N. Keys, from rocks near Tavistock, Devon, which I cannot distinguish from the ordinary *Asplenium obovatum* of the Mediterranean district.

“Var. *microdon* is a native of Guernsey, and was found in 1855 first by Miss Wilkinson, and subsequently in other stations by Miss Mansell, of the Quesne, and Mr. C. Jackson, to the latter of whom we are indebted for specimens and for our knowledge of the plant. Mr. Jackson informs us that it grows on banks of rough masonry without mortar, and intermixed with *Asplenium lanceolatum*, at some

distance from the sea. It has been found within a short distance of Penzance by Mr. J. Mager, and this plant, which is somewhat more divided than the Guernsey form, proves incontestably its relationship to the species to which we refer it." (Moore, l. c. p. 73.)

England, Ireland. Perennial. Summer, Autumn.

Caudex with the crowns closely packed together, clothed with long linear-subulate and filiform dentate scales, which appear to be dark brown, but, when examined under a lens, are seen to be white and hyaline, with a network formed by thick reddish-brown longitudinal and transverse bars, which are the boundaries between the cells; the partitions project at the margins of the scales in the form of very minute teeth: these scales are good examples of the clathrate scales which distinguish the genus *Asplenium* from *Athyrium*. The stipes is shining, purplish-brown, thickly clothed with articulated hair-like scales when unfolding, but ultimately nearly glabrous, variable in length even in the same tuft, very rarely as long as the lamina, and usually only one-third or one-fourth as long, containing two oval vascular bundles. Lamina variable in size, but generally under 6 inches long by $1\frac{1}{2}$ inch broad. The largest I have is 9 inches long by $3\frac{1}{2}$ broad, with a stipes of 9 inches long; it was collected in a well in Jersey by Dr. J. A. Power. The fronds are of a deep bright green, without any lustre, and are evergreen if protected from frost, to which they are, however, very susceptible; so that the plant cannot be cultivated out of doors, at least in the greater part of Britain. The fronds vary in thickness, and are sometimes translucent, but more generally they are opaque, and, when growing in exposed situations, frequently have the pinnules recurved.

Var. β seems to pass insensibly into the typical form.

Var. γ I have never seen, but, judging from the impression in Moore's 'Nature-printed Ferns,' it is a most extraordinary variety, simulating *Asplenium marinum*.

Lanceolate Spleenwort.

SPECIES III.—**ASPLENIUM ADIANTUM-NIGRUM.**

Linn.

PLATES 1874 AND 1875.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 35, 36, and 115.

Caudex short, divided into several scaly crowns; scales linear-subulate, entire, tapering into long setaceous points. Fronds several from each crown, ascending or spreading or pendent. Stipes wiry, generally as long as and sometimes longer than the lamina, purplish-

brown throughout, or rarely green in the upper part, channelled above, with a few scattered hair-like deciduous dark-brown scales. Lamina coriaceous or subcoriaceous, glabrous, usually shining, evergreen, triangular-lanceolate or triangular-oblong or triangular or deltoid-ovate, not attenuated towards the abrupt base, bipinnate or tripinnate, more rarely quadripinnate; lowest pair of pinnæ larger than the succeeding pair, ovate or lanceolate, conspicuously stalked, ascending-spreading or ascending straight or curved upwards; middle pinnæ similar to the basal ones, but smaller and usually less divided; pinnules or ultimate segments oblanceolate or ovate or rhombic-elliptical or strapshaped, serrate or crenate-serrate at least towards the apex; teeth acute, sometimes shortly mucronate. Rachis usually purplish-brown in the lower part, green in the upper part, margined; glabrous partial rachides narrowly winged, with the wing connecting the bases of the pinnules. Pinnules with a flexuous mid-vein which gives off forked or simple branches, running into the teeth. Sori linear-oblong or strapshaped, straight, attached to the ultimate veins, much nearer the midrib of the pinnules or ultimate segments than to their margins, often ultimately confluent. Indusium entire. Spores muricate-tuberculate, with rather large pointed tubercles.

Var. *a. genuinum*.

PLATE 1874.

Stipes usually as long as the lamina, and frequently exceeding it. Lamina coriaceous, opaque, shining with a greasy lustre, triangular-lanceolate, shortly acuminate, bipinnate or subtripinnate; lower pinnæ ascending, nearly straight; all the pinnæ acute or shortly acuminate; basal pinnules of the lower pinnæ not contiguous, lanceolate or rhombic-lanceolate, pinnate or pinnatipartite or pinnatifid, subobtuse or subacute; ultimate pinnules or segments ascending, subacute, toothed towards the apex; teeth longer than broad, gradually acute.

Var. *β. obtusum*. Kit. and Milde.

Var. *obtusatum*, Moore, Nat. Print. Brit. Ferns, 8vo. ed. Vol. II. p. 76. *Rabenh.* l. c. No. 36.

A. *obtusum*, Kit. in Herb. Willd. No. 19,927 (teste Mild.). Non Presl.

Stipes usually shorter than the lamina, and rarely exceeding it. Lamina coriaceous, opaque, shining with a greasy lustre, triangular-ovate, more rarely lanceolate-ovate, acuminate bipinnate or (rarely)

subtripinnate; pinnae spreading or spreading-ascending, straight; all the pinnae obtuse or subobtuse, very rarely acuminate; basal pinnules of the lower pinnae contiguous obovate or ovate or rhombic-ovate, lobed or incised or pinnatifid; ultimate segments ascending, obtuse or crenate-serrate or dentate serrate towards the apex; teeth often no longer than broad, subacute, very shortly acuminate and subacute or very shortly mucronate.

Var. γ . *Serpentini*. Koch.

- A. *Adiantum-nigrum*, var. *obtusum*, Moore in Journ. Bot. 1864, p. 129. *Hook. fil. Stud. Fl. ed. ii. p. 493*; *Hook. & Bak. Syn. Fil. ed. ii. p. 214*.
 A. *Serpentini*, *Tausch. Fl. 1839*, p. 477. *Milde, Fil. Europ. p. 86. Rabenh. l. c. No. 115*.
 A. *obtusum*, *Presl*, non *Kit.* (teste *Milde*).

Stipes as long as the lamina, or often exceeding it, more conspicuously margined than in vars. α , β , and γ . Lamina coriaceous or subcoriaceous, opaque, scarcely shining but with a faint satiny lustre, ovate-triangular or triangular, gradually acute, tripinnate or subquadripinnate; lower pinnae ascending-spreading or spreading, straight, rarely slightly curved towards the apex of the frond, subacute, very rarely acuminate; basal pinnules of the lower pinnae separated, rhombic deltoid, pinnate or subbipinnate; ultimate pinnules or segments ascending-spreading, wedgeshaped at the base, obtuse or subobtuse and crenate-dentate at the apex, with the teeth as long as or longer than broad.

Var. (?) γ . *acutum*. Pollini.

PLATE 1875.

- A. *Onopteris*, var. *a. acutum*, *Milde, Fil. Europ. p. 87*.
 A. *Adiantum-nigrum*, var. *Virgilii*, *Heufler, Willk. & Lange, Prod. Fl. Hisp. Vol. I. p. 7*.
 A. *acutum*, "Bory, MS." *Willd. Spec. Plant. Vol. V. p. 347. Newm. Hist. Brit. Ferns, ed. iii. p. 230*.
 A. *Virgilii*, *Guss. Fl. Sic. Syn. p. 662*.
 A. *productum*, *Lowe, Trans. Camb. Phil. Soc. 1838, p. 524*.

Stipes generally much exceeding the lamina. Lamina subcoriaceous, translucent, faintly shining with a strong satiny lustre, ovate-triangular, longly acuminate, almost cordate, mostly tripinnate or subquadripinnate; lower pinnae spreading-ascending at the base, and then curved upwards towards the apex of the frond, acuminate and very acute or subacute; basal pinnules of the lower pinnae much separated, narrowly rhombic or rhombic-triangular, pinnate or sub-

bipinnate; ultimate pinnules or segments ascending-erect, longly wedgeshaped at the base, very acute, serrate, with mucronate teeth longer than broad.

On rocks, walls, and banks. Vars. α and β not very abundant, but generally distributed, extending north to Orkney and Shetland. Frequent throughout Ireland.

Var. γ . *Serpentini*, on serpentine rocks, at Cabrach, in Aberdeenshire, on the confines of Banffshire, where it was discovered by the Rev. Andrew Christie. To this var. I am inclined to refer also a plant sent me by Mr. G. H. Kinahan, labelled "On serpentine a little south-west of Glendalough Hotel, Connemara."

Var. γ . *acutum* appears to be confined to the south-west of Ireland. I have specimens from Glen Carragh, Mr. G. Maw; Killarney, Mr. E. T. Bennett; and Bandon Hill, near Peafield, Rev. J. Allen. Mr. G. H. Kinahan writes to me that it is frequent in Connemara, Galway, and S.W. Mayo, but I have not seen specimens. Mr. H. C. Watson reports it from Surrey, and Dr. Lowe from Norfolk. Besides these localities it is reported from Jersey; from Combe Royal, south Devon; and the walls of the cathedral of St. Asaph, Wales; but as I have not seen specimens from these places, I do not know if they belong to *acutum*, as I understand it, or are merely finely divided states of var. α .

England, Scotland, Ireland. Perennial. Summer, Autumn.

A very variable plant, which Milde and others divide into 3 subspecies, and certainly taking the typical forms of each of these one is much inclined to endorse their opinion; but these principal forms are so intimately connected by intermediates, and the characters become so crossed, that I have found myself compelled to agree with those writers who regard them all as forms of one species. It is not, as in the case of the *Lastreas*, that we have distinct forms of which there are abundant individuals connected by intermediate forms of which there are few individuals: the types of the distinct forms of *Lastrea* are abundant, the intermediates scarce, and each intermediate form occurs only where the two typical forms which it connects grow together.

Very different from this is the case of *Asplenium Adiantum-nigrum*, in which there are far more individuals of the connecting forms than of the type-forms of two out of the three possible subspecies, at least in Britain and central Europe; while in the south of Europe and the Canary Isles another type-form becomes prevalent, and the intermediates which connect it with the form most common in Britain are more abundant than the northern form.

The first of Milde's subspecies "*nigrum*," Heufler, contains the forms here called *genuinum* and *obtusatum*. It is the least divided of the three, and has usually the stipes not exceeding the lamina, which is usually about 6 or 8 inches long, by 2 to 3 inches across the broadest part at the base; the frond is coriaceous and opaque with a greasy lustre, the ultimate segments are convex on the outer side. Milde's var. *obtusatum* is a less developed form, with the stipes usually shorter in proportion to the frond, which is rarely above 4 inches in length, and sometimes as little as 2 inches; it is less divided, and sometimes scarcely bipinnate; the ultimate segments are rounder and more obtuse than in var. *genuinum*, into which it passes insensibly, and is scarcely worthy of the name of a variety. Milde gives as one of the characters of his first form that there is only a solitary vascular bundle in the stipes, while in the second subspecies there are 1 or 2 bundles, and in the third two. I fear little reliance can be placed upon this character; in all the specimens I have examined there are two vascular bundles in the stipes where it starts from the caudex. These two bundles approach each other and coalesce before reaching the lamina. In small specimens the coalescence occurs much nearer the base than in large ones, but the point at which it does occur appears to depend on the degree to which the stipes is developed. Speaking of the petiole of *Asplenium Adiantum-nigrum*, Mons. Duval Jouve says: "A leur base dilatée ils présentent de chaque côté et presque contre la périphérie un faisceau fibro-vasculaire simple, dont la coupe est réniforme oblique; plus haut, ces deux faisceaux se rapprochent vers le centre sans jamais se fondre en un seul" (Billot, Annot. Fl. de Fr. et d'All.' p. 247). My experience is contrary to this, as I find the two bundles always ultimately coalesce, and sometimes indeed very near the base; so I suspect the unity or duality of the vascular bundles varies in different specimens.

The second subspecies, "*Serpentini*," Tausch., appears to be confined to serpentine rocks in Saxony and Silesia, south to Italy, Dalmatia, and Hungary. It was first recorded as a British plant by Mr. T. Moore, from specimens collected by the Rev. A. Christie, on serpentine rocks at Cabrach, Aberdeenshire. It differs from the commoner form of *Adiantum-nigrum* by its lamina being more divided, and the ultimate segments less approximate, and more or less bent away from the partial rachis. The frond also is dim, without the greasy lustre of the common form, or the satiny lustre of the form *acutum*. Milde says concerning it, that he has often found fronds passing into *A. Adiantum-nigrum* on the same rhizome with *A. Serpentinum*. The stipes is usually longer than the frond, often conspicuously so. The lamina is from 4 to 6 inches long in the specimens I have seen. Milde says the fronds do not last through the winter, but in answer to a query of mine on this point, Mr. Christie writes that the fronds are evergreen at Cabrach. Along with the true *Serpentini* there grows a form connecting it with ordinary *Adiantum-nigrum*.

Mr. Christie says that the stipes varies considerably in length. "In the specimens sent, those in which it is long were taken out of chinks in the rock, and therefore lengthened to bring the fronds towards the light; those in which the stipes is short were growing in an open situation."

The third subspecies admitted by Milde, "*Onopteris*," which contains the var. "*acutum*," is frequent in the Mediterranean region, Madeira, and the Canary Isles. I have not seen it in this country except from the south of Ireland, and Mr. T. Moore also has seen true examples of this variety only from Ireland, though it is closely approached by English forms, and also by one which Mr. Moore calls "*oxyphyllum*," gathered near Dunoon and near Stirling, but which I have not seen. I am indebted to Mr. J. F. Duthie for living plants of genuine *acutum* from the neighbourhood of Florence. It differs conspicuously from the ordinary *Adiantum-nigrum* in the texture of its fronds, which are not thick, cartilaginous and opaque, as in the common form, and have a satiny, not a greasy lustre; this apparently arises from the epidermal cells being narrower in *acutum* than in *A. Adiantum-nigrum*, at least this is the case with Mr. Duthie's plants, but unfortunately this character is in a great measure lost in dried specimens, which can be distinguished only by the longer stipes, the deltoid-ovate outline of the more divided frond with narrow and elongated ultimate segments. It appears to attain a larger size than the other forms. The largest Irish specimen I possess has a stipes 8 inches long, and a lamina of $5\frac{1}{2}$ by 3 inches at the broadest part; but a specimen from Naples has it $10\frac{1}{2}$ inches long by 7 inches broad, and Teneriffe specimens are quite as large. Mr. Moore has an Irish specimen with the lamina of the frond 9 inches long and 7 inches broad.

Mr. Kinahan, of the Geological Survey of Ireland, has supplied me with some notes on the Irish forms of *Adiantum-nigrum*. "In north-west Galway and south-west Mayo the *A. Adiantum-nigrum* seems to grow as follows. It is always associated with more or less calcareous rocks, which may be shales, limestones, dolomites, serpentines, and the other associated pseudomorphic rocks. In exposed sunny situations it is always diminutive (the obtusum of some authors). This variety is not, however, very common. The most usual form is like No. 1,* but the more shady the nook, and the more northern the aspect, the more acute the form. The typical form of *acutum* always grows in cliffs and caves facing the north and north-east. The general character of its stipes is long, as when the plant grows in a crevice the plant wants to get above the fissure, but it depends altogether upon the situation. The best fronds usually have a long stipes. I believe there is only one species that will change according to the place it grows in. *Acutum* does not

* Typical *Adiantum-nigrum*.—Ed.

necessarily grow in woods, but the most typical plants that I ever saw were in a cliff with a northern aspect, in the wood north of Lady Kinnear's cottage on the Lakes of Killarney. When I first saw it the trees had been cut away from it, having the cliff quite covered with such a marked variety of the fern that I firmly believed it must be a distinct species. Five or six years afterwards I visited the place, and found the trees amazingly grown, and that only in the still exposed places grew the *A. acutum*, while in the places shaded by the trees it was replaced by the normal form." It seems curious that increased shade should cause the *acutum* to pass into the normal form; I should have expected the reverse to happen.

A. Adiantum-nigrum can scarcely be confounded with any other British fern, except perhaps *A. lanceolatum*, from which it differs in its fronds being much thicker and firmer in texture, and with the lower pinnae much larger, so that the frond is triangular or even sub-deltoid rather than lanceolate. The sori are much longer and more remote from the margin of the pinnules and segments than in *A. lanceolatum*, and the scales at the base of the stipes are longer and more attenuated, generally with only a single longitudinal rib of thickened tissue towards the apex.

Black Spleenwort.

SPECIES IV.—**ASPLENIUM MARINUM.** *Linn.*

PLATE 1876.

Caudex short, tufted, divided into several scaly crowns; scales linear-lanceolate, entire, tapering into long setaceous points. Fronds several from each crown, spreading or pendent. Stipes rather slender but not wiry, from one quarter to as long as the lamina, purplish-brown, margined with green in the upper part, with a few scattered hair-like deciduous dark-brown scales. Lamina thick, coriaceous, glabrous, shining, evergreen, strapshaped or oblong-strapshaped or triangular-strapshaped, abrupt or tapering towards the base, and always tapering towards the apex, pinnate; lowest pair of pinnae smaller than or equalling the succeeding pair, very shortly stalked or sessile, decurrent, spreading or ascending-spreading, rhomboidal-ovate or rhomboidal-oblong or rhomboidal-strapshaped or trapezoidal-rhombic or strapshaped-triangular, entire and rectangular or inversely-deltoid or wedgeshaped at the base (which is usually unequal-sided), obtuse or acute, crenate or crenate-serrate or slightly lobed, more rarely serrate or incised; middle pinnae similar to the basal ones, and equalling them, but sometimes a little larger; all decurrent; terminal pinnae smaller and confluent. Rachis more or

less brown, at least towards the base, margined with narrow green wings, glabrous. Pinnæ with a flexuous mid-vein, giving off forked branches running into but not reaching the crenatures. Sori linear or strapshaped or oblong, mostly attached to the anterior fork of the venule, usually commencing at the margin, and not unfrequently extending nearly to the midrib, but variable in position with regard to both, rarely confluent. Indusium entire. Spores tuberculated, with numerous blunt rounded tubercles.

Var. *α. genuinum.*

Pinnæ rhomboidal-oblong or rhomboid-oval, obtuse.

Var. *β. acutum.* Moore.

Pinnæ oblong-triangular or strapshaped-triangular or linear-triangular, acute.

In the crevices of rocks and in caves, near the sea. Frequent in the south and west, from Sussex to Orkney and Shetland; rarer on the east coast, though occurring in a few stations from York northwards. Frequent in Ireland. Rare inland, though it has occurred near Warrington and Newton, Lancashire, and at the Lakes of Killarney, co. Kerry. Var. *β* occurs in Cornwall and Devonshire, and in the Channel Islands, along with the commoner form.

England, Scotland, Ireland. Perennial. Summer, Autumn.

Plant growing in dense tufts, which take their shape from the fissures of the rock on which it grows. Crowns thickly clothed with purplish-brown scales, in which there are many longitudinal thickened bars. Stipes varying much in length even in the fronds from the same tuft, thicker and more brittle than in the preceding species. Var. *α* has the stipes $2\frac{1}{2}$ to 5 inches long. Lamina $1\frac{1}{4}$ to 8 inches long, and $\frac{3}{4}$ to 2 inches broad; pinnæ usually close together, more developed at the base on the anterior than on the posterior side, and with the anterior portion of the base usually parallel with the rachis, thick and fleshy in texture, and deep glossy green in colour. Sori when long, generally with their ends equally near the margin and midrib, but when they are abbreviated they are sometimes near the midrib and sometimes near the margin, generally speaking they remain distinct, but occasionally, or in small specimens, they become confluent.

Var. *β* is a larger plant, with the pinnæ rounder and more pointed, the venules making a more acute angle with the mid-vein than in var. *α*. I have specimens from Plymouth Hoe with stipes 9 inches long, and the lamina about a foot long by 4 inches broad, and Mr. T. Moore

records specimens of *parallellum* (which is here included under var. β) "from Guernsey, gathered by Mons. Boistel, measuring 34 inches in length, of which 24 inches were occupied by about 30 pairs of pinnae, the largest being about $2\frac{1}{2}$ inches long and $\frac{3}{8}$ inch wide; larger specimens were produced on the same plant, which was growing in the same soil, but on a damp rock." Moore, Nat. Print. Brit. Ferns, 8vo ed. vol. ii. p. 93.

Although the extreme forms of vars. α and β are much unlike, they are so connected by intermediate forms, that they scarcely deserve to be separated even as varieties; the shape of the base of the pinnae, or the degree to which their margins are crenate, serrate, or lobed, are too variable to be sufficient to separate the various forms, as even in fronds on the same tuft they often vary to a considerable extent.

This cannot well be confounded with any other British Fern. The only one which looks at all like it is *Asplenium lanceolatum*, var. *microdon*, but from it *A. marinum* differs by its larger scales, thicker stipes, much more coriaceous or cartilaginous lamina, glabrous rachis, and elongated generally median sori. The fronds present sometimes a slight resemblance to those of *Polypodium vulgare*, but in that the pinnae are adnate to the rachis by their whole base, while in *A. marinum* not even the lower ones are connected by their whole base, and it is almost needless to remark that the difference in their generic characters will prevent their being mistaken the one for the other.

Sea Spleenwort.

SPECIES V.—**ASPENIUM VIRIDE.** *Huds.*

PLATE 1877.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 34.

Caudex rather elongated and creeping, divided into several sparsely scaly crowns or shortly creeping branches; scales linear-lanceolate, denticulate in the lower portion, tapering into short setaceous points, usually concolorous. Fronds several from each crown, spreading or ascending. Stipes slender, not wiry, from one-eighth to nearly half the length of the lamina, purplish-brown at the base, green above, with scattered hair-like deciduous brown scales. Lamina thin, flaccid, translucent, glabrous, dim, evergreen, linear or more rarely elliptical-linear, tapering slightly at the base and apex, pinnate; lowest pair of pinnae smaller than or equalling the succeeding pair, very shortly stalked or sessile, spreading, rhombic-ovate or ovate or rhombic-suborbicular or deltoid-ovate, entire and truncate or inversely deltoid at the base (which is commonly equal-sided), obtuse, crenate or inciso-crenate; middle pinnae similar to the

basal ones, and generally longer and narrower and more trapezoidal; terminal pinnæ smaller; all distinct, or two or three of them confluent with the terminal lobe of the frond, persistent and withering while attached to the rachis. Rachis green, furrowed above, not winged, with a few scale-like hairs, ultimately glabrous. Pinnæ with an indistinct flexuous mid-vein, giving off simple or once-forked branches running to the crenatures and nearly reaching the margin. Sori oblong, attached to the lower part of the ultimate veins, and extending below their forks, nearer the midrib than the margin of the pinnæ, ultimately confluent. Indusium finely denticulate or crenate, rarely entire. Spores tuberculated, with numerous subacute tubercles.

On rocks in mountainous districts, from South Wales and Derbyshire, north to Sutherland and Shetland, but apparently wanting in Orkney. Common in the hilly parts of the north of England and the Highlands of Scotland. It grows also on walls, at low elevations at Danny (Sussex), Mickleham (Surrey), Hambridge (Worcester), and Linnmill (Clackmannan), but there is always a possibility that it may have been planted in such localities. In Ireland it occurs along the west, from Kerry to Donegal.

England, Scotland, Ireland. Perennial. Summer, Autumn.

Caudex usually more elongated and creeping than in the other British *Asplenium*. Stipes from $\frac{1}{4}$ to 4 inches long or even more. Lamina from 1 inch long by $\frac{1}{4}$ inch broad to 5 inches long by $\frac{5}{8}$ inch broad, of a pale delicate green colour and thin texture, resembling that of *A. lanceolatum*. Pinnæ generally separated, but in small specimens they are often contiguous, variable in shape; in large specimens they are usually very broad, truncate at the base, and more or less ovate-rhombic, while in small specimens they are more often wedged-shaped at the base, and longer than broad, always distinctly crenate, and sometimes doubly crenate; occasionally they are deeply incised, but these appear to be monstrous forms; sometimes the base is most developed on the anterior side of the mid-vein of the pinnæ, so that the form is more or less trapezoidal. The sori are very short and close to the midrib of the pinnæ.

A. viride can be mistaken for no other British fern, except *A. Trichomanes*; the differences between these two are pointed out under the latter species.

Green Spleenwort.

SPECIES VI.—**ASPENIUM TRICHOMANES.** *Lim.*

PLATE 1878.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 25.

Caudex short, tufted, dividing into several scaly crowns; scales linear-lanceolate, entire, tapering into short setaceous points, usually with a dark central stripe. Fronds several from each crown, spreading or ascending. Stipes slender, wiry, usually very short, and hardly ever more than one-sixth the length of the lamina, purplish-brown throughout, with scattered hair-like deciduous brown scales. Lamina thick, coriaceous or subcoriaceous, opaque, glabrous above, but sometimes with a few deciduous gland-tipped hair-like scales beneath, dim, evergreen, linear or more rarely strapshaped-linear, tapering slightly towards the base and apex, pinnate; lowest pair of pinnæ smaller than the succeeding pair, sessile, spreading, suborbicular or deltoid-suborbicular, truncate or inversely-deltoid at the base, obtuse, repand or crenate or rarely incised; middle pinnæ longer than the basal ones, roundish-oval oval or oblong, rarely oblong-strapshaped, truncate or inversely deltoid or wedgeshaped at the base; terminal pinnæ smaller; all distinct or two or three of them confluent with the terminal lobe of the frond, deciduous and falling off from the rachis when mature. Rachis purplish-brown with a narrow brown wing on each side, and having notches in which the pinnæ are inserted, at first with a few hair-like scales, ultimately glabrous. Pinnæ with a flexuous mid-vein, giving off once-forked branches running to the crenatures and nearly reaching the margin. Sori oblong-linear, attached to the anterior branch of the venules beyond their forks and equidistant from the midrib and the margins of the pinnæ, often ultimately confluent. Indusium entire or repand, rarely crenulated. Spores muricated, with numerous small acute tubercles.

Var. *a. genuinum.*

Middle pinnæ roundish-oval or oval-oblong, mostly equal at the base, repand or crenate. Rachis rounded beneath.

Var. *β. anceps.* Soland.

Lowe, Primit. Fl. et Faun. Madeir. p. 8.

Middle pinnæ oblong or oblong-strapshaped, auriculate above, crenate-serrate. Rachis more prominent beneath than in var. *a.*

On rocks and walls rather frequent. Generally distributed, extending to Orkney. Frequent but rather local in Ireland. Var. β . Hedge-bank near Bowler Green, south-west Surrey, H. C. Watson; "Killarney," Bab. Man. Brit. Bot. ed. vii. p. 452.

England, Scotland, Ireland. Perennial. Summer, Autumn.

Plant growing in dense tufts. Fronds including the very short stipes, $1\frac{1}{2}$ to 1 foot long, by $\frac{1}{4}$ to $\frac{3}{4}$ inch broad. After the fall of the pinnæ, the stipes and bare rachis remain and in old plants each of the approximate crowns is surrounded by a guard of these leafless purplish-brown rachides.

Var. β . seems to pass insensibly into the ordinary form. Mr. T. Moore says of *A. anceps* that it has not, he believes, been found in Britain, but specimens from Mr. H. C. Watson, collected in Surrey, appear inseparable from the plant of the Atlantic islands; some of these specimens have fronds 10 inches long by $1\frac{1}{4}$ inch broad.

There are some very beautiful monstrosities of *A. Adiantum-nigrum*, of which the form called *incisum* by Moore is the most striking; in this the leaves are irregularly deeply pinnatifid, with the segments incised. It is, as Mr. Moore says, exactly analogous to the form *Cambricum* of *Polypodium vulgare*, and the fronds are said to be uniformly barren.

Crested forms in which the apex of the frond is spread out into a tassel are more common, and are said to be invariably produced from spores.

Asplenium Trichomanes is liable to be confounded with *A. viride*; but in that species the stipes is green at the apex, and the rachis wholly green and destitute of the raised brown wing down each side, the pinnæ are persistent and more evidently stalked, much thinner in texture and more translucent, so that the veins are readily seen when the plant is held up to the light, paler green, and usually more crenate, with the sori shorter and nearer the midrib. When *A. Trichomanes* becomes luxuriant the pinnæ are longer and narrower in proportion than in the smaller forms; while in *A. viride* they become broader and more rhombic or deltoid-rhombic.

Maidenhair Splenwort.

SPECIES VII.—ASPLENIUM CLERMONTÆ.

PLATE 1879.

A. Petrarc[h]æ, *Newm. Hist. Brit. Ferns*, ed. v. p. 146; non *DC.*

"Caudex small, tufted; the crown covered with dark-coloured, linear, sharp-pointed scales," Newman. Stipes slender, wiry, shorter than the frond, chestnut-brown below, green in the upper part, with

scattered hair-like brown scales. Lamina rather thick, subcoriaceous, opaque, glabrous, dim, evergreen, linear, abrupt at the base, tapering towards the apex, pinnate; lowest pair of pinnæ larger than the succeeding pair, shortly stalked, spreading, deltoid, three-lobed, lobes roundish-obovate, deeply crenate; middle pinnæ smaller than the basal ones, rhombic-ovate, inversely deltoid at the base, obtuse, crenate; terminal pinnæ smaller, oval-obovate, wedgeshaped at the base, obtuse, crenate or simply repand, several of them confluent with the terminal lobe of the frond, persistent. Rachis green, not winged, but with the stalk of the pinnæ very shortly decurrent, with a few hair-like gland-tipped scales. Lower pinnæ flabellately veined, with the veins forked; middle and upper pinnæ with a flexuous mid-vein giving off once-forked branches running to the crenatures, and nearly reaching the margin. Sori oblong-linear, attached to the anterior branch of the ultimate veins beyond their forks and equidistant from their base and the margins of the pinnæ, not confluent. Indusium denticulate.

Found by Lady Clermont, in 1863, growing on the back of a garden wall among *Asplenium Trichomanes* and *Asplenium Ruta-muraria*, at Ravensdale Park, Newry. Mr. Newman gives the station as "near Flurry Bridge," but I suppose the same place is intended.

Ireland (extinct). Perennial. Autumn.

Stipes about 1 inch long. Lamina 2 to $2\frac{1}{2}$ inches long by $\frac{1}{2}$ inch broad. Stalk of the pinnæ about $\frac{1}{20}$ inch long. Lowest pinnæ about $\frac{3}{8}$ inch long, and nearly as broad at the base, with three lobes, of which the central one is the largest, each lobe with a nearly equal vein, which gives off forking branches, but these do not form mid-veins to the three divisions of the pinna; in the undivided pinnæ, however, there is a flexuous mid-vein like that of *A. Trichomanes*. The spores are immature in the specimen which I have seen, which I received through the kindness of Lord Clermont; they appear to be similar to those of *A. Ruta-muraria*, that is tuberculate with rather large blunt tubercles.

Distinguished from *A. Trichomanes*, of which the authors of the 'Cybele Hibernica' "suspect it will prove to be a form," by its stipes being green at the top and the rachis without the prominent dark wing which runs down each side of the upper face. The pinnæ also are distinctly though shortly stalked, and the lower ones three-lobed. The venation has also more tendency to be flabellate, and the indusium is conspicuously denticulate.

From the continental *A. Petrarchæ*, to which Mr. Newman refers it, it differs in not having the stipes wiry, and purplish-black through-

out, the frond more tapering, the pinnæ persistent, the lower ones with longer stalks, more evidently three-lobed, and as large as or larger than the succeeding pair, the middle ones smaller and not pinnately-lobed; it also is not densely glandulose on the rachis, lamina, and indusium, and the latter is not entire but jagged at the edges, as in *A. Petrarchæ*, and the sori are longer and narrower.

From *A. Ruta-muraria* it differs in the frond being linear, only once pinnate, and in the pinnæ having much shorter stalks, with a more decided mid-vein, and the sori on the middle pinnæ diverge more from the median line of the pinnæ. The stipes, rachis, venation, sori, and indusia are, however, more like those of *A. Ruta-muraria* than of any other British *Asplenium*.

A. Clermontæ belongs to a group of forms intermediate between *A. Trichomanes* and other species of this genus, and which are generally believed to be hybrids. These have been found in very small quantity, often only single roots, where *A. Trichomanes* grows in company with those species between which and *A. Trichomanes* the forms to which I allude are intermediate. These are in the first place *A. adulterinum*, *Milde*, which has been found in Northern Bohemia and near Schönberg in Moravia; this is intermediate between *A. Trichomanes* and *A. viride*, and *Milde* considers it as certainly a hybrid.

The next is *A. dolosum*, *Milde*, of which a single caudex was found by *Milde* growing with *A. Trichomanes* and *A. Adiantum-nigrum* at Méran in the Southern Tyrol, and which he also believes to be a hybrid; I have not seen this form, but it evidently approaches *A. Clermontæ* very closely: it differs by having the stipes entirely and the rachis partly blackish, the pinnæ more deeply divided and with acute teeth, and the indusium quite entire.

The third form is *A. Heuffleri*, *Reichardt*, which was found growing with *A. Trichomanes* and *A. Germanicum* between Vilpian and Mölten, in the Southern Tyrol, and at Eichorn, Moravia: this is quite intermediate between the two species with which it grows, and is considered by *Milde* to be a hybrid.

I have scarcely any doubt that *A. Clermontæ* is a hybrid between *A. Trichomanes* and *A. Ruta-muraria*, between which it is quite intermediate, and it ought to be looked for in other places where these two species grow together. The plant has been eradicated at Ravensdale Park, but it is quite possible it may survive in some fern-grower's collection. I have followed the example of *Milde* in giving a distinct name to this form.

It is but an inference that ferns do produce hybrids, as it has never been actually proved by experiment, but every new intermediate form which exists in extremely small quantity and is found in circumstances where the supposed parents grow together adds to the probability of hybridization in ferns. *A. Clermontæ* has a peculiar interest, as so many of the supposed hybrids cluster round *A. Trichomanes*.

Lady Clermont's Spleenwort.

SPECIES VIII.—**ASPLENIUM RUTA-MURARIA.** *Lim.*

PLATE 1880.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 37.*A. murale, Bernh.* *Gray's Nat. Arr. Brit. Pl.* Vol. II. p. 14.*Tarachia Ruta-muraria, Presl, Epim. Bot.* p. 81.*Amesium Ruta-muraria, Newm. Hist. Brit. Ferns,* ed. ii. p. 10, and ed. iii. p. 254; and *Phytol.* 1851, App. viii.*Scolopendrium Ruta-muraria, Roth, Fl. Germ.* Vol. III. p. 52.

Caudex short, divided into several closely-packed scaly crowns; scales linear-subulate, very acute. Fronds several from each crown, ascending or spreading or pendent. Stipes wiry, from as long as to twice as long as the lamina, purplish-brown for a very short distance from the base, green in the upper part, channelled above, with a few very narrow deciduous brown scales, and numerous very minute globose deciduous glands. Lamina thick, coriaceous or subcoriaceous, opaque, glabrous, shining, evergreen, triangular-ovate deltoid-ovate or triangular-lanceolate, rarely triangular-strapshaped, bipinnate or subtripinnate, or rarely simply pinnate, in the latter case the lower segments more or less deeply cut; lowest pinnae larger and more divided than the succeeding ones, conspicuously stalked, ascending or spreading-ascending, pinnate or trifoliate or trifid; middle pinnae similar to the basal ones, but smaller and more shortly stalked and less divided; all of them alternate; pinnules or ultimate segments obovate or rhombic oblanceolate, or rhombic-oblong or oblanceolate-strapshaped, inversely deltoid or wedgeshaped and entire at the base, obtuse or rounded, rarely acute, crenate or inciso-crenate or crenate-serrate at the apex. Rachis green, not winged. Ultimate segments flabellately veined, without a distinct mid-vein. Sori oblong or linear-oblong, usually diverging, situated about the middle of the pinnae and not reaching its margin, ultimately confluent. Indusium dentate or fimbriate. Spores tuberculated, with rather large blunt tubercles.

Var. *a. genuinum.*

Lamina bipinnate, rarely only pinnate; ultimate segments obovate or rhombic.

Var. *β. elatum.* 'Lang,' Moore.

Frond bipinnate or almost tripinnate; ultimate segments oblanceolate or rhombic-oblong, narrowly wedgeshaped at the base, obtuse, more rarely truncate at the apex. Stipes longer and whole plant taller than in var. *a.*

Var. γ . *pseudo-Germanicum*. "Heufler," Milde.

A. *Ruta-muraria*, var. *cuneatum*, *Moore*, Nat. Print. Brit. Ferns, 8vo. ed. Vol. II. p. 124.
Non A. *cuneatum*, *Lamarck*.

Fronde bipinnate or scarcely more than pinnate, narrow; ultimate segments long, oblanceolate-strapshaped, very narrowly wedgeshaped at the base, truncate and toothed at the apex. Stipes usually longer in proportion to the lamina than in var. α .

On rocks and walls, common and generally distributed, extending to Orkney. Frequent throughout Ireland. Var. β , Derbyshire, Cumberland, and the south and west of Ireland, and probably elsewhere. Var. γ Pass of Llanberis, Carnarvon; and near Bristol. Stenton Rock, near Dunkeld, Perth. Var. *cristatum* seems to be a monstrous form of this, found near Tunbridge Wells (Kent); and Ruthin Castle (Denbighshire).

England, Scotland, Ireland. Perennial. Summer, Autumn.

Plant growing in very dense tufts. The stipes is very variable in length in proportion to the lamina, even in fronds from the same tuft. The scales are strongly clathrate, with the network very thick. The lamina is $\frac{3}{4}$ inch to $2\frac{1}{2}$ inches by $\frac{1}{2}$ to $1\frac{1}{2}$ inch broad. The ultimate segments vary from $\frac{1}{8}$ to $\frac{1}{2}$ inch long in vars. α and β , but in var. γ they are $\frac{3}{4}$ inch long or even more.

In young plants the first fronds are entire and somewhat resemble one of the segments of the barren frond of *Botrychium Lunaria*: they are much thinner in texture than in the mature plant. These fronds are succeeded by trifoliate ones.

Dwarf forms are sometimes trifoliate or pinnate.

Var. γ is frequently little more than pinnate with the long ultimate segments connected at the base. It has sometimes been mistaken for A. *Germanicum*, which see.

Wall Rue.

SPECIES IX.—**ASPLENIUM GERMANICUM.** *Weiss.*

PLATE 1881.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 88.

A. *alternifolium*, *Wulf.* Sm. Eng. Bot. ed. i. No. 2258; and Eng. Fl. Vol. IV. p. 309.

A. *Breyonii*, *Retz.* *Fries*, Summ. Veg. Scand. p. 82. *Koch*, Syn. Fl. Germ. et Helv. ed. ii. p. 983. *Gren. & Godr.* Fl. de France, Vol. III. p. 637.

Tarachia Germanica, *Presl*, Epim. Bot. p. 79.

Amesium *Germanicum*, *Newm.* Hist. Brit. Ferns, ed. ii. p. 10, and ed. iii. p. 258; and *Phytol.* 1851, App. p. vii.

Scolopendrium alternifolium, *Roth*, Fl. Germ. Vol. III. p. 53.

Caudex short, divided into several closely packed scaly crowns;

scales linear-subulate, very acute, with stalked glands. Fronds several from each crown, ascending. Stipes wiry, from as long as to twice as long as the lamina, purplish-brown for about half its length from the base, green in the upper half, channelled above, with a few very narrow deciduous brown scales, but no glands. Lamina rather thick, subcoriaceous, nearly opaque, glabrous, dim, evergreen, triangular-strapshaped or triangular-linear, pinnate; lowest pinnæ larger than the succeeding ones, rather shortly stalked, ascending, trifid or incised; middle pinnæ smaller and more shortly stalked than the basal ones, incised or undivided, curving inwards towards the rachis, narrowly wedgeshaped and entire at the base, oblanceolate or strapshaped-oblanceolate at the apex only; uppermost pinnæ sessile, linear, entire or with one or two teeth at the tip, a few of the uppermost ones confluent with the terminal lobe of the frond. Rachis green, not winged. Pinnæ or ultimate segments flabellately veined, without a distinct mid-vein. Sori linear-oblong or linear, situated about the middle of the pinnæ, ultimately confluent. Indusium quite entire. Spores tuberculated, with rather large blunt tubercles.

On rocks. Local and very rare. Between Llanrwst and Capel Curig and Bwlch-y-Rhyn, Denbigh, and Moel Lechog, Carnarvon; Helvellyn and Borrowdale, Cumberland; Kylloe Crags, Northumberland. On the Tweed two miles from Kelso, and on Minto Crags, Roxburghshire; three miles from Dunfermline, Fife (now extinct according to Mr. C. Howie); Stenton Rock near Dunkeld, Perth. Reported also from Culborne, Somerset; from Arthur's Seat and Blackford Hill, Edinburgh; from near Perth, and from almost inaccessible rocks near Airlie Castle, Forfarshire.

England, Scotland. Perennial. Summer, Autumn.

Fronds 1 to 5 inches high, of which the stipes is generally the greater part. Lowest pinnæ $\frac{1}{8}$ to $\frac{1}{2}$ inch in length. *A. Germanicum* is liable to be confounded with elongated forms of *A. Ruta-muraria*, but the stipes is without glands, more wiry, and a much greater part of it is darker-coloured and very persistent, so that tufts of old plants remind one of those of *A. Trichomanes*. The frond is thinner, of a paler green; the pinnæ less divided, more shortly stalked, more incurved, shorter and more deeply crenate or serrate at the apex; the sori are longer, with the indusium quite entire; the spores are considerably smaller and with fewer tubercles than in any form of *A. Ruta-muraria*.

Bory considers this species a hybrid between *A. Ruta-muraria* and *A. septentrionale*, and Ascherson a hybrid between *A. septentrionale*

and *A. Trichomanes*; Hüter, a hybrid between *A. Ruta-muraria* and *A. Trichomanes*; but there seems no ground for regarding the plant as anything but a true species. Although scarce in Britain, it is not so on the continent, and is found over the whole of Europe. According to Milde, it is common in Silesia and the Tyrol, and he has seen it in many places, not in company with *A. septentrionale* or *A. Trichomanes* or *A. Ruta-muraria*.

Alternate-leaved Splenwort.

SPECIES X.—**ASPLENIUM SEPTENTRIONALE.** *Hull.*

PLATE 1882.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 61.

Acrostichum septentrionale, *Linn.* Spec. Plant. 1524.

Acropteris septentrionalis, *Link.* *Rabenh.* l. c. No. 61.

Amesium septentrionale, *Newm.* Hist. Brit. Ferns, ed. ii. p. 10, and ed. iii. p. 265; and

Phyt. 1851, App. p. vii.

Scolopendrium septentrionale, *Roth*, Fl. Germ. Vol. III. p. 49.

Caudex short, divided into several closely packed scaly crowns; scales subulate, acute, entire or with stalked glands. Fronds several from each crown, ascending. Stipes wiry, longer than the lamina, generally twice or thrice and sometimes four times as long, purplish-brown for about $\frac{1}{4}$ of its length from the base, green in the upper half, channelled above, clothed with numerous cylindrical unicellular hairs, especially towards the base. Lamina very thick, coriaceous, opaque, dim, evergreen, wedgeshaped and once or twice forked or lacinate, or linear and undivided; segments linear or strapshaped-linear, tapering towards the base and apex, very narrowly wedgeshaped at the base, and very acute at the apex, entire or with one or two narrow ascending secondary segments, and usually with one or two long teeth at the apex. Rachis green, not winged. Segments and secondary segments without any mid-vein; veins few, forked, parallel. Sori linear, parallel, nearly covering the lower surface of the segments, ultimately confluent. Indusium quite entire. Spores tuberculated, with rather small subacute tubercles.

On rocks and walls. Rare and local. Between Chudleigh and Dartmoor, South Devon, Rev. W. M. Rogers; North Devon, Rev. W. S. Hore; Porlock, Somerset, Miss Edmunds; several places in North Wales and the lake district; Ingleborough, Yorkshire; Kylloe Craigs, Northumberland. Minto Craigs, Roxburgh; Arthur's Seat and Blackford Hill, Edinburgh; Stenton Rock, near Dunkeld, Perth;

Pass of Ballater; near Inver, Aberdeenshire, on granite, though in Scotland it is elsewhere found on trap rocks facing the south.

England, Scotland. Perennial. Summer, Autumn.

Fronds (including the stipes) 2 to 7 inches high; segments from $\frac{1}{2}$ to 1 inch long by $\frac{1}{10}$ to $\frac{2}{5}$ long, tapering so insensibly downwards that it is difficult to say where the lamina ends and the stalk begins. In large examples the fronds divide into two stalked portions making an acute angle with each other, and these again divide in a similar manner; but in small specimens they fork only once, and occasionally do not fork at all.

Forked Spleenwort.

GENUS XIV.—**CETERACH.** Willd.

Fronds produced from the apex of the caudex, tufted, subcoriaceous, pinnatifid, densely clothed beneath with imbricated ovate subcordate scales, which are at first silvery, afterwards pale reddish-brown. Stipes not articulated to the caudex, containing 2 vascular bundles which unite upwards and give a 4-lobed section in the centre of the stipes. Veins forked, the ultimate ones more or less anastomosing. Scales clathrate, composed of short cells, with thickened boundaries. Sori linear, attached along the side of the veins. Indusium absent, or rudimentary and attached along the vein.

Name from Chetherak, a name applied to some fern used by the Arabian and Persian physicians.

SPECIES I.—**CETERACH OFFICINARUM.**

PLATE 1883.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 12.

Asplenium Ceterach, *Linn.* Sp. Pl. 1538. *Hook. & Bak.* Syn. Fil. ed. ii. p. 245. *Hook. fil.* Stud. Fl. ed. ii. p. 493.

Grammites Ceterach, *Schwartz.* *Koch*, Syn. Fl. Germ. et Helv. ed. ii. p. 974.

Scolopendrium Ceterach, *Symons.* *Smith*, Eng. Bot. ed. i. No. 1244; and Eng. Fl. Vol. IV. p. 315.

Gymnogramme Ceterach, *Spreng.* *Ledebour*, Fl. Ross. Vol. IV. p. 507.

Notolepium Ceterach, *Newm.* Hist. Brit. Ferns, ed. ii. p. 9, and ed. iii. p. 278; and *Phytol.* 1851, App. p. v.

Caudex short, dividing into several closely packed crowns. Fronds numerous from each crown, spreading. Stipes short, from $\frac{1}{6}$ to $\frac{1}{4}$ the length of the lamina, rarely more than half the length of the lamina, thickly clothed with lanceolate or ovate acuminate scales at

first silvery tinged with brown, afterwards wholly brown. Lamina coriaceous, evergreen, glabrous above except for a few scattered hairs on the rachis, densely clothed beneath with imbricated broadly lanceolate scales which are at first silvery and afterwards pale rusty brown, strapshaped, tapering towards the base and apex, pinnate or very deeply pinnatifid; pinnæ adnate by the whole of their broad base, broadly ovate-oval or ovate-oblong, entire or crenate. Venules anastomosing towards the margins of the pinnæ. Sori oblong, attached to the venules above their first fork. Indusium rudimentary, represented only by an elevated ridge extending the length of the sorus. Sori muricated, with numerous rather large acute tubercles.

Var. *a. genuina*.

Pinnæ broadly ovate-oval, entire or nearly so.

Var. *β. crenatum*. Milde.

Pinnæ oval-oblong, coarsely crenate; plant usually considerably larger than in var. *a*.

On walls and rocks, local but widely distributed over England. Most frequent in the south-west and west of England. Scarce in the midland counties and rare in the eastern. Very scarce in Scotland, though it extends north to the counties of Argyle and Perth. Frequent but local in Ireland, and most abundant towards the west. Var. *β* rare. I have wild specimens only from Ingleborough, but it is reported from many stations, particularly in the west of Ireland.

England, Scotland, Ireland. Perennial. Summer, Autumn.

Fronds including the stipes from $1\frac{1}{2}$ to 6 inches long by $\frac{3}{8}$ to $\frac{3}{4}$ broad, deep rich green with a slightly glaucous tinge, not shining. The pinnæ more or less connected at the base, at least towards the apex of the frond. Scales dentate at the margin, thin, distinctly clathrate, their network with large meshes. Sori at first hidden beneath the scales which clothe the under surface of the frond, but ultimately appearing conspicuously through them.

Var. *β* is a considerably larger plant, sometimes 8 or 9 inches long by $1\frac{3}{4}$ to 2 inches broad, with the pinnæ longer and crenate or lobate-crenate at the margins, indeed it approaches somewhat in size to *C. aureum*, found in the Canary Isles and Madeira, but this has the rachis at first densely scaly above as well as beneath, the indusium more developed, and the spaces of the network of the scales marked with striæ; the pinnæ, moreover, are entirely repand, not lobate-crenate.

Common Scale-fern.

GENUS XV.—SCOLOPENDRIUM. *Smith.*

Fronds produced from the apex of the caudex, tufted, subcoriaceous, simple entire or lobed. Stipes not articulated to the caudex. Veins forked, free. Scales clathrate, composed of oblong cells with thickened boundaries as in all the true *Asplenium*. Sori linear, attached along the side of the veins, approximated in pairs, the anteriorly placed sorus of one vein being so close to the posterior sorus of the next vein above it, that the two appear to form but a single sorus. Indusium linear, attached along the vein, and from their approximation each pair resembles a single indusium, opening down the middle of the compound sorus.

Name from *Scolopendra*, a centipede, the sori being supposed to resemble the legs of the animal.

SPECIES I.—SCOLOPENDRIUM VULGARE. *Symons.*

PLATE 1884.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 31.

S. officinarum, Swartz. Fries, Summ. Veg. Scand. p. 83. Koch, Syn. Fl. Germ. et Helv. ed. ii. p. 984. Rabenh. l. c. No. 31.

S. officinale, DC. Willk. & Lange, Prod. Fl. Hisp. Vol. I. p. 5.

S. Phyllitis, Roth, Fl. Germ. Vol. III. p. 47.

Phyllitis Scolopendrium, Newm. Hist. Brit. Ferns, ed. ii. p. 10, and ed. iii. p. 272; and Phytol. 1851, App. vi.

Asplenium Scolopendrium, Linn. Spec. Plant. No. 1537.

Caudex thick, dividing into numerous crowns. Fronds several from each crown, ascending, arching backwards or pendulous when large. Stipes short, $\frac{1}{8}$ to $\frac{1}{2}$ the length of the lamina, purplish-brown, clothed with partially deciduous scales; scales at the very base of the stipes broadly lanceolate acute or acuminate, those higher up much smaller and narrower, glandulose ciliate at the base, with long hair-like points; upper ones and those on the rachis longer and still more resembling woolly hairs; all of them at first silvery white, ultimately rust-coloured. Lamina coriaceous, evergreen, shining and glabrous above, paler and with hair-like mostly deciduous scales beneath, strapshaped or elliptical-strapshaped or oblong-strapshaped, tapering slightly to the base, which is cordate or rarely sagittate, tapering towards the apex, which is acute or acuminate, entire or repand, rarely crenate-lobed. Veins forking, a few of them sometimes anastomosing. Rachis more or less purplish-brown in the lower portion beneath, with scattered hair-like scales beneath. Sori

linear, usually equidistant from the midrib and the margin of the frond; the two portions of the compound sorus wholly coalescent. Spores muricated, with numerous prominent acute tubercles.

On rocks and hedgebanks, and in woods, frequent and generally distributed in lowland districts, more rare in Scotland, but extending to Orkney and Shetland. Frequent in Ireland.

England, Scotland, Ireland. Perennial. Summer, Autumn.

Very variable in size and in the length of the lamina, generally speaking the larger the lamina the longer in proportion is the stipes. Of the lamina I have specimens from 4 inches long by $\frac{1}{2}$ inch wide; 10 inches long by 3 inches wide; 17 inches long by $3\frac{1}{2}$ inches wide; and 2 feet long by $2\frac{1}{2}$ inches wide. These dimensions will show that there is a great want of regularity in the length and breadth of the fronds. Frequently the fronds are more or less undulated and sometimes crisped at the margins, but the latter seldom occurs without the sori being more or less abnormal, often short, sometimes few in number or even absent altogether.

This is one of the Ferns which are the special delight of fern-growers, from the number of remarkable monstrosities which occur. Sometimes the stipes is branched, sometimes the frond is divided into two or more divisions towards the base, but more frequently it is multifid at the apex; sometimes it is deeply lobed along the margin, with the lobes deeply crenate or incised; sometimes it is extremely short and almost reniform; sometimes there are a number of short reniform divisions; sometimes the sori are abbreviated near the margins; sometimes they are quite marginal, or even appear on the upper surface. Many of these monstrous forms can be reproduced from spores, and sometimes it is said that when part of the frond is normal and part abnormal, the spores on the normal part produce normal plants and *vice versâ*.

Hart's-tongue Fern.

TRIBE V.—BLECHNEÆ.

Caudex not growing in advance of the fronds, the stipes of which is not articulated to the caudex and does not separate from it. Sori medial, oblong or linear, straight or flexuous, continuous or more rarely separate, attached to the side of a vein which is parallel to the midrib and margin of the frond or segment, which is flat, or with its margins reflexed over the sori. Indusium attached longitudinally to the veins, or absent.

GENUS XVI.—**LOMARIA**. Willd.

Fronde produced from the apex of the caudex, which is frequently elongated and woody, tufted, rarely solitary, dimorphous, the female or fertile ones contracted. Stipes not articulated to the caudex, veins of the sterile frond forked, free, those of the fertile frond anastomosing so as to form a continuous flexuous vein on each side of the midrib, and parallel to the margin of the segment. Sori linear, continuous, attached to the inner side of the above-mentioned vein, concealed by the reflexed margin of the frond. Indusium attached along the vein which bears the sori, opening towards the midrib.

Name from *λωμα* (*loma*), a margin or border, from the reflexed margin of the frond.

SPECIES I.—**LOMARIA SPICANT**. Desvaux.

PLATE 1885.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 91.

L. borealis, *Link*, Hort. Berol. Vol. II. p. 80.

Blechnum Spicant, *Roth*. *Moore*, Nat. Print. Brit. Ferns, 8vo. ed. Vol. II. p. 211.

Newm. Hist. Brit. Ferns, ed. iii. p. 17. *Fries*, Summ. Veg. Scand. p. 83. *Koch*,

Syn. Fl. Germ. et Helv. ed. ii. p. 984. *Gren. & Godr.* Fl. Fr. Vol. III. p. 639.

Rabenh. l. c. No. 91.

B. boreale, *Swartz.* *Sm.* Eng. Bot. ed. i. No. 1159; Eng. Fl. Vol. IV. p. 316. *Bab.*

Man. Brit. Bot. ed. vii. p. 453.

Osmunda Spicant, *Linn.* Spec. Plant. No. 1522.

Caudex short, thick, divided into numerous short branches or scaly crowns; scales subulate, acuminate into long slender points, dentate. Fronds of two kinds, many produced from each crown. Barren fronds spreading. Stipes short, one-twelfth to one-third the length of the lamina, with numerous scales at the base, and a few narrower deciduous ones above, purplish-brown. Lamina strapshaped, attenuated towards the base and apex or elliptical-linear, dark green above, paler beneath, coriaceous, glabrous, evergreen, pinnatipartite; segments strapshaped or linear, falcate, contiguous, adherent by their whole base, obtuse and apiculate, each with a midrib giving off veins which are once-forked and do not anastomose. Rachis green and channelled above, brown in the lower portion beneath. Fertile fronds longer than the barren ones from the same caudex, erect, with a stipes from one-third the length of to as long as the lamina. Lamina strapshaped, attenuated towards the base and apex, coriaceous, perishing in autumn, pectinate-pinnate or pectinate-pinnatipartite: segments distant, linear, contracted, with dilated bases adnate to the rachis,

acute, with the margins revolute, each with a central mid-vein, which gives off venules which anastomose so as to form a flexuose vein on each side of the mid-vein and parallel to it, between which and the margins of the segments the venules are free. Rachis purplish-brown. Sori linear, attached to the longitudinal vein formed by the anastomoses of the venules, covering the whole under surface of the segments except the apex. Indusium linear, continuous. Spores faintly tuberculate, with a few small blunt tubercles.

On heaths, hedgebanks, and woods, common and generally distributed, except in chalky or limestone districts.

England, Scotland, Ireland. Perennial. Autumn.

Barren fronds, including the stipes, 6 inches to 2 feet long, but most commonly 12 to 15 inches by 1 to 2 inches broad or more; fertile fronds 1 to 3 feet high rising from the centre of the spreading sterile fronds. Like *Scolopendrium vulgare*, the present species produces numerous monstrous forms much prized by fern-growers. Most of these variations take place in the barren frond, although in some cases the fertile frond is also divided.

Hurd Fern.

TRIBE VI.—PTERIDÆ.

Rootstock velvety, extensively creeping, growing in advance of the fronds, the stipes of which is not articulated to the rootstock and does not separate from it. Sori marginal, linear, straight, continuous, attached to a vein which is parallel to the midrib and margin of the frond or segment, which is reflexed over the sorus, and has the margins cut into capillary segments, forming an accessory indusium; true indusium attached to the vein within the sorus, membranous, fringed.

GENUS XVII.—PTERIS. *Linn.*

Rhizome velvety, growing in advance of the fronds. Fronds solitary, decomposed, their stipes not articulated to the rootstock and not separating from it. Veins not anastomosing, but having their apices connected by a marginal vein. Sori marginal, linear, straight, continuous, attached to a vein which is parallel to the reflexed margin, lying between two membranes of which the inner one is the smaller and sometimes absent, though it is probable that it represents the

true indusium, while the outer seems to be a prolongation of the epidermis of the margin of the frond.

The above description is applicable only to the genus *Paesia* of St. Hilaire, which appears to be the oldest name for the group containing the Brake-fern, which is almost cosmopolitan, and surely better deserves to retain the name of *Pteris* than any of the others which have been left in the genus by those who have broken it up: even those authors who include the Brake-fern in the genus *Pteris* admit that in habit of growth and indusium it differs not only from the genus, but also from the group *Pterideæ*. I have therefore retained the name *Pteris*, thinking that it is rather the less familiar species which do not agree with it that should be removed.

Name from *πτέρις* (*ptēris*), a Fern.

SPECIES I.—**PTERIS AQUILINA.** *Lim.*

PLATE 1886.

Rabenh. Crypt. Vasc. Exsicc. No. 122.

Paesia aquilina, *Moore*, Gard. Chron. 1858, p. 878.

Ornithopteris aquilina, *John Smith*, Hist. Fil. p. 298.

Eupteris aquilina, *Newm.* Phytol. 1845, 277, and 1851, App. iii.; Hist. Brit. Ferns, ed. iii. p. 23.

Allosorus aquilinus, *Presl*, Tent. Pterid. p. 153.

Rootstock buried, creeping, clothed with very short brown tomentum; its apex growing in advance of the fronds. Fronds solitary, distant. Stipes elongate, often as long as or longer than the lamina, dark and tomentose below ground like the caudex, green or straw-coloured and channelled above ground, at first with hair-like scales, ultimately glabrous. Lamina coriaceous, perishing in autumn, light green and generally glabrous above, more or less densely pubescent beneath, bending backwards from the erect stipes, deltoid-ovate or triangular-ovate, tripinnate or bipinnate; ultimate pinnae triangular-strapshaped, entire or crenate or pinnatifid. Indusium double, ciliated at the margin, the inner one sometimes wanting.

In heaths and woods, very common, and generally distributed.

England, Scotland, Ireland. Perennial. Summer, Autumn.

Rootstock extensively creeping, as thick as the little finger. Fronds variable in size, sometimes not more than a foot high including the stipes, but commonly 3 or 4 feet, and not unfrequently 6 or 7; according to Mr. Moore, they reach 10 or 12 feet or even more in some cases. The smaller the frond, the more deltoid and less

divided is the lamina. In the thick stipes the vascular bundle is very conspicuous, and has been fancied to represent a spread eagle; whence the name 'aquilina.' Others have seen in it a resemblance to an oak-tree, and the section is spoken of as 'King Charles in the oak.'

Mr. Francis Darwin has observed glands secreting nectar at the base of the branches of the rachis; these glands cease to secrete when the frond is mature (Journ. Linn. Soc., vol. ii. p. 407).

Mr. Moore distinguishes a variety *integerrima*, in which the secondary pinnules instead of being deeply pinnatifid are nearly entire, but this seems to be the effect of growing in poor soil.

Seedling plants have the frond much thinner in texture, and the ultimate pinnules roundish-ovate and crenate; and the same form of the plant has been found on walls.

Pt. aquilina is remarkable for the rudimentary state of the lamina when the fronds first emerge from the ground, but the after development is very rapid.

Bracken or Brake-Fern or Common Brakes.

TRIBE VII.—ADIANTEÆ.

Caudex not growing in advance of the fronds, the stipes of which is not articulated to the caudex and does not separate from it. Sori punctiform or transversely oblong, on the apex of the veins upon a portion of the frond which is bent over, forming a false indusium, with the sori on the inner surface, but there is no true indusium.

GENUS XVIII.—ADIANTUM. *Linn.*

Fronds produced near the apex of the rootstock, approximate or distant, coriaceous or herbaceous, simple pinnate or decomposed; ultimate pinnules or segments commonly without a midrib or with a very eccentric one. Veins forked, free. Sporangia attached to the extremity of the veins on the reflexed flaps of the margins of the frond, which form false indusia.

Name from *ἀδίατρον* (*adianton*), a plant called Maidenhair.

SPECIES I.—ADIANTUM CAPILLUS - VENERIS. *Linn.*

PLATE 1887.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 11.

Rootstock creeping, rather slender, densely scaly; scales yellowish, subulate, acuminate into slender points. Fronds subsolitary. Stipes

usually about as long as the lamina, slender, wiry, purplish-black, furnished at the base with a tuft of very narrowly-linear scales acuminate into slender points. Lamina submembranous, translucent, pea-green, dim, glabrous, rhombic-ovate or rhombic-lanceolate or triangular-ovate or oblong, bipinnate or tripinnate, at least below; ultimate pinnules shortly-stalked, obovate or reniform or oblanceolate or lunate, inversely deltoid or wedgeshaped or subtruncate at the base, more or less deeply inciso-crenate or palmatifid. Sori transversely oblong or transversely strapshaped, more or less curved, with the convexity of the curve pointing towards the base of the pinnæ. General and partial rachides capillary, purplish-black.

On the faces of cliffs, on limestone rocks, and in caves, usually near the sea, and high, ascending to a height of 800 feet or more in the south-west of Ireland. Rare and very local. Near St. Ives, Penzance, and other places in Cornwall; in several places about Ilfracombe; Torquay, Mr. W. A. Hayne; and near Berry Head, Devon; "Dorsetshire, Miss Payne," Wats.; Coombe Down, near Bath, Mr. E. J. Low; Dunraven, and Barry Island, and East Aberthaw, Glamorgan, said to have occurred near Stonehaven, Kincardineshire, but doubtless this is an error; also in Arran, from confounding Clyde and Galway Islands. Glenmeay, Isle of Man. In the west of Ireland in several places, between Tralee and Dingle, co. Kerry; several places in co. Clare, Isle of Arran, Galway, and perhaps further northward in the west of Ireland.

England, Ireland. Perennial. Summer, Autumn.

Rootstock from the thickness of a crow-quill to that of a goose-quill. Fronds variable in size, erect when small, drooping when large. The smallest British specimens I have are from Ilfracombe, in which the stipes is $\frac{3}{4}$ inch long, the lamina 1 inch by $\frac{1}{2}$ inch broad, and the pinnules about $\frac{1}{4}$ inch each way. Glamorganshire specimens have a stipes 1 to 3 inches long, and a lamina from 2 by $\frac{3}{4}$ inch to 6 inches by 2 inches; while specimens from the Isle of Arran, Galway, sent me by Dr. Perceval Wright, have the stipes as much as 9 inches long, and a lamina 6 inches by 4 inches, and pinnules $\frac{1}{2}$ to $\frac{3}{4}$ long by $\frac{3}{4}$ broad. The pinnules are covered with a waxy bloom from which water rolls off in drops without wetting the surface—hence the name of the genus.

There is a good deal of variation both in the shape and in the degree of incision of the pinnules; but they vary to a considerable extent, even on fronds from the same caudex.

Maidenhair.

EXCLUDED SPECIES.

ASPLENIUM REFRACTUM. *Moore.*

A. fontanum, var. *Milde*, *Fil. Europ.* p. 70.

A. ebeneum, *Ait.* Var. *refractum*, *Lowe*, *Our Native Ferns*, Vol. II. p. 169.

“Fronds linear, subbipinnate. Pinnæ short, oblong, obtuse, refracted, pinnate at the base, pinnatifid above. Pinnules (the lowest anterior one only distinct, the rest more or less confluent) roundish, with a few coarse angular mucronate teeth, the upper two four-toothed, the lower ones overlapping. Sori short, oblong-oblique, in a line on each side near the costa of the pinnæ. Rachis chestnut-coloured, marginate above, not winged, bulbil-bearing.” *Moore*, ‘*Nat. Print Brit. Ferns*,’ 8vo. ed. vol. ii. p. 66.

This plant is known only in cultivation. First seen in 1851 by Mr. T. Moore, from the gardens at Peper-Harrow Park, Surrey. Afterwards exhibited by Mr. Parker, nurseryman, Hornsey.

“These plants being reported by Mr. Williams, then of Hoddesdon, to have been received by him a few years previously as *A. viride*, from a gardener whose friend, named Filden, who it appears died soon after the occurrence, had found them in Scotland and sent three roots.”—*Moore*.

Judging from Mr. Moore’s description and the figure in *Lowe’s* ‘*Native Ferns*,’ vol. ii. pl. xlii., I believe this to be a distinct species, but the evidence that it occurred in Scotland is far too slight to entitle it to a place in the ‘*British Flora*.’

LOMARIA ALPINA. *Spreng.*

A plant of the temperate parts of the Southern Hemisphere, which was reported to have been found by a lady “in the crevices of an old stone wall, by the side of a mountain torrent, not far from Loch Tay, Perthshire, Scotland, June, 1856.” Mr. G. B. Wollaston, in ‘*Phytologist*,’ series ii. 1859, p. 157. Doubtless an error.

ONOCLEA SENSIBILIS. *Linn.*

A North American plant, which has escaped from cultivation or been planted in a few localities. Seen by Mr. H. Baines “in a lane at Moreby, near York, now extinct?” *Suppl. Fl. Yorksh.* p. 144, and *Phytol.* vol. i. p. 453. Also naturalised near Warrington, Lancashire; Mr. Borrer writes concerning it, “*Onoclea sensibilis* was thriving

over a considerable space of boggy ground, planted as a nursery with young poplars. He (Mr. Wilson) told me that a botanical garden formerly existed there." Phytol. 1846, vol. ii. p. 432. Mr. Samuel Gilson, in 1843, speaks of it as growing "in an old stone quarry near Warrington." This fern was found "in the above locality by John Roby, Esq., of Rochdale." Phytol. vol. i. p. 492.

ORDER XCV.—**EQUISETACEÆ.**

Perennial herbs with subterraneous creeping rhizomes. Stems cylindrical, jointed, hollow, usually with verticillate branches at the top of each internode, rarely simple; internodes terminated above by a sheath ending in teeth (a whorl of connate leaves) which embraces the base of the succeeding internode. Branches jointed and sheathed similarly to the stem, sometimes absent. Sporangia opening by a longitudinal cleft, arranged 6 to 9 in a circle on the inner side of stalked peltate verticillate plates, which are arranged in an ovoid or oblong terminal spike. Spores very numerous, minute, similar; each furnished with 4 filiform appendages (elaters) which spring from one point and are thickened at the apex, at first rolled spirally round the spore, but ultimately uncoiling; the elaters are hygrometric, uncoiling when dry and rolling round the spore when damp. Prothallium green, flat, lobed, commonly dioecious, producing archegonia and antheridia resembling those of Filices.

GENUS I.—**EQUISETUM.** *Linn.*

The only genus. Characters the same as the Order.

Name from *equus*, a horse, and *seta*, a bristle.

SECTION I.—**VERNALIA.** *A. Braun.*

Stems of two kinds. Sterile stems appearing after the fertile stems, and perishing in winter, green or whitish, branched. Stomata level with the surface. Sheaths with persistent teeth. Branches in regular whorls, except in depauperate specimens, without any central cavity. Fertile stems appearing in early spring, decaying before summer shortly after the spike is matured, succulent, whitish, ultimately brown or fawn-colour, without branches. Spike obtuse, at first whitish, afterwards fawn-colour. Rarely a few fertile stems are produced after the sterile stems, and in that case they are thinner

and less succulent than the normal fertile stems, and become whitish or green, and ultimately produce whorls of branches similar to those of the sterile stem, but shorter.

SPECIES I.—**EQUISETUM MAXIMUM.** *Lam.*

PLATE 1888.

Rabenh. Crypt. Vasc. Europ. Exsicc. Nos. 99, 100.

E. Telmeteia, *Ehrh.* in *Hanov. Magazine* for 1873, p. 287. *Koch*, Syn. Fl. Germ. et Helv. ed. ii. *Gr. & Godr.* Fl. de Fr. Vol. III. p. 643. *Newm.* Brit. Ferns, ed. ii. p. 67. *Rabenh.* l.c.

E. eburneum, "*Schreb.*" *Fries*, Summ. Veg. Scand. p. 59. *Roth*, Cat. Vol. I. p. 129.

E. fluviatile, *Sm.* Eng. Bot. No. 2022; and Eng. Fl. Vol. IV. p. 337; et auct. Brit. plur. ante 1843. Non *Linn.*

Stems of two kinds, perishing in autumn. Sterile stem stout, cylindrical, with even or smooth 20 to 40 striæ scarcely observable in the living plant, smooth or slightly rough in the upper part, white. Sheaths applied to the stem, pale green with a pitchy-black ring towards the apex; teeth 20 to 40, free or some of them united in pairs or threes, subulate, very acute, pitchy-black with brown scarious margins. Branches very numerous, spreading or slightly drooping in luxuriant specimens, scabrous, 4- or 5-quetrous, with the ridges grooved and separated by rather shallow furrows, solid, unbranched or rarely with one or more branchlets, their lowest internodes falling short of the teeth of the sheath; sheath enclosing the base of the first internode of the branch, pitchy-black, with a pale brown scarious apex, furnished with short rounded lobes; sheaths at the apex of the first and succeeding internodes of the branches, terminated by triangular or triangular-subulate teeth, which have frequently setaceous points. Fertile stem short, very stout, succulent, whitish, ultimately pale brown, smooth. Sheaths close together, funnel-shaped, the lower ones overlapping each other, and even the upper frequently showing but a small portion of the stem between them, pale brown, darker towards the apex; teeth 20 to 40, many of them united into groups of 2 to 4, dark brown, subulate, not at all connivent. Spike oblong-cylindrical, obtuse, pale brown. Occasionally stems similar to the sterile stem, but terminated by a spike like the fertile ones, appear in summer or autumn.

On the banks of ponds, rivers, and ditches, and on banks of loose earth and quarry rubbish, also in damp woods and moist meadows, even growing in water. Not uncommon, and generally distributed

in England. Rare in Scotland, extending to Edinburgh on the east side and Skye on the west; reported also from Fife and Forfar, but these counties require confirmation. Not unfrequent, and generally distributed in Ireland.

England, Scotland, Ireland. Perennial. Spring.

Rootstock creeping, about the thickness of a goose-quill, solid, brownish-black, pubescent. Sterile stems erect, very variable in size, but usually attaining to 2 or 3 feet, and not unfrequently even 4 or 5; and Mr. Sidebotham, in the 'Phytologist,' 1843, p. 649, says that "in a wood below Arden Hall, Cheshire, it flourishes in a swamp to the height of 6 or 7 feet." The stem is from the thickness of a swan-quill to that of a man's finger, with very numerous sheaths, all of which, except about 6 of the lowest, have whorls of branches at their base. The lowest whorls are about $1\frac{1}{2}$ inch apart or more, closer together above, and quite approximate at the apex of the stem, where the branches rapidly diminish in size. The colour is pale bright-green, and the general form of the plant is cylindrical, tapering towards the lower part, and blunt at the top. Fertile stems 4 inches to 1 foot high, about the thickness of a man's little finger, tapering downwards at the base, with 7 to 18 sheaths, which are placed so closely together that the lower part of the stem, and sometimes the whole stem, is concealed. I have, however, one specimen from St. Mary's Church, Devon, in which the upper internodes are $2\frac{1}{2}$ inches long, while the sheath itself is only $1\frac{1}{2}$ inch. Spike $1\frac{1}{4}$ to 3 inches long, ultimately pale brown.

The form of fertile stem (var. *serotinum*, A. Braun), which resembles the barren one, is not a variety, but is due to certain conditions of growth, and is not always developed from the same plant. I have collected it myself at Haselmere, Surrey, and on the débris of the under-cliff below Fairlight Glen, Hastings, where I observed many examples of it in 1862; I have seen it also on the cliffs east of Southend, Essex, and the under-cliff at Folkestone. The Haselmere and Fairlight Glen specimens are 18 inches or 2 feet high, terminated by a spike of 1 or 2 inches; the rest of the stem is quite like the ordinary sterile plant, except that the sheaths are widened upwards, though not so much as in the sterile plant: but the Folkestone and Southend specimens are 4 to 6 inches high, with spikes $\frac{1}{2}$ to 1 inch long, have the sheaths close together, much widened upwards, and so bear a much greater resemblance to the ordinary fertile stem, except in being furnished with branches.

If the rootstock be dug up at the time the sterile stem has reached its full size, the buds of the fertile spikes may be observed near its base, $1\frac{1}{2}$ to 2 inches long, looking like small fir-cones from the overlapping of the teeth of the sheaths. These are developed in the succeeding spring, about March, and disappear by May, at which time

the fertile stems appear, and last till October or November; perhaps if the female spikes are started into growth in the summer or autumn they develop branches.

According to Milde, the sterile stem, terminated by a spike, is the *E. eburneum* of Schreber.

Great Horsetail.

SPECIES II.—**EQUISETUM ARVENSE.** *Linn.*

PLATE 1889.

Rabenh. Crypt. Vasc. Exsicc. Nos. 46, 47, and 48.

Stems of two kinds, perishing in autumn. Sterile stem rather slender, with 6 to 19 furrows, slightly rough, especially in the upper part, green. Sheaths shortly cylindrical, very slightly widened upwards, pale green; teeth 6 to 19, free or some of them united in pairs or threes, triangular-subulate acute, concolorous or edged with pale brown, with very narrow light brown scarious margins. Branches numerous, rarely few, ascending or slightly drooping in luxuriant specimens, usually 4-quetrous, with the ridges not grooved and separated by very deep furrows and the angles not grooved, solid, unbranched or rarely with a few branchlets, their lowest internode exceeding the teeth of the stem-sheath between which it is produced; sheath enclosing the base of the first internode of the branch pale brown or olive, dim, furnished with short roundish-ovate teeth with narrow pale scarious margins; sheaths at the apex of the first and succeeding internodes of the branches terminated by as many subulate teeth as there are angles on the branch. Fertile stem more or less elongated, moderately stout, succulent, whitish or pale brown, smooth. Sheaths rather distant, tubular-funnel-shaped, sulcate, whitish at the base, brown towards the apex; teeth 8 to 14, most of them often united into groups of 2 or 3, dark brown, triangular-subulate, often somewhat connivent. Spike cylindrical-oblong, obtuse, pale brown. Rarely fertile stems are produced along with or after the sterile stems, which are much firmer and greener than the ordinary state, with pale green sheaths, and these generally ultimately produce whorls of branches like those of the sterile stem, but often with the first internode of the branch not exceeding the sheath below which it is placed.

By roadsides and in waste places, and in cultivated ground, very common, and generally distributed throughout the country.

England, Scotland, Ireland. Perennial. Spring.

Rootstock rather slender, solid, with oblong pubescent tuber-like excrescences. Sterile stems erect, decumbent, or prostrate; when erect it is usually 1 to 2 feet high or even more, and frequently terminates in a long portion bare of branches, and is about the thickness of a crow-quill in the lower part, which commences to branch at the extremity of the 5th to the 14th internode, but usually about the 8th from the base. The colour is rather dull green, and the general form somewhat pyramidal or cylindrical, tapering from about the middle upwards. When growing in cultivated land a great number of decumbent or prostrate stems are produced, with long branches generally few in each whorl. In the form named *alpestre*, by Wahlenberg, which grows at Micklefell, Teesdale, the sterile stem is short, 2 to 3 inches, prostrate, with an ascending terminal point and subsecund branches. I have seen a similar form on the shores of Loch Leven.

The fertile stem is 4 inches to 1 foot high, with 4 to 8 sheaths. The spike is $\frac{3}{4}$ to $1\frac{1}{2}$ inches long.

The fertile form, which afterwards throws out branches, appears to be much rarer in *E. arvense* than in *E. maximum*. I collected in September, 1838, by the side of Gartmorn Dam, near Alloa, Clackmannanshire, a fertile form, with a few branches at the base, which resembles the form called *E. riparium* by Fries, but its sterile stems are more branched. In 1874 a good many late fertile stems came up at Balmuto in the month of June; at first they were quite unbranched, but distinguishable by their green colour and faintly ribbed surface; their sheaths were green, less deeply sulcate than those of the ordinary fertile form. Most of these I gathered and dried as specimens. I do not know whether they would all have produced branches or not, but in July I found in the same place several specimens with developed branches, sometimes in complete whorls, but generally only 2 or 3; since that year only the ordinary forms of fertile and barren fronds have appeared. This form, when fully developed, is the var. *campestre* of C. F. Schultz, and the var. *serotinum* of F. W. Meyer; but I believe it to be only an accidental variation, not a variety.

Corn Horsetail.

SECTION II.—SUBVERNALIA. A. Braun.

Stems of two kinds. Sterile stems appearing at the same time as the fertile stems, or shortly after them, and perishing in winter, green or whitish, branched. Stomata level with the surface. Sheaths with persistent teeth. Branches in regular whorls, without any central cavity. Fertile stems appearing in spring, and remaining until autumn; at first somewhat succulent, whitish or fawn-coloured,

and without branches; but after the spike is matured becoming firmer, white or greenish, and emitting whorls of branches similar to those of the sterile spikes, but shorter. Spike obtuse, at first greenish-white, afterwards fawn-colour.

SPECIES III.—**EQUISETUM PRATENSE.** *Ehrh.*

PLATE 1890.

Rabenh. Crypt. Vasc. Europ. Exsicc. Nos. 41, 42.

E. umbrosum, Meyer, in Willd. Sp. Pl. Vol. V. p. 3. Koch, Syn. Fl. Germ. et Helv. ed. ii. p. 965. Hook. & Arn. Brit. Fl. ed. viii. p. 599. Newm. Brit. Ferns, ed. ii. p. 63.

E. Ehrharti, Meyer, Chlor. Hanov. p. 666.

E. amphibolium, Retz, Fl. Scand. supp. 2, p. 602 (teste Koch).

E. Drummondii, Hook. E. B. S. No. 2777.

E. sylvaticum, β. minus, Wahlenb. Fl. Succ. p. 689, nup.

Stems of two kinds, perishing in autumn. Sterile stem slender, with 8 to 20 furrows, rather rough, green. Sheaths shortly funnel-shaped, pale green, sometimes with a pitchy-brown ring at the apex; teeth 6 to 19, usually free, rarely some of them united in pairs or threes, very narrowly triangular, hyaline with the exception of a brown central firm rib, which is generally excurrent in a small mucro, but sometimes does not reach the apex. Branches numerous, usually 3-quetrous, with the ridges not grooved, and separated by very deep furrows, solid, unbranched or rarely with a few branchlets, their lowest internode shorter than the teeth of the stem-sheath below which it is produced in the lower whorls, but equalling or exceeding them in the upper whorls; sheath enclosing the base of the first internode of the branch brown, mostly wholly scarious towards the apex, furnished with short rounded lobes; sheaths at the apex of the first and succeeding internodes of the branches, terminated by deltoid blunt teeth. Fertile stem rather short, rather stout, at first slightly succulent and reddish-white or very pale fawn-colour, ultimately firm and green, slightly scabrous. Sheaths approximate, the lower ones tubular-funnel-shaped and the upper funnel-shaped, sulcate, white with a dark reddish-brown ring at the apex; teeth 8 to 20, subulate, almost wholly scarious, some of them occasionally united into groups of 2 or 3, pale brown, with hyaline margins and a brown central firm rib as in the sheaths of the sterile stem. Branches absent until the fertile stem has attained nearly its full height, when they begin to appear; they are similar to those of the barren stem, but always

shorter, generally much shorter. Spike oblong-fusiform, obtuse, at first greenish-white, afterwards fawn-colour.

In pastures, especially by the sides of streams, and on shady banks and in woods. Local and rather rare, extending from Westmoreland (or perhaps Lancashire) and Yorkshire to Lanark, Stirling, Perth, Banff and Caithness. Local in Ireland, and confined to the North; most plentiful in the mountain glens of Antrim.

England, Scotland, Ireland. Perennial. Late Spring and early Summer.

Rootstock slender, without tubers. Sterile stem from the thickness of a stocking-wire to that of a crow-quill; usually 9 to 18 inches high. Plant pale green, somewhat cylindrical, usually blunt-topped, sometimes bending over at the apex, with the branches spreading or drooping and slightly arching, occasionally somewhat secund. Fertile stem appearing in April or the beginning of May, 4 to 14 inches high. The sheaths are wider, the higher they are placed on the stem. Spike $\frac{1}{2}$ to $\frac{3}{4}$ inch long.

A very distinct species, though the barren stems are sometimes mistaken for those of *E. arvense*, but the teeth of the sheaths are very different, being entirely transparent except the thickened central rib. The branches are generally triquetrous, not usually tetraquetrous as in *E. arvense*; the first internode of the branch rarely reaches even to the base of the teeth of the stem-sheath below which it springs; while in *E. arvense* it generally exceeds, and always attains, the level of the apex of the teeth. The little sheaths from which the branches spring are distinctly toothed in *E. arvense*, which is not the case in *E. pratense*; and this latter has the teeth of the sheaths of the branches very obtuse, while they are acute in *E. arvense*. The fertile stems are not likely to be mistaken, the sheaths are so different; those of *E. arvense* have the central rib furrowed on the back, and the teeth with very narrow scarious margins, while in *E. pratense* the central rib has no furrow on the back, and except a small projection at the base, from which the rib springs, they are wholly scarious.

The fertile stems of *E. pratense* are to be compared with those occasionally found in *E. maximum* and *E. arvense* which ultimately produce branches. *E. pratense* has never, so far as I know, any form of fertile stem analogous to the ordinary fertile stems of *E. maximum* and *E. arvense*.

Blunt-topped Horsetail.

SPECIES IV.—**EQUISETUM SYLVATICUM.** *Linn.*

PLATE 1891.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 43.

Stems of two kinds, perishing in autumn. Sterile stem rather slender, with 10 to 18 furrows, separated by ridges, usually furnished with lines of minute spreading bristle-like processes which are longest immediately beneath the sheaths, or rarely nearly smooth, pale green. Sheaths cylindrical, green, reddish-brown at the apex; teeth 10 to 18, generally combined into 3 or 4 obtuse hooded lobes, rarely any of them free, linear-subulate, reddish-brown or more rarely pitchy-brown, scarious, with the exception of a concolorous firm central rib, which reaches to the tip, but is not excurrent. Branches very numerous, usually tetraquetrous, with the ridges faintly grooved and separated by very deep furrows, solid, much branched, their lowest internode is sometimes shorter than the teeth of the stem-sheath below which it is produced, but exceeding them in the upper whorls; sheath enclosing the base of the first internode of the branch olive, scarious and reddish-brown at the apex, furnished with long triangular acute teeth; sheath at the apex of the first and succeeding internodes terminated by subulate very acute teeth. Branchlets trigonous, their sheaths with very long subulate teeth curving away from the branchlet. Fertile stem elongate, rather stout, at first somewhat succulent and pale fawn-colour, ultimately firm and pale green, less deeply striated and smoother than in the barren stem. Sheaths rather distant, loose longly cylindrical, contracted at the apex, their teeth collected into a few blunt much-hooded lobes, marked with lines indicating the midribs of the teeth, striate, but scarcely sulcate even at the base. Branches absent until the fertile stem has attained nearly its full height, when they begin to appear; they are similar to those of the barren stem, but usually, though not always, shorter. Spike oblong-cylindrical or oblong-fusiform, at first greenish-white, afterwards fawn-colour.

In moist woods and by the sides of streams, roadsides, and waste places, and on heaths. Rather common and generally distributed throughout England and Scotland, extending to Orkney and Shetland. Not infrequent throughout Ireland.

England, Scotland. Ireland. Perennial. Spring and early Summer.

Rootstock rather slender, angular, with a ring of open tubes running through it, producing brown acuminate tubers. Stems usually 1 foot to 18 inches high, and rarely exceeding 2 feet; remarkable for the lines of bristle-like projections on the ridges of the stem; these bristles vary much in length, and sometimes are altogether absent; I have specimens from Kingcansie, Kincardineshire, and Cullalo, Fifeshire, in which they are wanting, but differ in no other respect from the ordinary form. The plant is bright green, the form somewhat pyramidal from where the branches begin, which is at about the 6th to the 8th internode; the branches are always arched and drooping, and the top of the stem is also drooping and secund. The fertile stems are at first from 9 to 15 inches high, and at that time are succulent and terminated by a spike $\frac{3}{4}$ to $1\frac{1}{4}$ inch long; afterwards the branches begin to appear, and are short and recurved; the stem continues to lengthen, to become firmer, and the branches to increase in size, the spike withers away; and ultimately the fertile frond is distinguishable from the barren one mainly by its being truncate at the top, where usually the withered remains of the spike may be found. The fertile stem is generally smooth, and the first internode of the branches shorter than the stem-sheath below which it is produced.

A well-marked species, from its compound drooping branches, and sheaths with the teeth combined so as to appear lacerate rather than toothed.

Wood Horsetail.

SECTION III.—ÆSTIVALIA. *A. Braun.*

Stems all similar, or nearly so, perishing in winter, green or whitish, smooth to the touch or nearly so, branched. Stomata level with the surface. Sheaths with persistent teeth. Branches in regular whorls, except in depauperate specimens, with a central cavity; rarely the branches are absent. Fertile stems differing from the sterile ones only in being terminated by a spike, which is perfected in summer. Spike blunt or rarely slightly apiculate, usually black or dark brown.

SPECIES V.—EQUISETUM PALUSTRE. *Lin.*

PLATE 1892.

Rabenh. Crypt. Vasc. Europ. Exsicc. Nos. 69, 70, 71.

Stems all similar, perishing in autumn. Sterile stem rather slender or with 5 to 12 furrows, which are rather shallow in the living plant, but become deeper in dried specimens, separated by ridges which

are not grooved, slightly rough, green. Sheaths shortly cylindrical-funnel-shaped, green, often pitchy-brown towards the apex; teeth 5 to 12, mostly free, or more rarely some of them united in pairs or threes, narrowly triangular, acute, dark brown or pitchy-black, with very broad pure white hyaline margins. Branches usually in whorls, but sometimes only 1 or 2 from a node, and sometimes wholly absent, generally 5-angular, but varying from 4- to 7-angular, with the ridges separated by very shallow furrows, hollow, unbranched, their lowest internode much shorter than the teeth of the stem-sheath below which it is produced, and indeed reduced to little more than a sheath; sheath enclosing the base of the first internode of the branch pitchy-brown or nearly black, shining, with deltoid-ovate obtuse teeth having very narrow pale brown or whitish scarious margins; sheath at the apex of the first internode terminated by deltoid-ovate blunt teeth; teeth of the succeeding internodes ovate or ovate-lanceolate, with a weak mucro. Fertile stem differing from the sterile one only in being terminated by a spike which is ovoid-oblong or cylindrical-oblong, obtuse, pitchy-black.

In bogs and marshes, and on the shores of lakes and ponds and on wet rocks. Common and generally distributed throughout England and Scotland, extending to Orkney and Shetland; frequent throughout Ireland.

England, Scotland, Ireland. Perennial. Summer.

A very variable plant. The commonest form has erect stems, 1 foot high or more, but the length of the stem varies from a few inches to 2 feet. The plant is of a rather dull green, and is narrowly pyramidal when branched. When unbranched it is the var. *nudum* of Duby, but unbranched stems may be seen springing from the same rootstock as branched ones. The stems grow more in tufts than in any of the preceding species, and in this respect resemble the *Equiseta hyemalia*. Frequently the stem is decumbent or prostrate and without branches, when it is the var. *nudum* of Newman ('Brit. Ferns,' ed. ii. p. 49), but not of Duby, the var. *alpinum* of Hooker, and var. *subnudum* of the London Catalogue of British Plants; but this appears to be merely a starved state of the plant. The spike is $\frac{1}{4}$ to $\frac{7}{8}$ inch long, and is produced in June or July.

An extraordinary state of the fertile stem, in which 1 or more of the upper branches are terminated by spikes, has received the name of var. *polystachyum*; but this is evidently a monstrosity rather than a variety. Very often the main central stem has been accidentally injured, so that there is no spike at its apex; but specimens occur

which have not only a spike on the main stem, but also minute ones on the branches, which are much elongated.

The barren fronds of *E. palustre* are much like those of *E. arvense*, but may be readily distinguished by the teeth of the stem-sheaths being darker, and with a broader white margin; by the minute sheaths from which the branches spring being pitchy-brown or black and shining; by the branches being hollow and most commonly 5-angled, and with the faces between the angles not excavated into deep grooves; by the teeth of the sheaths of the branches being much shorter and sulcate; and above all, by the first internode of the branches being extremely short, rarely reaching even to the base of the teeth of the stem-sheath, while in *E. arvense* it almost always exceeds the apex of the teeth of the stem-sheath.

Marsh Horsetail.

SPECIES VI.—**EQUISETUM LIMOSUM.** *Smith.*

PLATE 1893.

E. fluviatile (*Linn.*), *Newm. Brit. Ferns*, ed. ii. p. 51. *Hartm. Handb. Skand. Fl.* ed. xi. p. 548. Non *Sm.*

Stems all similar, perishing in autumn. Sterile stem stout, rarely rather slender, not furrowed when fresh, but with 10 to 25 faint striæ (which are more conspicuous in the dried plant), smooth, green. Sheaths shortly cylindrical or funnel-shaped-cylindrical, green, often pitchy-black towards the apex; teeth 10 to 25, mostly free, but sometimes united in pairs or threes, narrowly triangular or triangular-subulate, acute, usually pitchy-black or at least tipped with that colour, with very narrow pale brown scarious margins. Branches usually in whorls, but sometimes only 1 or 2 from a node, and often wholly absent, generally 4-angular but sometimes 5- to 6-angled, with the ridges separated by very shallow furrows, hollow, unbranched, their lowest internode shorter than the teeth of the sheath-stem below which it is produced; sheath enclosing the base of the first internode of the branch pitchy-brown or olive, dim with deltoid-ovate subacute teeth, without whitish margins; sheath at the apex of the first internode terminated by triangular-acute teeth, and those of the succeeding internodes with subulate very acute teeth. Fertile stem differing from the sterile one only in being terminated by a spike which is oval-ovoid or ovoid-oblong, obtuse, pitchy-black or pitchy-brown.

Var. *α. genuinum.*

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 74.

E. limosum, *Linn.* Spec. Plant. p. 1517. *Fries*, Summ. Veg. Scand. p. 59.

E. limosum, var. *Linnæanum*, *Döll*; *Milde*, Fil. Europ. p. 227.

Stem unbranched, or with a few irregular solitary or subsolitary branches.

Var. *β. fluviatile.*

Rabenh. Crypt. Vasc. Europ. Exsicc. Nos. 75 and 124.

E. fluviatile, *Linn.* Spec. Pant. No. 1517. *Fries*, Summ. Veg. Scand. p. 59. Non *Smith*.

E. limosum, var. *verticillatum*, *Döll*; *Milde*, Fil. Europ. p. 227.

Stem with regular whorls of branches. Stem stouter than in var. *α*, and when barren with a longer point.

In lakes, ponds, and ditches, growing in the water, or rarely in wet places out of water. Frequent and generally distributed throughout England and Scotland, extending to Orkney and Shetland. Common in Ireland.

England, Scotland, Ireland. Perennial. Summer.

Rootstock hollow. Stems erect, dark green, scarcely striated, when growing easily compressible from having a large central hollow and thin walls, which are not strengthened by a cylinder of thickened cells as in all the other British species of *Equiseta*. In var. *α* they vary from the thickness of a crow-quill to that of a swan-quill; but in var. *β* they are frequently as thick as a man's little finger. The unbranched forms are nearly as common as the branched. When growing in bogs or shallow water the branches are commonly absent, but they are so also not unfrequently even in deep water, in which the plant attains its greatest development, reaching a height of 3 or 4 feet, or even more. It is in deep water too that the barren stems terminate in a long naked point. The spike is $\frac{1}{2}$ to $\frac{3}{4}$ inch long, less cylindrical than in the preceding species, and often paler in colour. A 'polystachyum' form occurs, but much more rarely than in *E. palustre*.

The absence of furrows on the stem distinguishes all the forms of this plant from those of *E. palustre* when the plants are fresh. In the dried state the outside of the stem shrinks so that it appears furrowed; but the narrower teeth, without conspicuous white margins, should be enough to distinguish this from *E. palustre*. The want of a cylinder of thickened cells is a characteristic of this species; indeed, it occurs in only one other European form, namely, *E. littorale* of *Kühlew*, which is generally believed to be a hybrid between

E. limosum and *E. arvense*. If this be so, it is not unlikely to occur in Britain. *E. littorale* has the general habit of the forms of *E. arvense* which have branched fertile stems, but the rootstock is angular and hollow, and there is no ring of thickened tissue in the stem; the branches also are generally hollow.

E. limosum is a variable plant, but the variations run too much into each other to be separable into varieties; even the two forms which I have admitted as varieties are most difficult to define, and may very possibly be merely states of the plant due to external circumstances. I have, however, retained them, as they are generally accepted in this country, and were considered distinct species by both Linnæus and Fries.

Water Horsetail.

SECTION IV.—HYEMALIA. *A. Braun.*

Stems all similar, persisting, green, rough to the touch, branched or unbranched. Stomata sunk in depressions so as to be below the general surface of the epidermis. Sheaths with persistent or deciduous teeth. Branches usually solitary, rarely in whorls, often absent, with a central cavity. Fertile stems differing from the sterile ones only in being terminated by a spike, which is perfected in autumn or late summer. Spike mucronate or apiculate, usually black.

SPECIES VII.—**EQUISETUM HYEMALE.** ‘*Linn.*’ (auct. plur.)

PLATES 1894 AND 1895.

Stems all similar, sub-evergreen, solitary or several together from each node or extremity of branch of the rootstock rather stout or rather slender, with a central hollow of $\frac{2}{3}$ or $\frac{1}{2}$ its diameter, with 8 to 34 rather shallow furrows, separated by subobtuse edges, which are not furrowed on the back, and are rough, with small prominent tubercles arranged in one stripe on each ridge, dull dark green. Sheaths cylindrical, applied to the stem or slightly widened upwards, at first pale green and concolorous, then with a black band at the apex and afterwards another at the base, afterwards wholly black, ultimately white with a black band at the base and a narrower one at the apex; the lower ones permanently black; each of the portions of the sheath which corresponds to one of the teeth with a narrow shallow furrow down the centre, and another similar furrow on each side, midway between the central furrow and the great furrow which extends (between the teeth) from the apex to the base of the sheath; teeth

8 to 34, deltoid-triangular or triangular, acuminate into long setaceous-subulate flexuous or straight points, which are wholly scarious, pitchy-black, with narrow paler margins, and are often caducous except on the terminal sheaths, in which case by their fall they leave the sheaths truncate and crenate—these crenatures corresponding with the bases of the teeth; more rarely the points of the teeth of all or of some of the sheaths are persistent. Branches very rarely produced, and then solitary, resembling the stem in miniature, with the first internode much shorter than the stem-sheath below which it is produced; sheath enclosing the first internode of the branch pitchy-black, shining, oblique; sheaths at the apex of the first and succeeding internodes of the branch terminated by triangular teeth with deciduous subulate scarious points. Spikes oval- or roundish- or oblong-ovoid, acuminate and mucronate or apiculate, pitchy-black or pitchy-brown, its base embraced by the teeth of the uppermost stem-sheath.

SUBSPECIES I.—*Equisetum eu-hyemale*.

PLATE 1894.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 49.

E. hyemale, *Newman*, Phytol. 1854, p. 19.

E. hyemale, var. *genuinum*, *A. Braun*; *Milde*, Fil. Europ. p. 243.

Stems all similar, sub-evergreen, mostly solitary from each node or extremity of branch of the rootstock, rather stout, with a central hollow of about two-thirds its diameter with 15 to 34 rather shallow furrows separated by subobtuse ridges, which are not furrowed on the back, and are rough with small prominent tubercles arranged in one stripe on each ridge, dull dark green. Sheaths cylindrical, closely applied to the stem, pale green, at first concolorous, then with a black band at the apex and afterwards another at the base, afterwards wholly black, ultimately white with a black band at the base and a narrower one at the apex, the lower ones permanently black; each of the portions of the sheath which corresponds to one of the teeth with a narrow shallow furrow down the centre, and another similar shallow furrow on each side between the central furrow and the great furrow which extends (between the teeth) from the apex to the base of the sheath; teeth 15 to 34, deltoid-triangular, acuminate into long setaceous, subulate flexuous or crisped roughish points, which are wholly scarious, pitchy-black with narrow paler margins, and are caducous except on the terminal

sheath, so that by their fall the sheath is left truncate and crenate ; these crenatures correspond with the bases of the teeth. Branches absent or very rarely produced, and then solitary, resembling the stem in miniature, with its first internode much shorter than the stem-sheath, below which it is produced ; sheath enclosing the first internode of the branch pitchy-black, shining, oblique ; sheaths at the apex of the first and succeeding internodes of the branch terminated by triangular teeth with deciduous subulate scarious points. Spike oval- or roundish-ovoid, acuminate and mucronate, pitchy-black or pitchy-brown, its base embraced by the persistent teeth of the uppermost stem-sheath.

In moist woods and on wet banks and bogs, and in wet places amongst sandhills, rare, from Kent, Surrey, Hereford, and Glamorgan to Aberdeen, Banff, Elgin, Ross, Perth, Lanark, and Ayr. Rare, but distributed from north to south of Ireland.

England, Scotland, Ireland. Perennial. Late Summer, Autumn.

Rootstock creeping, black, hollow. Stems $1\frac{1}{2}$ to $2\frac{1}{2}$ feet high ; usually about the thickness of a goose-quill or a swan-quill, so rough on the ridges as to make a distinctly grating sound when the fingernail is drawn along them ; spaces between the ridges transversely rugose, with a line of stomata sunk in depressions at the base of the ridges on each side. Sheaths usually about $\frac{1}{4}$ inch long, appearing truncate by the scarious part of the teeth separating as the stem develops. The teeth of the uppermost sheath, which is funnel-shaped and embraces the base of the spike, are always persistent, and are slightly rough and crisped or twisted. Very rarely the teeth of the stem-sheaths are persistent, in which case they are at first black, but afterwards become hyaline. Branches rarely produced. I possess but a single specimen which has a branch from near the apex of the stem ; it was gathered by Mr. Roy, at Banchory, Kincardineshire. Spike $\frac{1}{4}$ to $\frac{1}{2}$ inch long.

The stems survive the winter, but are more or less killed at the apices, and in severe winter sometimes down to the ground.

From the roughness of the stems caused by particles of silica, they are capable of being used "as a file in polishing wood, ivory, or even brass. This purpose it has long served in England, under the name of Dutch Rushes, being usually imported from Holland." (Sm. Eng. Flor. vol. iv. p. 340.)

Rough Horsetail ; Dutch Rush ; or Shave-grass.

SUBSPECIES II.—*Equisetum Moorei*. *Newm.*

PLATE 1895.

Rabenh. Crypt. Vasc. Europ. Exsicc. No. 501.*Newman*, Phytol. 1854, p. 19.*E. hyemale*, var. *Moorei*. *Hook. & Arn.* Brit. Fl. ed. viii. p. 601. *Bab. Man.* Brit. Bot. ed. vii. p. 440. *Hook. fil.* Stud. Fl. ed. ii. p. 502.*E. hyemale*, var. *Schleicheri*. *Milde*, Fil. Europ. p. 244.*E. paleaceum*, "*Schleicher*, e p.;" e p. *Milde*, l.c.*E. trachyodon*, *Rabenh.* l.c. No. 50. Non *A. Braun*.

Stems all similar, sub-evergreen, usually in tufts of 3 or 4 together from each node, or extremity of branch of the rootstock, rather slender, with a central hollow of about half its diameter, with 8 to 15 ("to 23," *Milde*) rather shallow furrows, separated by sub-obtuse ridges, which are not furrowed on the back, and are rough with small prominent tubercles arranged in one stripe on each ridge, dull dark green. Sheaths cylindrical-funnel-shaped, a little widened upwards, pale green, at first concolorous, then with a black band at the apex and afterwards another at the base, ultimately white with a black band at the base and a narrower one at the apex; the lowest ones permanently black; each of the portions of the sheath which corresponds to one of the teeth with a narrow shallow furrow down the centre, and another similar furrow on each side between the central furrow and the great furrow which extends (between the teeth) from the apex to the base of the sheath; teeth 8 to 16, triangular, acuminate into long setaceous-subulate straight or slightly flexuous points, which are wholly scarious, pitchy-black with narrow paler margins and persist until the stems are full grown; but in the succeeding winter or spring many of them fall off and leave the sheaths truncate and crenate, the crenatures corresponding to the bases of the teeth. Branches absent, or very rarely produced, solitary or two at a node, resembling the stem in miniature, with the first internode much shorter than the stem-sheath below which it is produced; sheath enclosing the first internode of the branch pitchy-black, shining, oblique; sheaths at the apex of the first and succeeding internodes terminated by subulate persistent teeth. Spike oblong-ovoid, acuminate and shortly mucronate, pitchy-black, its base embraced by the teeth of the uppermost stem-sheath.

On wet rocky banks and on open sandhills, very rare. "Sandhills north of Courtown, County Wexford, and sandhills near Arkwell, and thence northwards in many places along the coast

extending to near Seamark House, County Wicklow." (A. G. More.) First found by the late Dr. D. Moore, 1861, on wet rocky banks facing the sea, and on open ground facing Rochfield, not far from Dunganstown, Wicklow, Mr. A. G. More says, the plant of Dundrum Sandhills "should probably be referred to *E. Moorei*." This would extend the range of the plant to County Down.

Ireland. Perennial. Autumn.

Stems 1 to 2 feet high, from the thickness of a stocking-wire to that of a crow-quill; sheaths about $\frac{1}{4}$ inch long exclusive of the teeth. Spike $\frac{1}{4}$ — $\frac{3}{8}$ of an inch long.

E. Moorei differs from *E. eu-hyemale* in its much smaller size, more deeply furrowed stem of which the sheaths are slightly widened upwards and have the teeth persistent; the points of the teeth are firmer in texture, and many of them remain attached to the sheaths until winter, and even in spring may be found on stems which have not been killed by frost.

One of the characters which was considered distinctive of *E. Moorei*, in the original notice of it, is apparently not constant. Dr. D. Moore writes in December, 1853, "The stems of all our British unbranched species of *Equisetum* are persistent, *remaining green throughout the winter*. The economy of the plant to which I am now directing your attention is the reverse of this: *the stems die down annually*" (Phytol. 1854, p. 18). I have cultivated this for more than four years from roots sent me by Dr. Moore, and I find that they are scarcely more tender than those of *E. eu-hyemale* grown along with it; neither form is completely evergreen, being more or less killed downwards from the top according to the severity of the frost.

Mr. A. G. More, writing from Glasnevin in May 1869, says that "none of *E. Moorei* are quite dead, nearly all are green $\frac{3}{4}$ up," and in the 'Journal of Botany' for 1868, p. 253, he writes, "In the wild state the stems are not strictly deciduous, for in sheltered situations among bushes I have found them quite green and fresh even so late as in the month of March; and if on the open sandhills they are more or less withered, I believe that this may be due simply to exposure." Mr. J. G. Baker in a letter says, concerning the stems of *E. Moorei*, "They are just the same in texture as in *E. hyemale*, but perhaps—I am not even certain as to that—cut up by frost rather earlier."

In cultivation at Balmuto it has remained unchanged; and is in habit and general appearance much more like *E. trachyodon* than *E. eu-hyemale*.

According to Milde, *E. paleaceum* (Schleicher) which is the oldest name, is to be rejected, as by it plants quite different from each other are intended by different authors and even by Schleicher himself. That being the case, Mr. Newman's name *Moorei* is antecedent to the

Schleicheri of Milde, and the name Moorei is now generally used in British Floras.

Moore's Horsetail.

SPECIES VIII.—**EQUISETUM TRACHYODON.** *A. Braun.*

PLATE 1896.

E. Mackaii, *Newm. Hist. Brit. Ferns*, ed. ii. 1844, p. 25.

E. hyemale, var. *Mackaii*, *Newm. Phytol.* 1842, p. 305.

E. variegatum, var. *trachyodon*, *Hook. fil. Stud. Fl.* ed. ii. p. 502.

E. elongatum, *Hook. Lond. Journ. Bot.* 1842, p. 42. *Non Willd.*

E. ramosum, *Benth. Handb. Brit. Fl.* p. 620. *Non DC.*

Stems all similar, completely evergreen, usually several together from each branch of the rootstock, rather slender, with a central hollow about one-third of its diameter, with 8 to 14 rather shallow furrows separated by acute-angled ridges, which are furrowed on the back, and are rough with small prominent tubercles arranged in 2 lines on each ridge, dull dark green. Sheaths shortly cylindrical, closely applied to the stem, at first green and concolorous, then with a black band at the apex, soon becoming wholly black, but ultimately usually having a narrow whitish ring below the narrow black apical band; each of the portions of the sheath which corresponds to one of the teeth with a rather broad deep furrow in the centre, and another broad shallow rather indistinct furrow on each side between the central furrow and the great furrow which extends between the teeth from the apex to the base of the sheath; teeth 8 to 14, triangular-subulate, gradually acuminate into long subulate-setaceous straight rough firm persistent points, pitchy-black, with rather narrow paler or white scarious margins, furrowed on the back, persistent, though sometimes their points get broken off, occasionally becoming nearly wholly white when old. Branches absent, or rarely produced unless the main stem be injured, and then solitary, resembling the stem in miniature, with its first internode much shorter than the stem-sheath below which it is produced; sheath enclosing the first internode of the branch, pitchy-black, shining, irregularly toothed; sheath at the apex of the first internode of the branch terminated by ovate-triangular apiculate pitchy-black teeth without furrows on the back; the succeeding ones similar to those on the main stem, pitchy black. Spike oval-ovoid, abruptly acuminate and mucronate, pitchy-black, its base embraced by the teeth of the uppermost sheath.

In wet, shady places, very rare. On the banks and in the water

of the Dee, at intervals of 6 or 7 miles within the parish of Banchory-Ternan, Kincardineshire, the Rev. J. M. Brichan, who says, "It appears to prefer a locality where water oozing from the bank forms a moist green spot, or finds its way through a rent made by the river, or a channel worn by itself. The water where *E. Mackaii* thus fixes its habitat, is generally, if not invariably, chalybeate." (Phytol. 1842, p. 371.) The Aberdeen botanists, however, do not seem to have observed this plant, as in answer to inquiries Dr. G. Dickie replied in Nov. 1874, "I know nothing of *Equisetum trachyodon* in this quarter; Mr. Roy says the same." Perhaps some form of *E. hyemale* or *E. variegatum*, both of which certainly grow by the Dee, may have been mistaken for *E. trachyodon*, but Mr. Brichan's description appears to agree best with the true plant.

Moist banks near a waterfall at the upper end of Colin Glen, Belfast, where it was found in August 1833, by Mr. J. T. Mackay, in company with Mr. F. Whitla. In Ballynarrigan Glen, near Dungen, Derry, and in several glens near Glenarm, Antrim, Dr. D. Moore, in Drunnan Wood, and on the adjacent shores of Loch Cullin, Mayo, Mr. A. G. More. In two places by the side of the stream in Chevy Chase, about 7 miles south-east from Gort, co. Galway, Mr. H. C. Hart. Near St. Ann's, Blarney (R. Mills), Rev. T. Allin.

Scotland, Ireland. Perennial. Late Summer and Autumn.

Plant erect, or more or less decumbent, 1 to 2 feet high, from the thickness of a stocking-wire to that of a crow-quill. Sheaths $\frac{1}{8}$ to $\frac{1}{6}$ inch exclusive of the teeth, which are stiff and persistent; uppermost sheath which embraces the spike funnel-shaped, gradually narrowed upwards, with lanceolate teeth having broad white margins and brown scabrous flexuous points. Spike about $\frac{1}{4}$ inch long, abruptly acuminate into a short mucro.

Branches are much more frequently produced in *E. trachyodon* than in any of the forms of *E. hyemale*. They may come from any part of the stem, and sometimes have a secondary branch from one of their internodes. In the 'Cybele Hibernica' it is stated that "after a series of careful observations made in Antrim, Mr. D. Orr considers that the normal state of *E. trachyodon* is the unbranched form. In exposed situations, when broken by the wind or injured by cattle, the stems throw out lateral shoots from near the point of injury." (Cyb. Hib. p. 365.)

E. trachyodon is very similar in general appearance to *E. Moorei*, so much so that many excellent botanists appear to have mistaken the one for the other, as instanced in Rabenhorst's published fasciculi. In *E. trachyodon*, however, the ridges of the stem are not rounded on

the back, but slightly grooved, and present two sharp angles towards the furrows, and the rough points with which they are furnished are arranged in two distinct lines. The sculpture of the sheaths and teeth is different, the central furrow running into each tooth is deeper, and the lateral furrows are wider and shallower than in *E. Moorei*. The points of the teeth are firmer, not being wholly scarious, but having a furrowed rib of firm tissue running along them; this rib is of a pitchy-black colour, and is bordered with pale or whitish scarious margins. The teeth are much more persistent; the sheaths become sooner black and remain much longer so, not assuming a whitish tinge until the winter. The stems are completely evergreen. I have not found it injured by frost since 1876, when I received living specimens from Mr. S. A. Stewart, of Belfast, which have grown in the open ground up to 1881.

Mackay's Horsetail.

SPECIES IX.—**EQUISETUM VARIEGATUM.** *Schleich.*

PLATES 1897 AND 1898.

Rabenh. Crypt. Vasc. Europ. Exsicc. Nos. 73 and 98.

Stems all similar, completely evergreen, usually several together from each branch of the rootstock, slender or rather slender, rarely stout, with a central hollow of one-fifth to one-third of its diameter, with 4 to 12 shallow furrows separated by subacute-angled ridges, which are rough with small prominent tubercles arranged in two lines on each ridge and furrowed on the back, dull dark green. Sheaths shortly (rarely longly) cylindrical-turbinate, yellowish-green, at first concolorous, then with a black band at the apex ultimately extending downwards until nearly the whole sheath becomes black, but usually without a black band at the base, and rarely wholly black, each of the portions of the sheath which corresponds with one of the teeth with a rather broad deep furrow in the centre, and another broad shallow rather indistinct furrow on each side between the central furrow and the great furrow which extends between the teeth from the apex to the base of the sheath; teeth 4 to 12, triangular-lanceolate or triangular-ovate, abruptly or rather abruptly acuminate into setaceous straight rough firm mostly caducous points, pitchy-black with broad white scarious margins, furrowed on the back, persistent, though generally their points either fall or get broken off, occasionally becoming nearly wholly white when old. Branches rarely produced unless the main stem has been injured

and then solitary or in pairs, resembling the stem in miniature, with the first internode much shorter than the stem-sheath, below which it is produced; sheath enclosing the first internode of the branch, pitchy-black, shining, irregularly toothed; sheath at the apex of the first and succeeding internodes of the branch terminated by ovate-triangular apiculate pitchy-black teeth without furrows on the back; the succeeding ones similar to those on the main stem. Spike oblong- or oval-ovoid, abruptly acuminate and mucronate, pitchy-black, its base usually embraced by the teeth of the uppermost stem-sheath.

Var. *a. genuinum*.

PLATE 1897.

E. variegatum, var. *arenarium*, *Newm. Bab. Man. Brit. Bot. ed. viii. p. 451.*

Stem usually slender, often very slender, flexuous, decumbent or prostrate; stem ridges each with 2 acute angles, and a conspicuous central furrow.

Var. *β. majus*.

Stem rather slender, not flexuous, erect; stem ridges each with 2 acute angles and a conspicuous central furrow.

Var. *γ. Wilsoni*. *Newm.*

PLATE 1898.

Stem stout, not flexuous, erect, stem ridges with 2 obtuse angles and a shallow central furrow, less rough than in vars. *a* and *β*.

Var. *a* in damp places on sandhills, and on damp rocks and by the sides of streams. Rare. Salcombe cliff, near Sidmouth, Devon; reported from Somerset and Flint; plentiful on the sandhills at the mouth of the Mersey, as at Wallasey and New Brighton, Cheshire, and at Bootle, Crosby and Southport, Lancashire; near Settle, Yorkshire; Teesdale; in several places by the river Irthing, near Wardrew, Northumberland, and by the same river above the upper stepping-stones at Gilsland, Cumberland. In Scotland it is reported from the Clyde Islands (Prof. Balfour, *Top. Bot.*); Frankfield Loch, Lanark; North Berwick, Haddington; near Largo and Tentsmuir, Fife (Mr. C. Howie); sands of Barry, Forfarshire; banks of the Dee, Kincardineshire; near Tain, Ross-shire. In Ireland it is found on sandhills at Port Marnoch and Port Crane, Dublin;

sandhills at Mullaghmore, and rocks at Glencar, co. Sligo ; sandhills at Benone, Magilligan, Derry.

Var. β , banks of the Dee at Durra, Kincardineshire ; by the Royal Canal at Dublin ; east of Clonsella Station, and a little below the bridge at Cross Duns, near Glasnevin ; canal at Mullingar ; margins of the pool of water on the Hunting Course field west of Castle Taylor ; and shore of Loch Bulard, near Roundstone, Galway ; and perhaps shore of Loch Carra, Mayo.

Var. γ in ditches by the side of the Lake of Killarney, at Mucruss, County Kerry.

England, Scotland, Ireland. Late Summer, Autumn.

A very variable plant, with stems from 3 or 4 inches to 2 feet long, and from the thickness of a darning-needle to that of a crow-quill or more ; they are generally more or less decumbent, especially when growing on sandhills ; usually they are unbranched, but I have specimens from Wallasey sandhills upon which there are branches from many of the internodes ; these branches are either solitary or in pairs, and in the latter case opposite, or very rarely on the same side of the stem. The branches occasionally terminate in spikes, and indeed seem to be more like secondary stems than anything else. The sheaths vary considerably in length and in colour, but are always enlarged upwards, and then again slightly contracted ; the teeth are also very variable, even in specimens from the same locality ; they are usually rather short and blunt, with broad white margins, and are generally abruptly acuminate into a long white setaceous point, which either falls off or is very liable to be broken off. Among the specimens I have from Wallasey sandhills, collected by Mr. H. S. Fisher in 1871, there are some in which the teeth of the sheaths are triangular and gradually acuminate into subulate points, and have only narrow white margins, though others collected at the same place and at the same date have teeth of the ordinary form.

Var. β scarcely appears to pass insensibly into the ordinary form. The plant from the Dublin Canal I have cultivated for about five years from roots sent me by the late Dr. D. Moore ; these have remained stouter and more erect than those of var. *genuinum* grown beside them, and divide below ground, while in var. *a* the stems come in tufts from the branches of the rootstock above ground ; the stems, however, do not exceed 1 foot high, while in the Dublin Canal they are twice as long, probably growing more luxuriantly from being in the water. The plants from the banks of the Dee, Kincardineshire, are intermediate between the Dublin Canal plant and the var. *genuinum*, but they have longer teeth and blacker sheaths. Specimens from the bridge of Potarch, Kincardineshire, collected by Mr. J. Sim in 1871, have stout stems, with short almost wholly black sheaths, and

lanceolate-subulate gradually-acuminate teeth, having rather narrow scariol margins; this form may be the var. *pseudo-elongatum* of Milde.

I have been unable to procure specimens of the Killarney plant, on which the var. *Wilsoni* was originally founded. It seems to be a much larger plant than the Dublin Canal one. Mr. Newman describes a stem which he believes to be of average size, and says it is 38 inches long, one-third of which was submerged, and from his figure of it, it must have been as thick as a goose-quill. He considers the average number of furrows as 10, "the ridges between them being broad, as in the common form, but the silicious particles are far less prominent, so that the plant does not partake of that asperity which so eminently characterises *E. hyemale*, *E. Mackaii*, and the more usual forms of *E. variegatum*, but has a smoother feel like that of *E. palustre*. . . . The sheaths are scarcely larger than the stem, with which, in dried specimens, they appear perfectly concolorous, with the exception of a narrow sinuous black band at the summit of each." (Brit. Ferns, ed. ii. pp. 39, 40.) Mr. Newman considered that the Mucruss plant was not the same as that from the Dublin Canal and Kincardineshire.

E. variegatum, or at least the stouter forms of it, is liable to be confounded with *E. trachyodon*, but the sheaths of the latter are cylindrical and closely applied to the stem, and they have long subulate, rather rigid teeth. In *E. variegatum* the sheaths widen upwards, and then contract; the teeth are considerably shorter than in *E. trachyodon*, even in those cases in which they are gradually acuminate. It is very rarely that the whole sheath becomes black, as they so commonly do in *E. trachyodon*.

Small forms of *E. palustre* have sometimes been mistaken for *E. variegatum*, but that plant has the stem-ridges without a furrow on their back, and without the two distinct rows of silicious tubercles on the ridges, which like the spaces between them, are only transversely rugose; the furrows of the sheaths which correspond to the divisions between the teeth are deeper, and the portion between these furrows more convex and without a central furrow until near the apex, while the lateral furrows, which are distinct in *E. variegatum*, are wanting in *E. palustre*; the teeth of the sheaths in *E. variegatum* are usually much longer and sharper than in *E. palustre*, and the spike of the latter is not apiculate or mucronate.

The stems of *E. variegatum* are completely evergreen, and the spikes more frequently survive the winter in this than in the other *Equiseta hyemalia*, although it occasionally happens to them all; when it does so, the spike in spring becomes slightly exserted and paler in colour.

It seems probable that under the name *E. hyemale*, Linnæus included not only the plant usually called *E. hyemale* by modern botanists, but also all the forms of the *Equiseta hyemalia* (the section *Hippochæte*, *Milde*). The same view was taken by Mr.

Newman in 1842, in which year he published descriptions of the British Equiseta in the 'Phytologist,' though in the 2nd edition of his 'British Ferns,' published in 1844, he described *E. Mackaii* (*E. trachyodon*) and *E. variegatum* as distinct from *E. hyemale*; but he marked the names of these species with a dagger, thus indicating they were "species whose distinctness I do not consider to be at present clearly proved." Dr. Stenzel, in Cohn's 'Kryptogamen Fl. von Schlesien,' includes under *E. hyemale* as subspecies *E. ramosissimum*, *Desf.*, *E. hyemale genuinum* with its var. *Schleicheri* (Moorei) and *E. variegatum*, *Schleicher*; and certainly all these forms pass so insensibly into each other, that I feel much inclined to follow his example. Still there seem sufficient differences to divide the subdeciduous *E. hyemale* with its form *Moorei* from the truly evergreen British Equiseta. *E. trachyodon* should probably be considered as but a subspecies of *E. variegatum*, but I think it is more than a variety; the living plant looks much more distinct from the forms of *E. variegatum* than do dried specimens.

Variegated Horsetail.

EXCLUDED SPECIES.

EQUISETUM RAMOSUM. *Schleicher.*

Said by Schkuhr to grow in Wales, but no authority is given. This is the plant now generally called *E. ramosissimum*, *Desf.* It occurs in the West of France, as far north as the valley of the Loire, and may possibly occur in Britain, as it might be passed as a form of *E. variegatum*. I have seen no Welsh specimens of *E. variegatum*, though it is reported from Carnarvon.

CLASS II.—CELLULARES.

Perennial or more rarely annual herbs which have a stem composed wholly of cellular tissue, producing adventitious roots and usually leaves or branches, more rarely reduced to that combination of stem and leaf termed a thallus, as in the Class III. (Thallophyta). Spores produced after fertilisation of the archegonia by the antherozoids, either solitary within a spirally marked indehiscent nucule, or numerous and contained in a spore case (*capsule* or *sporogonium*), which is usually elevated on a stalk. Antherozoids contained in the cells of coiled filaments or oblong vesicles, and discharged by the rupture of the cells.

ORDER XCVI.—CHARACEÆ.*

Aquatic annual or perennial herbs having branched stems, of which the internodes consist of a single large cell, which is either naked or covered by a layer of slender parallel cortical-cells, and frequently coated with a deposit of carbonate of lime. Stems furnished at the nodes with whorls of branchlets (leaves of many authors). At the base of the verticillate branchlets there are in many species two or more whorls, rarely only one whorl of stipule-cells (*involutral spines*, Babington—*stipulodes* of Messrs. Arthur Bennett and H. and J. Groves). Branchlets simple, or one or more times forked into rays, or with partial or rarely complete whorls of secondary branchlets (*bracts*). Male and female organs developed at the extremity of the branchlets, or at their nodes in the axils of the bracts. Male organs (*globules*) spherical, at first green, afterwards red or yellowish, consisting of 8 plates or shields, on the inside of each of which there is a central projecting cell, termed the *manubrium*, terminated by a globular cell, called the *capitulum*, or head, which produces 6 secondary *capitula*, or heads, from each of which proceed four long coiled filaments divided transversely into very numerous cells, in each of which is formed a biciliated antherozoid. Female organs (*nucules*) subglobular or ovoid or fusiform, reddish-yellow or olive, consisting of a nucleus

* In the general arrangement and nomenclature of the species of this Order, I have followed the eighth edition of Babington's 'Manual of British Botany,' pp. 468 and 473. The admirable papers of Messrs. H. and J. Groves in 'Journal of Botany,' 1880, have given me much assistance, especially by quoting synonyms from works to which I had not access, and giving the localities, so far as known, in which the species occur.

coated with five cells coiled spirally round it, terminated by a *coronula*, or crown, of 5 prominent cells in 1 row, or of 10 less prominent ones in two superposed rows. The apical cell of the nucleus is fertilised by the antherozoids; ultimately the nucule falls and germinates, [producing two shoots, one of which descends into the soil, produces root-hairs, and remains colourless, constituting the primary *rhizoid*; the other shoot ascends, and soon develops chlorophyll; its longitudinal growth is limited to a few cells, but at about its middle or below, a bud is formed, from which the perfect plant is developed: sometimes two or more rhizoids, and two chlorophyll-bearing shoots are produced from the same nucule. See Plate 1905, and A. de Bary in 'Botanische Zeitung,' 1875, p. 377, t. v. and vi.]*

GENUS I.—NITELLA. *Agardh.*

Internodes of the stem more or less pellucid, naked, without a covering of parallel cortical cells, also without a whorl of stipule-cells below the whorl of branchlets. Nucule with a crown of 10 small erect cells in 2 superposed rows, the cells of the upper row much smaller than those of the lower row, generally falling off before the nucule is ripe.

SECTION I.—EU-NITELLA. *A. Braun.*

Globules in the forks of the branchlets, of which the terminal rays are either 1-celled, or, if of more than 1 cell, having the apical cell much smaller than that behind it. Nucules below the globules.

SPECIES I.—*NITELLA FLEXILIS.* *Agardh.*

PLATE 1899.

Braun, Rabenhorst, and Stizinger, Char. Europ. Exsicc. Nos. 22, 23, 24, 54, 55, 101.

Nordstedt and Wahlstedt, Char. Scand. Exsicc. Nos. 8-14.

Nitella flexilis, Agardh, Syst. Alg. p. 124. Groves in Journ. Bot. 1880, p. 166, t. 210,

* Owing to the indisposition of Mr. Boswell, the task of bringing the Characeæ down to date, and seeing this portion of ENGLISH BOTANY through the press, has been entrusted by the publishers to myself; and in order that it may be known what portions I am responsible for, everything that I have added to Mr. Boswell's work is included in square brackets thus [], with the exception of the bulk of the synonymy for which I am chiefly responsible, some additional localities, and a few words it has been necessary to add or alter here and there in order to make the context clearer; beyond this, the work stands just as Mr. Boswell left it.—N. E. Brown, Herbarium, Kew, Surrey.

- f. 18. *Kütz*, Phyc. Gener. p. 318; Phyc. Germ. p. 256; Sp. Alg. p. 514; and Tab. Phyc. Vol. VII. p. 13, t. 32, f. ii. *Wallm.* in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 261.* *A. Braun*, Schweizer Char. p. 8; Conspectus Char. Europ. p. 2; in *Cohn*, Krypt. Fl. Schles. Vol. I. p. 397; and Fragm. Monogr. Char. p. 34. *Wahlst.* Bidr. Skand. Char. 1862, p. 4; and Monog. Sver. Norg. Char. p. 16. *Babing.* Man. ed. 8, p. 468. *Crepin*, in Bull. Soc. Bot. Belg. Vol. II. p. 129. *Leonhardi*, in Brunn Verhandl. Vol. II. p. 168. *Müller*, in Bull. Soc. Bot. Genève, 1881, p. 51. *Allen*, Char. Amer. pp. 9-12, pl. 4 and 5. *Sydow*, Europ. Char. p. 17.
- N. *Brongniartiana*, *Coss. & Germ.* Fl. Envir. Par. ed. i. p. 682; and Atlas, pl. 40, f. c; ed. ii. p. 896; and Atlas, pl. 46, f. d.
- N. *fureulata*, *Nordst.* in *Anderss.* Bot. Notiser, 1863, p. 35.
- Chara flexilis*, *Linn.* Sp. Pl. ed. i. p. 1157 (partly). *Canterer*, Österr. Char. p. 8. *Bischoff*, Krypt. Gewächse, p. 26, t. 1, f. 1-3; and Handb. Bot. Term. und Syst. t. 57, f. 2802-2804, and 2809. *Bruzel.* Obs. Char. pp. 15 and 23. *A. Braun* in Flora, 1835, Vol. I. p. 50. *Schkuhr*, Bot. Handb. t. 280. *Babing.* in Ann. Nat. Hist. 1850, Vol. V. p. 83. *Reichenb.* Iconog. Vol. VIII. p. 37, t. 795.
- C. *Brongniartiana*, *Wedd.* in *Coss. Germ.* and *Wedd.* Cat. rais. Pl. Vasc. Envir. Par. p. 152.
- "C. *fureulata*, *Reich.* in *Mössl.* Handb. ed. iii. Vol. III. p. 1664."
- C. *commutata*, *Rupr.* in Beitr. zur Pflanz. des Russ. Reich. 1845, dritte liefer. p. 9; and Symb. ad Hist. Plant. Ross. p. 77.

Monœcious. Dull dark green or olive. Stem slender, translucent, without cortical cells or spine-cells or stipule-cells. Branchlets usually 6 (more rarely 7 or 8) in a whorl, forked or more rarely trifid, with acute but not mucronate 1-celled points and rays. Primary whorls always lax; those of the secondary whorls similar and more compact (when it is the form *subcapitata* of Braun and C. *nidifica* of collectors, according to Babington). Nucules solitary, rarely in pairs, produced at the angle between the rays of the branchlets, without bracts, accompanied by a globule, which is placed above them, subglobular-ovoid, 7- or 8-striate ("8- or 9-striate," Groves), with a minute deciduous crown. In ponds and pools and ditches, rare.

Amberley, Sussex; Kent; Wimbledon Common, Surrey; Essex; Herts; Cambridge; Warwick; York; Northumberland; Suffolk; Lancashire; Kirkcudbright; Perth; Lough Allen, Leitrim.

* [The title-page of this volume runs thus:—"Kongl. Vetenskaps-Akademiens nya Handlingar för år, 1852. Stockholm, 1854." But Wallman's paper on Characeæ was presented to the Society in April 1853, and a separately paged extract of it was published in 1853, therefore, although it has been thought advisable to quote the volume as for 1854 (the volumes of this Journal not being numbered), the real date of publication of Wallman's monograph is 1853. A French translation by Dr. Nylander was published in 1854.]

I have seen neither Scotch nor Irish specimens, but Professor Babington and Messrs. Groves have it from both these countries.

England, Scotland, Ireland. Perennial. Summer.

Stems slender, flexible, 6 to 18 inches long or more; "often annularly encrusted" (Groves). Branchlets $\frac{1}{2}$ inch to 2 inches long; nucules minute, yellowish, ultimately black.

[The variety *crassa* (Braun, Rabenh. and Stiz. Exsicc. No. 101), distinguished from the type by its greater stoutness and shorter terminal segments; and variety *nidifica* (Wallm. in Kongl. Vet. Akad. Handl. Stockh., 1854, p. 262), which has the sterile branchlets often simple, and the fertile branchlets very short and collected into compact heads;—are stated by Messrs. H. and J. Groves (Journ. of Bot., 1883, p. 22), both to have been found in Perthshire; the former in Watson Loch, Doune, and Marlee Loch; the latter in Marlee Loch.]

There can be little doubt that the name "flexilis" was intended by Linnæus to include under it other forms besides the present, and it would have been much better to have adopted some later but more specially applied name; but "flexilis" is now in general use, so that little confusion is likely to occur.

Flaccid Nitella.

SPECIES II. (?) **NITELLA SYNCARPA.** *Chevallier.*

PLATE 1900.

Diœcious. Bright green or olive. Stem slender, translucent, without cortical cells or spine-cells or stipule-cells. Branchlets usually 6 (more rarely 7 or 8) in a whorl; those of the primary whorls in the male plant elongated and forked or trifid, in the female simple, forked or trifid, with acute but not mucronate 1-celled rays. Primary whorls always lax; those of the secondary whorls usually more compact, and in the female plant always so, often so short as to appear capitate. Nucules 2 or 3, rarely 4, at the middle of the simple branchlets, or in the angle between the rays when they are forked, without bracts, subglobular-ovoid, 5- or 6- (rarely 7-) striate, with a minute deciduous crown. Globules at the angle between the rays of the branchlets.

Var. *a. genuina.*

Braun, Rabenh. & Stiz. Char. Europ. Exsicc. No. 76.

Nordst. & Wahlst. Char. Scand. Exsicc. Nos. 1a, 1b, and 2.

- Nitella syncarpa*, *Chevallier*, Flor. Gen. ed. ii. Vol. II. p. 125. *Nordst.* in *Anderss.* Bot. Notiser, 1863, p. 35. *Kütz.* Phyc. Germ. p. 256; Sp. Alg. p. 514; and Tab. Phyc. Vol. VII. t. 31, f. ii. *Wahlst.* Bidr. Skand. Char. p. 9; and Monog. Sver. Norg. Char. p. 14. *Babing.* Man. ed. 8, p. 469. *A. Braun*, Consp. Char. Europ. p. 1; Schweiz. Char. p. 6; in *Cohn*, Krypt. Fl. Schles. Vol. I. p. 396; and Fragm. Monog. Char. p. 30, t. v. f. 101-103. *Coss. & Germ.* Fl. Envir. Par. ed. ii. p. 894; and Atlas, pl. 45, f. A. *H. & J. Groves* in Journ. Bot. 1880, p. 167. *Leonhardi* in Brunn, Verhandl. Vol. II. p. 167. *Müller* in Bull. Soc. Bot. Genève, 1881, p. 48. *Sydow*, Europ. Char. p. 10.
- Nitella syncarpa*, var. *leiopyrena*, *A. Braun*, Schweiz. Char. p. 7.
- N. syncarpa*, var. *capitata*, *Coss. & Germ.* Fl. Envir. Par. ed. i. p. 682; and Atlas, pl. 39, f. 1-6.
- Chara syncarpa*, *A. Braun* in Flora, 1835, Vol. I. p. 51. *Ganterer*, Österr. Char. p. 9. *Reichenb.* Iconog. Vol. VIII. t. 797? and 798.

Green. Branchlets of the female plant simple, those of the axillary branches less large, and often collected into small glomerules. Nucules covered with mucilage, placed about the middle of the simple branchlets, with 6 to 8 striæ, and with the spiral ridges on the central cell scarcely prominent. Globules covered with mucus, solitary in the forks of the rays, generally on the axillary branches, crowded into compact glomerules, from the branchlets being extremely short.

Var. *β. capitata*. *Kützing*.

- Braun*, *Rabenh. & Stiz.* Char. Europ. Exsicc. Nos. 26, 27, 28, and 104.
- Nordst. & Wahlst.* Char. Scand. Exsicc. Nos. 3 and 4.
- Nitella capitata*, *Agardh*, Syst. Alg. p. 125. *Nordst.* in *Anderss.* Bot. Notiser, 1863, p. 34. *Kütz.* Phyc. Gener. p. 319. *Wahlst.* Bidr. Skand. Char. p. 8; and Monog. Sver. Norg. Char. p. 15. *Wallm.* in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 265. *Babing.* Man. ed. 8, p. 469. *A. Braun*, Consp. Char. Europ. p. 1; in *Cohn*, Krypt. Fl. Schles. Vol. I. p. 396; and Fragm. Monog. Char. p. 31. *H. & J. Groves* in Journ. Bot. 1880, p. 167. *Crepin* in Bull. Soc. Bot. Belg. Vol. II. p. 130. *Leonhardi* in Brunn, Verhandl. Vol. II. p. 166. *Müller* in Bull. Soc. Bot. Genève, 1881, p. 49. *Sydow*, Europ. Char. p. 12.
- N. syncarpa*, vars. *β capitata* and *γ glæocephala*, *Kütz.* Phyc. Germ. p. 256.
- N. syncarpa*, vars. *capitata* and *oxygyna* (a misprint for *oxygyra!*), *A. Braun*, Schweiz. Char. p. 7.
- Chara capitata*, "*Nees ab Esenb.* in Denkschr. d. Bot. Gesellsch. Vol. II. (1818), p. 80, t. 6," teste *Braun*. *Bruzel*, Obs. Char. p. 24.
- C. syncarpa* var. *Reichenb.* Iconog. Vol. VIII. t. 799, f. 1076, 1077.
- C. syncarpa*, var. *capitata*, *Ganterer*, Österr. Char. p. 9.
- C. elastica*, *Amici*, Descriz. Chara, p. 9, t. 1, f. 2-3, and t. 2.

Green or light olive. Branchlets of the female plant forked or trifid, those of the axillary branches usually collected into small

glomerules. Nucules covered with mucilage, placed in the angles between the branchlets and the rays, with 6 or 7 striæ, and with the spiral ridges on the central cell very prominent and acute. Globules covered with mucilage, solitary in the forks of the rays, mostly on axillary branchlets and crowded into small compact glomerules or heads, from the branchlets being extremely short.

Var. γ . *opaca*. Kütz.ing.

PLATE 1900.

Braun, Rabenh. & Stiz. Char. Europ. Exsicc. Nos. 29, 51, 52, 53, 77, 105, 106.

Nordst. & Wahlst. Char. Scand. Exsicc. Nos. 5a, 5b, 6a, 6b, 7.

Nitella syncarpa, var. opaca, Kütz. Phyc. Germ. p. 256.

N. syncarpa, vars. opaca, glomerata, and pachygyra, A. Braun, Schweiz. Char. p. 7.

N. opaca, Agardh, Syst. Alg. p. 124. A. Braun, Consp. Char. Europ. p. 1; in Cohn, Krypt. Fl. Schles. Vol. I. p. 397; and Fragm. Monog. Char. p. 32. Nordst. in Anderss. Bot. Notiser, 1863, p. 34. Wahlst. Bidr. Skand. Char. p. 6; and Monog. Sver. Norg. Char. p. 15. Wallm. in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 264. Coss. & Germ. Fl. Envir. Par. ed. ii. p. 895; and Atlas pl. 45, f. b. Crepin in Bull. Soc. Bot. Belg. Vol. II. p. 129. Leonhardi in Brunn, Verhandl. Vol. II. p. 165. H. & J. Groves in Journ. Bot. 1880, p. 166, t. 210, f. 19. Babing. Man. ed. 8, p. 469. Müller in Bull. Soc. Bot. Genève, 1881, p. 50. Sydow, Europ. Char. p. 14.

N. atrovirens, Wallm. in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 263.

N. pedunculata, Agardh, Syst. Alg. Introd. p. xxvii.

Chara opaca, Agardh in Bruzel. Obs. Char. pp. 16 and 23.

C. flexilis, Sm. Engl. Bot. No. 1070.

C. syncarpa, Thuill. Fl. Envir. Par. p. 473. Ganterer, Österr. Char. p. 9. Babing. in Ann. Nat. Hist. 1850, Vol. V. p. 83.

C. syncarpa, vars. opaca and pseudoflexilis, A. Braun in Flora, 1835, i. p. 52.

C. syncarpa, var. Smithii, Coss. Germ. & Wedd. Cat. rais. Pl. Vasc. Envir. Par. p. 151. Coss. & Germ. Fl. Envir. Par. ed. i. p. 682; and Atlas, pl. 39, f. 7-12.

Olive. Branchlets of the female plant simple, forked or trifid; the primary are mostly barren, those of the axillary branches collected into rather large, lax glomerules. Nucules not coated with mucilage, placed in the angles between the branchlets and the rays, with 5 or 6 striæ, and with the spiral ridges on the central cell rather prominent and blunt. Globules not covered with mucilage, in the forks of the rays, mostly on axillary branches, concealed in rather large lax glomerules, from the branchlets being only moderately short.

In lakes, ponds, pools, and ditches.

Var. α .—Not known to occur in Britain, but very likely to be detected, as it occurs in the north of France.

Var. β .—Professor A. Braun referred to this var. specimens in the Kew Herbarium, from Kent; Llyn Idwal, Carnarvon; and Killarney, Kerry.

Var. γ .—Common and generally distributed in England and Scotland, in which it is known to occur northwards to Caithness and Orkney. From south to north of Ireland.

England, Ireland, and Scotland. Annual or perennial.
Spring and "Summer."

The var. *opaca*, which is considered a distinct species by Braun and others, is a variable plant 6 inches to 2 feet long, the branchlets $\frac{1}{2}$ to 2 inches long; both in the male and female plant, but especially in the latter, the fertile branches are usually so short that the globules and nucules seem to be produced in heads, though occasionally two or three nucules may be found at the forks of elongate branches. The colour of the plant is usually dull olive, sometimes dark olive, and it not unfrequently has the stem coated with carbonate of lime, generally in rings, but sometimes continuously. It is so like *N. flexilis* that in a barren state it is extremely difficult, sometimes impossible, to discriminate between them, as the fact of the latter being monœcious is not then observable. I have little doubt that the two ought to be considered as at best but subspecies.

The typical *N. syncarpa* and *N. capitata* are both usually more slender and of a brighter green colour than *N. opaca*; the heads are smaller, and the nucules and globules are described as surrounded by mucilage, a character which is not easily distinguishable in dried specimens [unless held obliquely to the light and viewed under a lens].

According to Cosson and Germain, *N. syncarpa* (*genuina*) germinates in spring and fruits in the end of summer or autumn; *N. capitata* germinates in autumn and fruits in spring; while *N. opaca* fruits from May to July. In the pond at Balmuto it fruited in April and appeared to be perennial. In an aquarium globe it lived two years, but never fruited.

[Of *Ch. syncarpa*, Thuill., there exists in the Kew Herbarium an authentic specimen from Thuillier, obtained from Gay's Herbarium, labelled "*Chara syncarpa*, Thuill. Fl. Par. 473. Lois. Fl. Gall. II. p. 623.—Thuillier 1812." Wallroth, who saw this specimen in 1828, named it "*Chara flexilis*, L.;" and A. Braun in Sept. 1834 has labelled it "*Chara syncarpa*, Thuill. (specimen ab auctore!) apices foliorum a forma communi paulo recedunt (*Ch. syncarpa pseudoflexilis*)." An examination of this specimen shows that it is somewhat intermediate in character between the plants now called *N. syncarpa* and *N. opaca*, having more the appearance and dark colour of some states of *N. opaca*; the specimen is female, and the branchlets are simple,

no traces of mucilage, so characteristic of *N. syncarpa*, are visible on the globules and nucules, and the spiral ridges on the nucleus of the nucules are less prominent and acute than in *N. opaca*, and more so than in *N. syncarpa*, though no doubt this is a variable character, and one which Messrs. Groves seem to have misunderstood, as they describe the nucules (under *N. capitata*) as having "sharp prominent cells," but the spiral cells of the nucules are not more prominent in *N. capitata* than in *N. syncarpa*, and are not sharp, but rounded as in other Characeæ; the terms *oxygyra*, *pachygyra*, &c. used by A. Braun, refer to the ridges on the nucleus *between* the spiral cells, which correspond to the striæ on the surface of the nucule, and are not cells, but merely thickened portions of cell-walls. Of the specimens at Kew referred by Braun to *N. capitata*, the Llyn Idwel plant (*C. gracilis*, *Wilson* in *Hook. Bot. Miscell.* vol. i. p. 336; not of Sm.) has traces of mucilage, and seems rather to belong to *N. syncarpa*, as the nucleus of the nucule is broader, and the ridges on it are not nearly so prominent and sharp as in typical *N. capitata*; the Kent specimen has no mucilage, and is simply the ordinary *N. opaca*, which is doubtless but a sexual state of *N. flexilis*, for taking the whole of the forms of *N. flexilis* and *N. opaca* there is nothing to distinguish the two but sex, which is not a specific character, and *N. flexilis* may be regarded as a polygamous species, with male, female, and hermaphrodite plants. The Killarney specimens in size and general appearance resemble the Llyn Idwel plant, but there are no traces of mucilage on them, and except in being smaller are not distinguishable from some specimens collected at Lyndhurst, and distributed by Messrs. Groves as *N. opaca* (No. 86). *N. opaca* var. *attenuata* described by Messrs. Groves in *Jour. Bot.* 1881, p. 356, is a striking form found at Hythe, S. Hants, with long and very slender branchlets, but still is evidently only a slender state of their Lyndhurst plant, and except that there is no mucilage on the globules and nucules, it is identical with *N. syncarpa* of Nordstedt and Wahlsted's *Char. Scand. Exsicc.* No. 2 (a form well figured in Reichenbach's *Iconographia*, vol. viii. pl. 798), which fact would seem to imply that the presence or absence of mucilage is of doubtful value as a specific character.—N. E. B.]

Twin-fruited Nitella.

SPECIES III.—**NITELLA TRANSLUCENS.** *Agardh.*

PLATE 1901.

Braun, Rabenh. & Stiz. Char. Europ. Exsicc. No. 19.

Nordst. & Wahlst. Char. Scand. Exsicc. No. 81.

Nitella translucens, *Agardh, Syst. Alg.* p. 124. *A. Braun, Consp. Char. Europ.* p. 2; and *Fragm. Monog. Char. p.* 49. *Coss. & Germ. Fl. Envir. Par. ed. i.* p. 682;

and Atlas pl. 40, f. B ; ed. ii. p. 895 ; and Atlas pl. 46, f. C. *Kütz.* Phyc. Gener. p. 318 ; Sp. Alg. p. 513 ; Tab. Phyc. Vol. VII. p. 10, t. 26, f. i. *Wallm.* in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 259. *Wahlst.* Bidr. Skand. Char. p. 2 ; and Monog. Sver. Norg. Char. p. 17. *Nordst.* in *Anderss.* Bot. Notiser, 1863, p. 36. *Crepin*, in Bull. Soc. Bot. Belg. Vol. II. p. 128. *Leonhardi* in Brunn, Verhandl. Vol. II. p. 173. *H. & J. Groves* in Journ. Bot. 1880, p. 165, t. 210, f. 17. *Babing.* Man. ed. 8, p. 469. *Sydow*, Europ. Char. p. 19.

Chara translucens, *Persoon*, Syn. Vol. II. p. 531. Sm. Engl. Bot. No. 1855. *Loisel.* *Deslong.* Notice, p. 135. *Bruzel.* Obs. Char. p. 22. *A. Braun* in Flora, 1835, Vol. I. p. 50. *Babing.* in Ann. Nat. Hist. 1850, Vol. V. p. 84.
Chara flexilis, *Thuill.* Fl. Envir. Par. p. 472 ; not of Linn.

Monœcious. Bright shining green. Stem rather stout, pellucid, without cortical cells or spine-cells or stipule-cells. Branchlets 4 to 8 in a whorl ; those of the primary whorls barren, elongated, rather stout, obtuse, simple, or with 1 or more terminal rays, so short that they are reduced to little more than points, some of them elongated and bearing secondary fertile whorls, with extremely short trifid branches, giving the appearance of forming small heads or interrupted spikes. Nucules 2 to 3, immediately below the 3 rays of the fertile branchlets, subglobular-ovoid, 5- to 7-striate, with a minute deciduous crown. Globules solitary, terminating the fertile branch, and surrounded by its 3 short rays immediately above the nucules.

In stagnant water, but usually where there is considerable depth, rarely in streams. Rather rare, but occurring in many places in the south of England ; rare in Scotland, where it occurs in Lochnaw, Wigtonshire ; neighbourhood of Edinburgh ; Kinghorn, Fife ; Loch Leven, Kinross ; Loch Lubnaig, Perthshire ; Loch of Drnm, Aberdeenshire. In Ireland it is reported from Kerry, Galway, Antrim, and Derry.

England, Scotland, Ireland. Perennial. Summer.

N. translucens is perhaps the finest of the British Characeæ from the bright green colour and large size, being 1 to 4 feet long or more, with much stouter stems than any of the other Nitellæ. It is well distinguished by the rays of the barren branchlets being so reduced as to form mere papillæ at the end of those branches where they occur. The fertile whorls are so reduced that they look something like the spikes of *Potamogeton pusillus*.

Translucent Nitella.

SPECIES IV.—**NITELLA MUCRONATA.** *Cosson & Germain.*

PLATE 1902.

Braun, Rabenh. & Stiz. Char. Europ. Exsicc. Nos. 17–20, 30.*Nordst. & Wahlst.* Char. Scand. Exsicc. No. 82.

Nitella mucronata, *Coss. & Germ.* Fl. Envir. Par. ed. i. p. 683, and Atlas pl. 40, f. D; ed. ii. p. 896; and Atlas pl. 46, f. E, 1–3. *A. Braun*, *Cousp.* Char. Europ. p. 2; *Schweiz.* Char. p. 9; in *Cohn*, *Krypt.* Fl. Schles. Vol. I. p. 398; and *Fragm. Monog.* Char. p. 50, t. i. f. 39–42. *Nordst.* in *Anderss.* Bot. Notiser, 1863, p. 36. *Wallm.* in *Kongl. Vet. Akad. Handl. Stockh.* 1854, p. 253. *Kütz.* Phyc. Germ. p. 256; *Sp. Alg.* p. 514; *Tab. Phyc.* Vol. VII. p. 13, t. 33, f. i. *Wahlst.* *Monog. Sver. Norg.* Char. p. 17. *Crepin* in *Bull. Soc. Bot. Belg.* Vol. II. p. 128. *Leonhardi* in *Brunn, Verhandl.* Vol. II. p. 172. *H. & J. Groves* in *Journ. Bot.* 1880, p. 165, t. 210, f. 16. *Babing.* *Man.* ed. 8, p. 469. *Müller* in *Bull. Soc. Bot. Genève*, 1881, p. 52. *Sydow*, *Europ.* Char. p. 22.

N. exilis, *A. Braun*, *Schweiz.* Char. p. 9. *Kütz.* *Sp. Alg.* 515; and *Tab. Phyc.* Vol. VII. p. 13, t. 33, f. ii. (excluding syn. *C. exilis*, *Amici*).

N. flabellata, *Kütz.* *Phyc. Gener.* p. 318; and *Phyc. Germ.* p. 256. *Wallm.* in *Kongl. Vet. Handl. Stockh.* p. 249. *A. Braun* in *Cohn*, *Krypt.* Fl. Schles. Vol. I. p. 398.

N. Norvegica and *N. longifurca*, *Wallm.* in *Kongl. Vet. Akad. Handl. Stockh.* 1854, p. 252.

Chara mucronata, *A. Braun* in *Ann. Sciences Nat.* 2nd ser. Vol. I. p. 351; and in *Flora*, 1835, Vol. I. p. 52. *Babing.* in *Ann. Nat. Hist.* 1850, Vol. V. p. 84. *Ganterer*, *Österr.* Char. p. 9.

C. furcata, *Amici*, *Descriz.* Char. p. 14, t. v. f. 2, and t. 3, f. 2 (not of *Roxb.*).

C. Barbierii, *Bals. Crivelli* in *Bibl. Ital.* vol. 97, p. 190.

C. flexilis, *Reichenb.* *Iconog.* Vol. VIII. p. 38, t. 795, (not of other Authors).

C. flexilis, var. *stellata*, *Wallr.* *Annus Bot.* p. 178, t. vi. f. 1, 2.

C. longifurca, *Rupr.* in *Beitr. zur Pflanz. des Russ. Reich.* 1845, dritte lief. p. 10.

C. brevicaulis, *Bertol.* *Fl. Ital.* X. p. 19.

Monœcious. Green or olive. Stem rather slender, translucent, without cortical cells or spine-cells or stipule-cells. Branchlets 4 to 8 in a whorl, slender, most of them 2 or 4 times bi- or tri- or quadrifurcate; the ultimate divisions shorter than the lower, often of 2 cells and sharply mucronate; those of the primary whorls rather lax and with elongated segments; those of the secondary whorls similar or short, sometimes so much so as to give the appearance of forming heads. Nucules solitary, immediately below the upper forks of the rays of the branchlets, subglobular-ovoid, 5- or 6-striate, with a minute deciduous crown. Globules solitary between the forks of the branchlets, immediately above the nucules.

In still water, very rare; marsh ditch at West Grinstead, Sussex, (Mr. Borrer); water-hole by the River Ouse, near Bedford (A. H. Davies, and J. Saunders).

England. Annual. Summer, Autumn.

Stems 6 inches to 1 foot long; primary branches $\frac{1}{4}$ to 2 inches long. *N. mucronata* has sometimes much the habit of *N. flexilis*, but may be distinguished by its more divided branches, of which the ultimate rays are often 2-celled and tipped with a small conical cell or mucro.

I have not seen Mr. Borrer's specimens of this plant, but Messrs. Groves state that it is near the var. *heteromorpha*, Braun [figured in Bischoff, Handb. Bot. Term. und Syst. t. 57, f. 2811], and this is shown by the figure they give of it, which was drawn from Mr. Borrer's specimen. Var. *heteromorpha* is the name given to the form in which the secondary whorls are contracted, and not lax like the primary ones.

Mucronate Nitella.

SPECIES V.—**NITELLA GRACILIS.** *Agardh.*

PLATE 1903.

Braun, Rabenh. & Stiz. Char. Europ. Exsicc. Nos. 24, 25, 57, 58, 59.

Nordst. & Wahlst. Char. Scand. Exsicc. Nos. 15, 16, 17.

Nitella gracilis, Agardh, Syst. Alg. p. 125. *Braun,* Consp. Char. Europ. p. 2; Schweiz.

Char. p. 10; in *Cohn,* Krypt. Fl. Schles. Vol. I. p. 399; and *Fragm. Monog. Char.*

p. 58. *Coss. & Germ.* Fl. Envir. Par. ed. i. p. 683; and Atlas pl. 41, f. E; ed. ii.

p. 897; and Atlas pl. 47, f. F. *Kütz.* Phyc. Germ. p. 256; Phyc. Gener. p. 319;

Sp. Alg. p. 515; and Tab. Phyc. Vol. VII. p. 14, t. 34, f. i. *Nordst.* in *Anderss.*

Bot. Notiser, 1863, p. 38. *Crepin* in Bull. Soc. Bot. Belg. Vol. II. p. 128.

Wallm. in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 247. *Leonhardi* in Brunn

Verhandl. Vol. II. p. 170. *Wahlst.* Bidr. Skand. Char. p. 1; and Monog. Sver.

Norg. Char. p. 19. *H. & J. Groves* in Journ. Bot. 1880, p. 164, t. 210, f. 15.

Babing. Man. ed. 8, p. 469. *Müller* in Bull. Soc. Bot. Genève, 1881, p. 52. *Sydow,*

Europ. Char. p. 25.

Chara gracilis, Sm. Engl. Bot. No. 2140. *Bruzel.* Obs. Char. pp. 17 and 24. *Bischoff,*

Hand. Bot. Term. und Syst. t. 57, f. 2810. *Reichenb.* Iconog. Vol. VIII. p. 36.

t. 793. *A. Braun* in Flora, 1835, Vol. I. p. 53. *Ganterer,* Österr. Char. p. 10,

t. i. f. ii. *Babing.* in Ann. Nat. Hist. 1850, Vol. V. p. 84.

C. exilis, Barbieri in *Amici,* Descriz. Char. p. 20, t. iii. f. vi.

Monœcious. Bright green. Stem slender, pellucid, without cortical cells or spine-cells or stipule-cells. Branchlets 4 to 7 in a whorl, capillary, most of them 2 to 3 times bi- or tri- or quadrifurcate, the ultimate divisions shorter than the lower, often of 2 cells, sharply mucronate, those of the primary whorls rather lax and with elongated segments, those of the secondary whorls similar and also lax. Nucules solitary immediately below all the forks of the rays of the branchlets, subglobose, 6- to 7-striate, with a very minute deciduous crown. Globules solitary between the forks of the branchlets, immediately above the nucules.

In boggy pools and ditches, very rare.

In St. Leonard's Forest, Sussex, found by Mr. Borrer, from which station it was described by Smith. Messrs. Groves state that "it has since been collected by Mr. D. Orr, at Glen Cullen, near Ballybetagh, co. Dublin," by Mr. Nicholson, at Kingston, Surrey; and by Mr. Beckwith, in Shropshire.

England, Ireland. Annual. Autumn.

A very delicate plant, usually 3 to 6 inches long; but the form *elongata* of Braun, Rabenh. and Stiz. Char. No. 58 is more than a foot. Rays of the primary whorls $\frac{1}{4}$ to $\frac{1}{2}$ inch long, much divided, with the segments as delicate as the filaments of a *Conferva*; secondary whorls similar, but shorter. Sometimes, however, the plant has thicker stems and branchlets, and the secondary whorls much denser, as in the form *bugellensis*, Braun, Rabenh. and Stiz. Char. No. 25, which seems to me to come very near *Nitella mucronata*, var. δ . 17 of the same set, and to be dissimilar to the typical and elongated states represented by Nos. 24, 57 and 58. I have seen neither English nor Irish specimens; the Irish is described by Messrs. Groves as a "smaller, stouter form, and the ultimate rays are shorter, and it is annularly incrustated." Messrs. Groves describe the nucules "as 6- or 7-striate," but those I have examined have been mostly 7-striate. Coss. and Germ. say they are with 4 or 5 striæ, and that the fructification takes place in April and May and in autumn.

Slender Nitella.

SPECIES VI.—**NITELLA TENUISSIMA.** *Kütz.*

PLATE 1904.

Braun, Rabenh. & Stiz. Char. Europ. Exsicc. Nos. 60, 103.

Nordst. & Wahlst. Char. Scand. Exsicc. No. 41.

Nitella tenuissima, *Kütz.* Phyc. Gener. p. 319; Phyc. Germ. p. 256; Sp. Alg. p. 515; and Tab. Phyc. Vol. VII. p. 14, t. 34, f. ii. *Coss. & Germ.* Fl. Envir. Par. ed. i. p. 683; and Atlas pl. 41, f. F; ed. ii. p. 898; and Atlas pl. 47, f. G. *Braun*, Consp. Char. Europ. p. 2; Schweiz. Char. p. 10; in *Cohn*, Krypt. Fl. Schles. Vol. I. p. 399; and Fragm. Monog. Char. p. 62. *Wallm.* in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 246. *Leonhardi* in Brunn Verhandl. Vol. II. p. 169. *Wahlst.* Monog. Sver. Norg. Char. p. 19. *H. & J. Groves* in Journ. Bot. 1880, p. 163, t. 209, f. 14. *Babing.* Man. ed. 8, p. 469. *Müller* in Bull. Bot. Genève, 1881, p. 53. *Sydow*, Europ. Char. p. 28. *Allen*, Char. Amer. p. 13, pl. vi.

N. hyalina, *Agardh*, Syst. Alg. 126 (teste *Bab.*). Non *DC.*

Chara tenuissima, *Desv.* in Journ. de Botanique, 1809, Vol. II. p. 313. *Loisel. Deslong.* Notice, p. 136. *Bischoff*, Handb. Bot. Term. und Syst. t. 57, f. 2812. *Ganterer*, Österr. Char. p. 10, t. 1, f. i. *Reichenb.* Iconog. Vol. VIII. p. 36, t. 791, 792. *A. Braun* in Flora, 1835, Vol. I. p. 53. *Babing.* in Ann. Nat. Hist. 1850, Vol. V. p. 85.

Monœcious. Dark green. Stems capillary, pellucid, without cortical cells or spine-cells or stipule-cells. Branchlets 5 to 8 in a whorl, most of them 3 to 7 times bi- or tri-furcate, the ultimate divisions longer than the lower, 2-celled and longly mucronate, those of all the whorls very compact with short segments, so that the whorls resemble widely separated heads which are mucilaginous and generally encrusted. Nucules solitary immediately below all the forks of the rays of the branches, ovoid, 7- to 9-striate with a very minute deciduous crown. Globules solitary between the forks of the branchlets immediately above the nucules.

In fen ditches and pits, very rare. In Roydon Fen, Norfolk; Bottisham, Wicken, and Burwell Fens, Cambridgeshire; Anglesea, (J. E. Griffith); first found by Professor Henslow in 1829.

England, Wales. Annual. Summer, Autumn.

A very elegant species, usually 2 to 3 inches high, primary branches $\frac{1}{2}$ to $\frac{1}{6}$ inch long, whorls usually $\frac{1}{4}$ to $\frac{1}{2}$ inch apart, but sometimes less.

I have a fine series of specimens of this, collected in Burwell Fen by Dr. J. A. Power, and one from Bottisham Fen collected by Mr. C. A. Stevens in May, 1838.

N. tenuissima comes near to *N. gracilis*, but is much smaller, and very different in appearance from the extreme shortness of the branches, though it is difficult to find any marked distinction between them. The terminal or mucro cell of the ultimate rays of the branchlet is longer in proportion and more gradually tapering than in *N. gracilis*.

Dwarf Nitella.

SECTION II.—TOLYPELLA. *A. Braun.*

Globules on the inner side of and at the first node of branchlets, accompanied by 2 to 4 bracts, similar to the branchlet but shorter and generally unequal. Nucules surrounding the globule.

SPECIES VII.—NITELLA GLOMERATA. *Chevallier.*

PLATES 1905 AND 1906.

Monœcious (or rarely dicecious?). Pale or dark olive. Stem rather stout, transparent or much more commonly opaque from being thickly encrusted with carbonate of lime, without cortical cells or spine-cells or stipule-cells. Branchlets 6 to 12 in a whorl, those of the primary

whorls sterile, of 3 to 5 cells, obtuse, unbranched; fertile whorls terminating the stems, and primary and secondary branches, forming rather large, oblong-ovoid or oval-ovoid heads consisting of the numerous branchlets and incurved bracts; branchlets 3- to 5-celled, obtuse, bearing at the first node 3 or 4 lateral bracts, each bract of 3 or 4 cells, obtuse, similar to the terminal portion of the branchlet, but shorter and incurved over the nucules and globule. Nucules 2 to 5 together, at the nodes of the fertile branchlets, between the bracts, oval-ovoid, 8- to 9-striate, with a minute deciduous crown. Globules solitary, lateral on the inner side of the fertile branches between the bracts, surrounded by the nucules.

Var. *a. genuina*.

PLATE 1905.

- Braun, Rabenh. & Stiz. Char. Europ. Exsicc. No. 17 partly. Nordst. & Wahlst. Char. Scand. Exsicc. Nos. 43, 44, 45.*
- Nitella glomerata, Chevallier, Fl. Gen. ed. 2, Vol. II. p. 124. Coss. & Germ. Fl. Envir. Par. ed. i. p. 681; and Atlas pl. 41, f. n, excluding description under explanation of plate; ed. 2, p. 893. Kütz. Sp. Alg. p. 517. Wallm. in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 270. A. Braun, Consp. Char. Europ. p. 3. Crepin in Bull. Soc. Bot. Belg. Vol. II. p. 130. Fl. Danica, t. 2800. Babing. Man. ed. 8, p. 470.*
- N. glomerulifera, Wallm. in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 270. Kütz. Tab. Phyc. Vol. VII. p. 32, t. 81, f. ii. Not of A. Braun.*
- N. flexilis, var. glomerulifera, Kütz. Sp. Alg. p. 514.*
- Tolypella glomerata, Leonh. in "Lotos, 1863, p. 129;" and in Brunn, Verhandl. Vol. II. p. 176. Wahlst. Monog. Sver. Norg. Char. p. 22. H. & J. Groves in Journ. of Bot. 1880, p. 162, t. 209, f. 11. A. Braun, Fragm. Monog. Char. p. 95. Sydow, Europ. Char. p. 35.*
- Chara glomerata, Desv. in Loisel. Deslong. Notice, p. 135. A. Braun in Flora, 1835, Vol. I. p. 55. Baker in Report of London Bot. Exchange Club for 1867, p. 16; and in Journ. Bot. 1868, p. 73.*
- C. glomerulifera, Rupr. in Beitr. zur Pflanz. des Russ. Reich. 1845, dritte liefer. p. 9.*
- C. prolifera, Babing. in Ann. Nat. Hist. ser. ii. Vol. V. 1850, p. 87. Not of A. Braun.*

Monœcious.

Var. *β. Smithii*.

PLATE 1906.

- Nitella Smithii, Wallm. in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 271.*
- Chara Smithii, Babing. in Ann. Nat. Hist. ser. ii. Vol. V. 1850, p. 86.*
- C. nidifica, Sm. Engl. Bot. ed. i. No. 1703, principal figure. Not of Roth.*

Dicœcious? Only the male plant known.

In pools and ditches, particularly in brackish water, rare.

Var. α recorded from Devonshire, Hayling Island, Hants; Kent, Middlesex, Essex, Norfolk, Cambridgeshire, Lancashire, Huntingdonshire, Yorkshire, Anglesea, Forfarshire, and near Dublin. Originally found near Cley, Norfolk, by Mr. Dawson Turner, and Mr. Borrer, in 1806. Var. β at Lancing, Sussex, in 1804-5, by Mr. Borrer, who says [Suppl. to Engl. Bot. 1834, Vol. II., under No. 2762] it was found in a ditch "which I believe the tide never reaches."

England, Wales, Scotland, and Ireland. Annual, perennial.
Spring, early Summer.

Stems much branched, very brittle, light or dark olive, and transparent when not coated with carbonate of lime, as is generally the case, 3 inches to 1 foot long; barren branchlets $\frac{3}{4}$ to 2 inches long. Fertile heads about $\frac{1}{2}$ inch long by $\frac{1}{4}$ inch across. [The nucules sometimes have the spiral investing cells prolonged above the nucleus or nut, into a short neck, as shewn in one of the nucules on our plate (1905), which was taken from the more robust specimen thereon represented, all the nucules of that plant being similar.]

Messrs. H. and J. Groves and MM. Cosson and Germain both cite No. 17 Braun, Rabenh. and Stiz. Char. Europ. Exsicc. But in my set No. 17 is *Nitella mucronata* var. *tenuior*, and there is no *N. glomerata* in the set at all. [This seems to be the case in some other sets.]

With regard to the plant called *C. Smithii* by Babington, the question of its identity with the ordinary form of *N. glomerata* must remain uncertain; all the other known species of the section *Tolypella* are monœcious, so it would be a curious circumstance if *N. Smithii* were really diœcious; yet Mr. Borrer was far too acute an observer; and far too correct, to be likely to make a mistake on the point. [I have very carefully examined Mr. Borrer's Lancing specimen, and only find globules upon it, not a trace of a nucule: this is therefore, I have no doubt, another case of a polygamous species, as in that of *N. flexilis*; see note under *N. syncarpa* var. *opaca*.—N. E. B.]

Clustered Nitella.

SPECIES VIII.—**NITELLA INTRICATA.** *Agardh.*

PLATE 1907 AND 1908.

Monœcious. Very pale olive. Stem rather stout, transparent or more commonly opaque from being thickly encrusted with carbonate of lime, without cortical cells or spine-cells or stipule-cells. Branchlets 6 to 20 in a whorl; those of the primary whorls sterile, of 3 to 5 cells, acute, usually with a few simple or once-branched, 3- or 4-jointed branchlets

similar to the bracts of the fertile whorls, more rarely unbranched. Fertile whorls terminating the stems and primary and secondary branches, forming large subglobose heads, consisting of very numerous branchlets, and incurved bracts. Branchlets 3- to 5-celled, acute, bearing at the first node 4 or 6 lateral bracts, each bract of 3 or 4 cells attenuated and acute, similar to the terminal portion of the branches, but shorter, and incurved over the nucules and globule. Nucules 2 to 8 together at the nodes of the fertile branchlets between the bracts, [and at the base of the branchlets,] subglobose-ovoid, 8- or 9-striate, with a minute deciduous crown. Globules solitary, lateral on the inner side of the fertile branches, between the bracts, surrounded by the nucules, [and lateral at the base of the branchlets.]

Var. *a. genuina*.

PLATE 1907.

Braun, Rabenh. & Stiz. Char. Europ. Exsicc. Nos. 18, 33, 108.

Nordst. & Wahlst. Char. Scand. Exsicc. Nos. 46, 47, 48.

Nitella intricata, Agardh, Syst. Alg. p. 125 (excluding synonym C. flexilis, var. stellata, Wallr. and the plant quoted from the Baltic Sea). Coss. & Germ. Fl. Envir. Par. ed. ii. p. 893; and Atlas pl. 47, f. i. Nordst. in Anderss. Bot. Notiser, 1863, p. 39. Braun, Consp. Char. Europ. p. 3. Crepin in Bull. Soc. Bot. Belg. Vol. II. p. 130. Fl. Danica, t. 2744. Müller in Bull. Soc. Bot. Genève, 1881, p. 56. Babing. Man. ed. 8, p. 470.

N. fasciculata, A. Braun, Schweiz. Char. p. 11. Kütz. Sp. Alg. p. 517; and Tab. Phyc. Vol. VII. p. 14, t. 36.

N. polysperma, Kütz. Phyc. Gener. p. 318; and Phyc. Germ. p. 255. Wallm. in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 269.

N. glomerata, Coss. & Germ. Atlas Fl. Envir. Par. ed. i., as to description under explanation of plate 41, not as to figure.

Tolypella intricata, Leonhardi "in Lotos, 1863, p. 32;" and in Brunn, Verhandl. Vol. II. p. 175. Braun in Cohn, Krypt. Fl. Schles. Vol. I. p. 400; and Fragm. Monog. Char. p. 99. Wahlst. Monog. Sver. Norg. Char. p. 22. H. & J. Groves in Journ. Bot. 1880, p. 163, t. 209, f. 13. Sydow, Europ. Char. p. 38.

Chara intricata, Roth, Catalecta Bot. Fasc. II. p. 125. Baker in Report of London Bot. Exchange Club for 1867, p. 15; and in Journ. Bot. 1868, p. 73.

C. fasciculata, Amici, Descriz. Char. p. 16, t. iv. f. iv. and t. v. f. iii.

C. polysperma, A. Braun in Ann. Sciences Nat. 2nd ser. Vol. I. p. 352; and in Flora, 1835, Vol. I. p. 56. Ganterer, Österr. Char. p. 12, t. i. f. iii. Babing. in Ann. Nat. Hist. ser. ii. Vol. V. 1850, p. 88.

Branchlets of the sterile whorls 6 to 14, once or twice branched with the divisions simple or again branched.

Var. *β. prolifera*.

PLATE 1908.

- Nitella prolifera*, *Kütz.* Phyc. Germ. p. 255. *Wallm.* in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 269. *A. Braun*, Consp. Char. Europ. p. 3. *Crepin* in Bull. Soc. Bot. Belg. Vol. II. p. 130. *Müller* in Bull. Soc. Bot. Genève, 1881, p. 55. *Babing.* Man. ed. 8, p. 470.
- N. fasciculata*, var. *robustior* (printed "robuster" by a typog. error). *A. Braun*, Schweiz. Char. p. 12. *Kütz.* Sp. Alg. p. 517.
- N. Borreri*, *Wallm.* in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 271.
- Tolypella prolifera*, *Leonhardi* "in *Lotos*, 1863, p. 57;" and in *Brunn*, Verhandl. Vol. II. p. 176. *Braun* in *Cohn*, Krypt. Fl. Schles. Vol. I. p. 401; and *Fragm. Monog.* Char. p. 97. *H. & J. Groves* in Journ. Bot. 1880, p. 162, t. 209, f. 12. *Sydow*, Europ. Char. p. 37.
- Chara prolifera* (*Ziz.* herb.), *A. Braun* in Ann. Sciences Nat. 2nd ser. Vol. I. p. 352; and in *Flora*, 1835, Vol. I. p. 56.
- C. Borreri*, *Babing.* in Ann. Nat. Hist. ser. ii. Vol. V. 1850, p. 87; and *Man. Brit. Bot.* ed. iii. p. 421.
- C. nidifica*, *Borrer* in Suppl. to Engl. Bot. 1834, Vol. II under No. 2762.
- C. intricata*, *β. robustior*, *Baker* in Report of London Bot. Exchange Club for 1867; and in *Journ. Bot.* 1868, p. 73.

Branches of the sterile whorls 6 to 20, very unequal, simple, more pointed than in var. *α*; the whole plant larger.

In ponds, canals, and ditches.—Var. *α* rare, and not persistent in its localities. In a ditch at Hempstead Wood, Essex, 1861 (Mr. G. Gibson); near Haslingfield (Prof. Babington, 1832), and Harston (A. Bennett), Cambridgeshire; "Livermere, near Bury St. Edmund's, Suffolk, C. R. Leathes" (Mr. Borrer); Brammingham, Bedfordshire (J. Saunders); Sedgfield, Durham (Rev. A. M. Norman); Dutton, North Yorkshire (Mr. T. Comber); Goole, S.W. Yorkshire (T. Birks); Durham and Dublin.—Var. *β* extremely rare. Found by Mr. Borrer, in 1827, in a marsh ditch near Brookside, Henfield, and in 1840 near Rye Farm, Henfield Level, Sussex; [and has since been found in Deeping Fen, Lincolnshire, by Mr. Beeby, who kindly sent living specimens, from which plate 1908 was drawn; and in Cambridgeshire and Huntingdonshire this year (1884), by Mr. Fryer. The plant collected by Mr. D. Moore in the grand canal, Glasnevin, Dublin, has been wrongly referred by Messrs. Groves to *N. prolifera*, it belongs to *N. intricata*, as the sterile branchlets are branched, and not simple as in the var. *prolifera*, which has not yet been found in Ireland.]

England, Ireland. Annual. Spring.

Very similar to *N. glomerata*, but larger, especially in the "bird's-nest-like" masses formed by the fertile whorls; these also are broader,

so as to be almost spherical; usually about $\frac{1}{2}$ inch in diameter, and have the bracts tapering and *acute*, as are also the branchlets of the barren whorls. The most important difference, however, seems to be in the shape of the nucules, which are much more globose in *N. intricata* than in *N. glomerata*.

Of var. *prolifera* I have seen no specimens, either British or foreign; except by its larger size, and *simple* barren branchlets, it seems undistinguishable from *N. intricata*.

Many-fruited Nitella.

EXCLUDED SPECIES.

NITELLA NIDIFICA. *Agardh.*

In the report of the Botanical Exchange Club for the year 1867, published in 'Journal of Botany' for 1868, at p. 73, Mr. Baker writes, "A plant gathered many years ago by Dr. Moore in Lough Neagh, and suspected by him at the time to be the true *Chara nidifica* of the Fl. Danica, may not unlikely prove to be really so. It has been submitted to Dr. Braun for his opinion, and his reply is, "Habitus et folia omnino *nidificæ*, sed seminibus minoribus magis contortis accedit ad *C. fasciculatum (intricatum)*." I do not know if Messrs. Groves have seen this plant, or if it has been found by any other botanist except the late Dr. Moore.

[Of the Lough Neagh plant mentioned above, there exists in the Kew Herbarium but one specimen, on which Prof. A. Braun has written as above quoted, and in his 'Fragmente Monographie Characeen,' p. 94, he writes of this specimen as follows (translation):—"Habit of the Baltic *N. nidifica*, the leaves of the fertile whorls incurved in the same manner and obtuse. Nucule smaller, more contorted, 10-gyrate, unripe, 0,46–0,48 mm. long, without the crown 0,43–0,44 mm. long, nucleus yellowish-green 0,30–0,35 mm. long." He also says that it is "a form which would seem best united with *N. intricata* and *prolifera*, or rather with *N. glomerata*."

A very careful examination of this specimen with *N. nidifica* and *N. glomerata*, however, has not corroborated what Braun has stated. A comparison under the microscope, side by side with typical specimens of *N. nidifica* from the Baltic, named by Professors Braun and Nordstedt, has failed to disclose the least difference between them. The nucules examined by Braun must have been quite immature ones, which are the most numerous on the specimen, but there are a few which appear to have attained their full growth, and these are neither smaller nor more contorted than those of *N. nidifica*, and appear to

be only 7-8-striate as in *N. nidifica*, not 10-striate as stated; their shape also is globose or subglobose as in *N. nidifica*, and lastly the habit, colour, size, branching, obtuseness and number of the cells of the branchlets is exactly as in *N. nidifica*. From *N. intricata* and its var. *prolifera* it is at once distinguished by the very obtuse apical cell of its branchlets, besides which *N. intricata* has the sterile ones branched. It is very much nearer to *N. glomerata* from which it chiefly differs in its nearly globose nucule, which is about as broad as long, whilst in *N. glomerata* the nucule is ellipsoidal, being distinctly longer than broad, and often half as long again as broad; the branchlets and their rays, or bracts, are also rather more incurved and more obtuse than in *N. glomerata*, and more constricted at the nodes (this may be due to desiccation, although I do not think so, as all the specimens examined were moistened in water in the same manner). But for all this, it is questionable whether *N. nidifica* and *N. glomerata* are more than varieties of each other; but until the plant is refound in the British Isles and becomes better known, it appears better to treat it separately, therefore the synonymy of *N. nidifica* is given for the Lough Neagh specimen, and a description is added, taken *exclusively* from this specimen.

Braun, Rabenh. & Stiz. Char. Europ. Exsicc. No. 32.

Nordst & Wahlst. Char. Scand. Exsicc. Nos. 84, 85, 86a, 86b.

Nitella nidifica, Agardh, Syst. Alg. p. 125. Kütz. Phyc. Gener. p. 318; Phyc. Germ. p. 255; Sp. Alg. p. 517; and Tab. Phyc. Vol. VII. p. 14, t. 37, f. i. A. Braun, Consp. Char. Europ. p. 3.

N. Stenhammariana, Wallm. in Kongl. Vet. Akad. Handl. Stockh. p. 271.

Tolypella nidifica, Leonhardi in Brunn, Verhandl. p. 176 (footnote), and p. 214.

Wahlst. Monog. Sver. Norg. Char. p. 21. A. Braun, Fragm. Monog. Char. p. 93. Sydow, Europ. Char. p. 34.

Chara nidifica, Roth, Catalecta, fasc. II. p. 126, note under C. intricata. Bruzel, Obs. Char. pp. 17 and 23 (excluding syn. C. nidifica, Sm.). Baker in Report of London Bot. Exchange Club for 1867, p. 16; and in Journ. Bot. 1868, p. 74. Ruprecht in Beitr. zur Pflanz. des Russ. Reich. 1845, dritt. liefer. p. 8.

C. flexilis, var. nidifica, Hartm. Scand. Fl. ed. 4, p. 358. Fries, Summ. Veg. Scand. p. 60.

C. flexilis, var. marina, Wahlenb. Fl. Succ. p. 718 (partly).

C. flexilis, var. prolifera, Wallroth, Comp. Fl. Germ. Vol. II. p. 105 (partly).

C. Stenhammariana, Wallm. in Add. Liljeblad Svensk. Fl. ed. 3, p. 686.

Conferva nidifica, Müller, Fl. Danica, t. 761.

Monœcious. Dark olive? drying blackish. Stem moderately stout, unencrusted, without cortical cells or spine-cells or stipule-cells. Branchlets 6 to 8 in a whorl, those of the sterile whorls unbranched, of 3 to 5 cells, the terminal cell very obtuse (truncately-rounded); fertile whorls in dense heads, terminating the stem and branches, branchlets 3-5-celled, very obtuse, strongly incurved, bearing at the

first node 3 or 4 simple lateral bracts, each bract of 3 to 5 cells, very obtuse, shorter than the terminal portion of the branchlet and like it strongly incurved. Nucules 3 to 4 together in the axils of the bracts, globose or subglobose, 7 to 8-striate, with a very minute crown. Globules solitary, surrounded by the nucules.

Lough Neagh, found by Mr. D. Moore in July, 1837. On the Continent *N. nidifica* grows in salt or brackish water, but this can scarcely be the case with the Irish specimen.

Ireland. Summer.

Stems branched, not coated with carbonate of lime, flexible, 3 to 4 inches long; sterile branchlets $\frac{3}{4}$ to 2 inches long. Fertile heads about $\frac{1}{4}$ inch in diameter.—N. E. B.]

GENUS II.—**CHARA.** *Agardh.*

Internodes of the stem subopaque (rarely pellucid), usually with a covering of slender parallel cortical cells [rarely naked], and generally furnished with one or two whorls of stipule-cells below each whorl of branchlets. Nucule with a crown of five erect or spreading cells in one row, persistent.

SECTION I.—LYCHNOTHAMNUS. *Ruprecht.*

Internodes of the stem naked, without a covering of parallel cells, but with a whorl of long stipule-cells at the base of each whorl of branchlets. Globule by the side of the nucule, within the bracts. Nucule with a crown of 5 minute cells.

SPECIES I.—**CHARA ALOPECUROIDEA.** “*Delile*,” *A. Braun*.*

PLATE 1909.

Braun, Rabenh. & Stiz. Char. Europ. Exsicc. Nos. 62, 63, 81.

Nordst. & Wahlst. Char. Scand. Exsicc. Nos. 20, 21, 21b, 22a, 22b.

Chara alopecuroidea (Delile, Herb.) and vars. *A. Braun, Schweiz.* Char. p. 13. *Kütz.* Sp. Alg. p. 518; and *Tab. Phyc. Vol. VII.* p. 18, t. 45, f. ii.

C. alopecuroides, Wallm. in *Kongl. Vet. Akad. Handl. Stockh.* 1854, p. 281; *A. Braun, Consp. Char. Europ.* p. 3; and in *Monatsbericht Akad. Wissensch. Berlin*, 1867, pp. 798 and 896. *Babing.* in *Journ. Bot.* 1863, p. 193, t. 7; and *Man. ed. 8,* p. 470. *Lange, Fl. Danica,* t. 2745.

C. intricata, Agardh, Syst. Alg. p. 125, (partly,—as to the plant from the Baltic Sea, according to an authentic specimen from Agardh, in the Kew Herbarium!)

C. papulosa, Wallr. Flor. Crypt. Germ. ii. p. 107.

C. Pouzolsii, (Gay, Herb.) A. Braun in *Flora* 1835, Vol. I. p. 58.

C. Wallrothii, Rupr. in *Beitr. zur Pflanz. des Russ. Reich.* 1845, dritte liefer. p. 12.

Nordst. in *Anderss. Bot. Notiser*, 1863, p. 41.

Lychnothamnus Wallrothii, Wahlst. Monog. Sver. Norg. Char. p. 23.

Lychnothamnus alopecuroides, H. & J. Groves in *Journ. Bot.* 1880, p. 161, t. 209, f. 10.

Lamprothamnus alopecuroides, A. Braun, Fragm. Monog. Char. p. 100, t. vi. f. 185-188.

Sydow, Europ. Char. p. 41.

[* The name *C. alopecuroidea* is so generally used for this plant, that there is perhaps little use in changing it now; but its oldest published name, and that which according to the laws of botanical nomenclature should be adopted for it under *Chara*, is *C. papulosa*, Wallr. published in 1833; the next oldest is *C. Pouzolsii* (Gay Herb.), published by Braun in 1835, and why he should have changed it in 1847 to *C. alopecuroidea*, does not appear, for according to the type specimens, Gay's MSS. name was given in 1822, and Delile's in 1827, so that even on the ground of manuscript priority (which cannot be admitted) there was no reason for the change.—N. E. B.]

Monœcious. Dark green or olive. Stem slender, translucent, without cortical cells or spine-cells, but with very long retrorse spine-like stipule-cells, in one whorl, lower portion often with small one-celled bulbils. Branchlets 6 to 9 in a whorl, 3- to 5-jointed, the 2 or 3 lower joints nearly equal, and as thick as the stem, the terminal one much smaller and spine-like. Bracts 6 to 8 in a whorl, at all the nodes of the branchlets except the last one, spreading, spine-like, mostly all larger than the nucules. Nucules solitary at the lower nodes of the branches in the axils of the bracts, oval-ovoid, 10- to 12-striate, with a minute persistent subentire crown. Globules solitary on the inner side of the fertile branches, between the bracts alongside of the nucule.

In brackish water, very rare. Abundant in the shallow water of the brine pans on the west mouth of New Town, Isle of Wight, first found by Mr. A. G. More in August, 1862, and again in 1863, in the pits or reservoirs on the east side of the creek close to the village of New Town, growing in salt water 18 inches to 2 feet deep, [also found there in July 1881 by Mr. Charles Bailey]. Journ. Bot. 1863, p. 193; 1871, p. 207; [and 1881, p. 356].

England. Perennial. Summer.

A small plant, 3 to 6 inches long, the stems scarcely so thick as a darning-needle, with branchlets $\frac{1}{4}$ to $\frac{3}{4}$ inch long, the lowest ones generally unicellular, and without stipule-cells, which are present at the base of all the fertile whorls, and are sometimes nearly as long as the first joint of the branchlet. This first joint is generally about as long as the succeeding one, but sometimes only half as long.

The spine-like bracts and stipule-cells give this plant a very bristly appearance, which, together with the uncorticated cells readily distinguish it from all the British Charæ. Messrs. Groves say that the Isle of Wight specimens appear to be nearer the var. *Montagnei* of Braun, which I have not seen, but they appear to me not to differ from the Baltic variety *Wallrothii* in Nordstedt et Wahlstedt, 'Characeæ Scandinaviæ Exsiccataë,' No. 21 B. The number 21 of the same set, and No. 81 of Braun, Rabenhorst and Stizenberger's published set, has more slender branches and longer stipule-cells and bracts than in any of the Isle of Wight specimens I have seen. [Between Delile's *type* of *C. alopecuroidea*, and the so-called varieties *Montagnei* (Montagne's specimens!), and *Wallrothii*, as named by Braun in the Kew Herbarium, and the Isle of Wight plant, I fail to find any distinction, beyond degree of incrustation; and Gay's *type* of *C. Pouzolsii* only differs in its longer and more slender bract-cells and stipulodes.—N. E. B.]

Foxtail Chara.

SECTION II.—TOLYPELLOPSIS. *Leonhardi*. (CHARÆ
ASTEPHANÆ. *A. Braun*.)

Internodes of the stem pellucid, naked, without a covering of parallel cortical cells, and with the stipule-cells at the base of each whorl of branchlets rudimentary or absent. [Dioecious. Globules at the nodes of the branchlets, between the bracts, solitary or in pairs.] Nucules [at the nodes of the branchlets, solitary (always ?),] with a persistent crown of 5 very minute cells.

SPECIES II.—CHARA STELLIGERA. *Bauer*.*

PLATE 1910.

Braun, Rabenh. & Stiz. Char. Europ. Exsicc. Nos. 1, 34.

Nordst. & Wahlst. Char. Scand. Exsicc. Nos. 49a, 49b.

Chara obtusa, Desv. in Loisel. Deslongeh. Notice sur les plantes à ajouter à la Flore de France, p. 136. H. & J. Groves in Journ. Bot. 1881, p. 1, t. 216.

C. stelligera, "Bauer in Moessler's Handb. der Gewäch. ed. 2, p. 1595." Bischoff, Handb. Bot. Term. und Syst. t. 57, f. 2805. A. Braun in Ann. des Sciences Nat. 2nd ser. Vol. I. p. 352; in Flora, 1835, Vol. I. p. 55; Consp. Char. Europ. p. 4; and in Cohn, Krypt. Fl. Schles. Vol. I. p. 402. Ganterer, Österr. Char. p. 11, t. i. f. iv. Crepin in Bull. Soc. Bot. Belg. Vol. II. p. 127. Leonhardi in Brunn Verhandl. Vol. II. p. 177. Wahlst. Monog. Sver. Norg. Char. p. 24. Babing. Man. ed. 8, p. 470.

C. vulgaris, var. elongata, Wallr. Annus Bot. p. 182.

C. ulvoides, Bertol. in Bruni Nuov. Collez. d'Opuse. Scient. 1826, p. 113; and Fl. Ital. Vol. X. p. 21. Amici, Descriz. Char. p. 21, t. iv. f. viii. and ix. Ganterer, Österr. Char. p. 11, t. i. f. v.

C. translucens, and var. stelligera, Reichenb., Iconog. Vol. IX. p. 2, t. 804, 805.

Nitella stelligera, Kütz. Phyc. Gen. p. 318; Phyc. Germ. p. 255; Sp. Alg. p. 518; and Tab. Phyc. Vol. VII. p. 11, t. 27, f. i. Coss. & Germ. Fl. Envir. Par. ed. i. p. 681; and Atlas, pl. 41, f. g; ed. ii. p. 892; and Atlas, pl. 47, f. h. Wallm. in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 267.

N. ulvoides, Kütz. Phyc. Gen. p. 318. Wallm. in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 267.

N. Bertolonii, Kütz. Tab. Phyc. Vol. VII. p. 11, t. 26, f. ii.

Lychnothamnus stelliger, A. Braun, Fragm. Monog. Char. p. 102, t. vi. f. 189. Sydow, Europ. Char. p. 45.

Dioecious. Olive green. Stem rather stout, translucent or opaque from being encrusted with carbonate of lime, without cortical cells or

* [Mr. Boswell has followed Braun in adopting Bauer's name *C. stelligera* for this plant; but Desvaux's name *C. obtusa* has the claim of priority, and concerning the identity of the two there is no doubt, as specimens from both authors are preserved in the Kew Herbarium.—N. E. B.]

spine-cells, and with rudimentary stipule-cells in one whorl, scarcely projecting above the surface; lower portion of the stem almost always with the whorls of branchlets rudimentary, and full of starch-grains, [bulbils] resembling white, stellately 5- to 7-lobed rings, surrounding the stem. Branchlets 4 to 8 in a whorl, 1- to 3-celled, subobtuse, apiculate, simple or with 1 or 2 1-celled bracts at the nodes, resembling the terminal portion of the branchlet. "Nucules subglobose, 9-striate; coronula minute, conical, persistent; globules solitary or 2 together." (Groves, Journ. Bot. 1881, p. 2.) [When the globules are in pairs, only one bract is developed, the second globule taking the place of one of the bracts.]

In deep water, very rare. In Filby Broad, 8 miles from Great Yarmouth, growing in water 4 feet deep; Hickling Broad, Somerton Broad, Stalham Broad, and Hundred Stream, Potter Heigham, Norfolk. South Devon. First found by Mr. Arthur Bennett, in September, 1880.

England. Perennial. Summer, Autumn.

A large plant, somewhat resembling *Nitella translucens*. Stem as thick as a stocking-wire, and the branchlets 2 to 6 inches long, [sometimes, and especially in the form called *C. ulvoides*, much stouter than represented on Plate 1910]. Remarkable on account of the white granular starlike bulbils on the lower part of the stem,* from which mainly the plant is propagated, as it very seldom fruits, though Mr. Bennett has found both the male and female plants in Filby Broad.

I have not seen British specimens, nor any foreign specimens, with either nucules or globules.

Star-bearing Chara.

SECTION III.—EU-CHARA.

Internodes of the stem more or less opaque, [rarely pellucid,] with [or rarely without] a covering of parallel cortical cells, and with 2 whorls (rarely only 1 whorl) of stipule-cells at the base of each whorl of branchlets. Globule placed below the nucule taking the place of one of the bracts, [or borne on a separate plant from that which bears nucules]. Nucule with a persistent crown of 5 conspicuous cells, which are erect or spreading.

[A. *Stem and branchlets without cortical cells, stipule-cells in one whorl.*

[* For an account of these and the bulbils on other species of *Chara*, see A. Clavaud in 'Bulletin de la Société Botanique de France,' Vol. X. pp. 137-148, pl. iii.]

SPECIES III.—**CHARA BRAUNII.** *Gmelin.*

PLATE 1911.

Braun, Rabenh. & Stiz. Char. Europ. Exsicc. Nos. 10, 64.*Nordst. & Wahlst.* Char. Scand. Exsicc. No. 87.

Chara Braunii, Gmelin, Fl. Badensis Alsatica, Vol. IV. (Suppl.) p. 646. Bischoff, Krypt. Gewächse, p. 26, t. i. f. 5. Reichenb. Iconog. Bot. Vol. IX. p. 1, t. 802. Wallm. in Kongl. Vet. Akad. Handl. Stock. 1854, p. 286. Nordst. in Anderss. Bot. Notiser 1863, p. 41. Wahlst. Monog. Sver. Norg. Char. p. 24.

C. coronata, (Ziz. Herb.) Bischoff, Krypt. Gewächse, p. 26, t. i. f. 7; and Handb. Bot. Term. und Syst. t. 57, f. 2817. A. Braun in Ann. Sciences Nat. 2nd ser. Vol. I. p. 353; in Flora, 1835, Vol. I. p. 59; Consp. Char. Europ. p. 4; in Monatsber. Akad. Wissensch. Berlin, 1867, p. 897; in Cohn, Krypt. Fl. Schles. Vol. I. p. 403; and Fragm. Monog. Char. p. 108. Ganterer, Österr. Char. p. 13, t. i. f. vi. Kütz. Sp. Alg. p. 520; and Tab. Phyc. Vol. VII. p. 17, t. 43, f. i. Durieu, Explor. de l'Algérie, Bot. Atlas, pl. 39, f. 3. Leonhardi in Brunn Verhandl. Vol. II. p. 179. Müller in Bull. Soc. Bot. Genève, 1881, p. 59. Allen, Char. Amer. p. 7, pl. iii.; and in Amer. Naturalist, Vol. XVI. p. 358, with plate and several woodcuts. Sydow, Europ. Char. p. 48. Coss. & Germ. Atlas Fl. Envir. Par. ed. ii. pl. 44.

C. flexilis, Amici Descriz. Chara, p. 5, t. i., f. i., and t. iii., f. i., not of Linn.

C. Cortiana, Bertoloni in *Amici* Descriz. Chara, p. 8; and *Fl. Ital. Vol. X. p. 16.*

C. eremosperma, Rupr. in *Beitr. zur Pflanz. des Russ. Reich. 1845, dritte liefer. p. 12.*

C. Stalii, Visiani, Fl. Dalm. Vol. III. p. 334. Meneghini in *Atti della ottava Reunione degli Scienziati Italiani, Genova, 1847, p. 553.*

Charopsis Braunii, Kütz. Phyc. Gener. p. 319; and Phyc. Germ. p. 257.

Nitella Braunii, Rabenh. Deutsch. Krypt. Fl. ed. i. Vol. II. p. 197.

Monœcious. Bright green or olive. Stem slender or moderately stout, flexible, translucent or rarely opaque from being encrusted with carbonate of lime, without cortical cells or spine-cells; stipule-cells in one whorl, of the same number as there are branchlets in a whorl, and alternating with them, very short, spreading, acute. Branchlets 7 to 11 in a whorl, ascending, or slightly incurved, without cortical cells, 3- to 5-jointed; their joints of nearly equal length, the terminal joint tipped with from 2 to 5 minute acute cells. Bracts 3 to 10 in a whorl, those on the inner side of the branchlet usually shorter than the nucules, but sometimes as long or longer; those on the outside of the branchlet shorter than the inner ones, rudimentary, or altogether deficient, especially at the sterile nodes of the branchlet. Nucules in the axils of the bracts at the 2 or 3 lowest nodes of the branchlets, solitary, or in pairs, or at the lowest node sometimes 3 together, ovoid, 9- to 11-striate, with a short erect, somewhat spreading, or connivent crown, when ripe of a brownish-yellow colour with a blackish nucleus. Globules solitary or in pairs placed immediately beneath the nucules.

In a canal near Reddish, South Lancashire; discovered by Mr. Charles Bailey in September, 1883.

England. Annual? Summer, Autumn.

Stems branched, slender or moderately stout, very variable in size, being from 2 to 18 inches in length, with branchlets from $\frac{1}{3}$ of an inch to an inch or more long, the internodes of the stem being shorter or longer than the branchlets; the length of the bracts and size of the nucules also vary considerably. The Lancashire plant is rather more slender than usual, and the nodes of the branchlets are not constricted as in the Continental forms.

C. *Braunii* is one of the most distinct species of British Charas, being readily known by its uncorticated stems and branchlets, and the minute cells at the tips of the branchlets, which consist of the very reduced apical cell and the bracts of the ultimate node, and are very similar to those that terminate the branchlets of *Nitella translucens*. The claim of this species to be considered a native plant is perhaps somewhat doubtful, since Messrs. Groves state (*Journ. Bot.* 1884, p. 4) that the water of the canal in which it grows "is raised to an abnormal temperature by the hot water from the adjacent mills. *Naias alagnensis*,* a native of Egypt, has been found in the same neighbourhood, and as its introduction is ascribed to the use of Egyptian cotton in the mills, there seems a possibility of *C. Braunii*, also an inhabitant of Egypt, having been introduced by the same means, although the distribution of the latter is such as to make its occurrence in this country probable."

This species is found nearly all over the world, therefore it is not unlikely to prove a native of the British Isles, and should be looked for in ponds, streams, lakes, &c.—N. E. B.

B. *Stem with as many rows of cortical cells as there are branchlets to a whorl, stipule-cells in two whorls, all well developed, setaceous.*]

SPECIES IV.—CHARA CRINITA. Wallr.

PLATE 1912.

Braun, Rabenh. & Stiz. Char. Europ. Exsicc. Nos. 6, 65, 66, 67, 68, 80, 118.

Nordst. & Wahlst. Char. Scand. Exsicc. Nos. 23, 24, 25, 26, 27, 28, 29, 29b.

Chara crinita, Wallr. Annus Bot. p. 190, t. iii. Bruzel. Obs. Char. pp. 10 and 19.

Agardh, Syst. Alg. p. 126. Bischoff, Handb. Bot. Term. und Syst. t. 57, f. 2821.

A. Braun in Ann. Sciences Nat. 2nd ser. Vol. I. p. 356; in Flora, 1835, Vol. I. p.

70; Consp. Char. Europ. p. 5; in Cohn, Krypt. Fl. Schles. Vol. I. p. 404; in

[* A very full account with good figures of this plant, will be found in the *Journal of Botany* 1884, p. 305, where it is described as *Naias graminea*, Delile, var. *Delilei*, Magnus.]

- Monatsber. Akad. Wissensch. 1867, p. 901; and *Fragm. Monog. Char.* p. 137, t. vii. f. 221-2. *Kütz.* *Phyc. Gener.* p. 320; *Phyc. Germ.* p. 259; *Sp. Alg.* p. 525; and *Tab. Phyc.* Vol. VII. p. 27, t. 69, f. i. *Rupr.* in *Beitr. zur Pflanz. Russ. Reich.* 1845, dritte liefer. p. 18. *Ganterer*, *Österr. Char.* p. 14, t. ii. f. viii. *Babing.* in *Ann. Nat. Hist.* 1850, Vol. V. p. 88; and *Man. ed.* 8, p. 471. *Wallm.* in *Kongl. Vet. Akad. Handl. Stockh.* 1854, p. 319. *Wahlst.* *Bidr. Skand. Char.* p. 31; and *Monog. Sver. Norg. Char.* p. 25. *Nordst.* in *Anderss. Bot. Notiser*, 1863, p. 41. *Crepin* in *Bull. Soc. Bot. Belg. Vol. II.* p. 126. *Leonhardi* in *Brunn Verhandl. Vol. II.* p. 180. *Lange*, *Fl. Danica*, t. 2747. *Sydow*, *Europ. Char.* p. 52. *Allen*, *Char. Amer.* p. 5, pl. ii.; and *Bull. Torrey Bot. Club*, Vol. IX. p. 40, pl. xviii.
- C. hispida*, var. *crinita*, *Wahlenb. Fl. Succ.* p. 717.
- C. Karelini*, *Lessing* in *Linnaea*, Vol. IX. p. 213. *Wallm.* in *Kongl. Vet. Akad. Handl. Stockh.* 1854, p. 322. *Kütz.* *Tab. Phyc.* Vol. VII. p. 28, t. 71, f. ii.
- C. condensata*, *Wallm.* in *Kongl. Vet. Akad. Handl. Stockh.* 1854, p. 320; not of *Rupr.*
- C. pusilla* (*Dethard*), *Kütz.* in *Flora*, 1834, Vol. II. p. 706; *Phyc. Gener.* p. 320. *Kütz.* *Phyc. Germ.* p. 260; (*Floerke*) *Kütz.* *Sp. Alg.* p. 526; and *Tab. Phyc.* Vol. VII. p. 28, t. 69, f. ii.
- C. canescens*, *H. & J. Groves*, in *Journ. Bot.* 1880, p. 134, t. 208, f. 9; scarcely of *Loisel. Deslong.**
- C. evoluta*, *Allen* in *Bull. Torrey Bot. Club*, Vol. IX. p. 41, pl. xix.
- C. altaica*, *A. Br. Fragm. Monog. Char.* p. 148, t. vii., f. 228-231.

Dioecious [or rarely monœcious]. Dark green. Stem slender, translucent, or opaque from being encrusted with carbonate of lime, rather faintly spirally striate from being coated with as many cortical cells as there are branchlets in the whorl, and with numerous (usually very numerous) spreading or spreading-retrorse fasciculated long setaceous spines; stipule-cells in two whorls, all are setaceous and spine-like. Branchlets 8 to 10 in a whorl (mostly 5, Braun), short, slender, often incurved, 4- to 8-jointed (mostly 5-jointed, Braun), clothed with cortical cells, except 1 or 2 joints at the apex. Bracts 7 to 11 in a whorl, at all the nodes of the branches, except sometimes the last 1 or 2, spreading-ascending, spine-like, mostly all longer than the nucules, usually twice as long [or the innermost bracts very much shorter than the nucules]. Nucules in the axils of the bracts at 2 or 3 or rarely 4 of the lowest nodes of the branch, oblong-oval, 10- to 13-striate, with a conspicuous erect persistent crown. Globules on separate plants from those bearing nucules, very rarely produced.

In pools of brackish water, very rare. Budock Pool, near Falmouth, Cornwall, Rev. W. L. P. Garnons.† Here it grows in

[* According to specimen named by Desvcaux, in the Kew Herbarium, which is probably authentic, *C. canescens* Loisel. Deslong. is *C. aspera*, Willd.]

[† By Professor Babington this locality is incorrectly spelt Burdock Pool in *Ann. Nat. Hist.* and in *Man. Brit. Bot. ed.* 8.]

company with *Ch. aspera*. Little Sea, Studland, Dorset, Mr. Bolton King. West Cornwall. Ireland, D. Moore, no exact locality given. The male plant only is in Professor Babington's Herbarium.

England, Ireland. Annual. Summer, Autumn.

Very variable in size, being from 1 inch to 18 inches or more, and with the branchlets $\frac{1}{8}$ to 1 inch long. The smaller forms seem to be more densely spinous than the larger, judging from the specimens in the Char. Europ. Exsicc. and the Char. Scandinav. Exsicc. I have not seen any British specimen.

The shape of the nucules is apparently variable. I have described them from the published sets above mentioned. Wallroth figures them linear-fusiform, and describes them as 'oblongo-linear.' Babington gives 'narrowly-oblong,' and Groves 'oval,' as their form.

The globules are very rarely seen. Wallroth says he never saw them, and A. Braun says that in Germany and Scandinavia the female plant only is found, and the fructification is parthenogenetic.

[The male plant of this species is excessively rare in Europe, but the hermaphrodite plant is not unlikely to be found, as in N. America a monœcious state of it has been discovered and described as a distinct species (*C. evoluta*) by Dr. Allen, but it is certainly nothing more than the hermaphrodite plant of *C. crinita*, and further supports the opinion expressed under *N. syncarpa* var. *opaca*, that the character monœcious or diœcious, unless accompanied with such distinctions as cannot be regarded as correlated with sex, is not a specific character, especially in such a group as this, where the species vary exceedingly, and the characters within certain limits are most unstable, and even when constant in certain localities, are possibly only conditional upon the depth, temperature, exposure, and chemical constituents of the water they grow in. *C. altaica*, Braun, is also the hermaphrodite plant of *C. crinita*. Not having seen fresh British specimens, my drawing was made partly from the Irish specimen, and partly from Continental ones.—N. E. B.]

Bearded Chara.

C. *Stem with twice as many rows of cortical cells as there are branchlets in a whorl; stipule cells in two whorls, papillate, ovoid, or setaceous.]*

SPECIES V.—**CHARA TOMENTOSA.** *Linn.*

PLATE 1913.

Braun, Rabenh. & Stiz. Char. Europ. Exsicc. Nos. 8, 9, 35, 36.

Nordst. & Wahlst. Char. Scand. Exsicc. Nos. 30, 31, 50, 50b, 51, 52, 53, 54, 88, 89.

Chara tomentosa, Linn. Sp. Pl. ed. i. p. 1156. *Hornemann, Fl. Danica, t. 1941.* *Bruzel,* Obs. Char. pp. 13 and 20. *Agardh, Syst. Alg. p. 127.* *Rupr.* in Beitr. zur Pflanz.

Russ. Reich. 1845, dritte Liefer. p. 15. *Kütz.* Phyc. Gen. p. 321; Phyc. Germ. p. 260; Sp. Alg. p. 526; and Tab. Phyc. Vol. VII. p. 29, t. 74, f. i. *Babing.* in Ann. Nat. Hist. 1850, Vol. V. p. 90; and Man. ed. 8, p. 472. *Wallm.* in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 317. *Nordst.* in *Anderss.* Bot. Notiser, 1863, p. 51. *Wahlst.* Monog. Sver. Norg. Char. p. 30. *H. & J. Groves* in Journ. Bot. 1880, p. 130, t. 207, f. 5.

- C. latifolia*, *Willd.* in Gesellschaft Nat. Freunde zu Berlin Mag. Vol. III. p. 299. *Hook.* Lond. Journ. Bot. 1842, Vol. I. p. 43; and Icon. Pl. Vol. VI. t. 532.
- C. ceratophylla*, *Wallr.* Annus Bot. p. 192, t. v. *Bruz.* Obs. Char. p. 20. *Agardh*, Syst. Alg. p. 127. *Hornemann*, Fl. Danica, t. 1654. *Bischoff*, Krypt. Gewächse, t. i. f. 16; and Handbk. Bot. Term. und Syst. t. 57, f. 2816. *Kütz.* Phyc. Gener. p. 321; Phyc. Germ. p. 260; Sp. Alg. p. 526; and Tab. Phyc. Vol. VII. p. 29, t. 73. *Ganterer*, Österr. Char. p. 16, t. ii. f. x. xi. *Wallm.* in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 318. *Wahlst.* Bidr. Skand. Char. p. 34. *Leonhardi* in Brunn Verhandl. Vol. II. p. 197. *A. Braun* in Ann. Sciences Nat. 2nd ser. Vol. I. p. 355; Cons. Char. Europ. p. 5; in Flora, 1835, Vol. I. p. 65; Schweiz. Char. p. 18; in *Cohn*, Krypt. Fl. Schles. Vol. I. p. 404; and Fragm. Monog. Char. p. 139. *Müller* in Bull. Soc. Bot. Genève, 1881, p. 60. *Sydow*, Europ. Char. p. 66.

Dioecious. Dark green, or greenish-grey, or even greenish-white from being encrusted with carbonate of lime. Stem stout and somewhat translucent when not encrusted, but opaque from having a thick covering of carbonate of lime when growing in fresh water, conspicuously spirally striate from being clothed with twice as many cortical cells as there are branchlets in the whorl, and with scattered ovate-conical or ovoid apiculate spine-cells, situated on the primary cortical cells (i.e. those which correspond to the branchlets). Stipule-cells in 2 whorls (sometimes 3, Braun), ovate-ovoid, acuminate, resembling the spine-cells, but smaller. Branchlets 5 to 7 in a whorl ("mostly 6," Braun), moderately long, stout, often incurved, 4- to 6-jointed, clothed with cortical cells, except 1 to 3 joints at the apex which are naked and larger, pellucid, oblong or cylindrical, sometimes tipped by a small cell resembling the spine-cells. Bracts mostly 5 in a whorl, unequal, oval-ovoid or oblong-ovoid or cylindrical, mostly acute and apiculate; the lateral ones longer than the nucules, 3 before it shorter or rudimentary. Nucules in the axils of the bracts of 1 or 2, rarely 3, of the lowest nodes of the branchlet, oval-ovoid, 12- to 14-striate, with a conspicuous spreading-erect persistent crown. Globules on a separate plant from that bearing nucules, much more common than nucules.

In fresh and salt water, very rare. Belvedere Lake, West Meath, found by Dr. D. Moore in 1841; and afterwards found by him in

another locality in the river Shannon below Portumna. Hundred Stream, near Potter Heigham, Norfolk, A. Bennett.

England, Ireland. Perennial. Autumn.

A very variable plant. The Irish specimens I have seen belong to a very small form, with slightly branched, brittle, greatly encrusted stems and branchlets, the latter with 1 or 2 of the lower joints furnished with cortical cells, but sometimes (especially in the lower part of the stem) the branchlets consist of but a single long cell without cortical layers. The primary cortical cells are much more prominent than the secondary cortical cells. The spine-cells and stipule-cells are much smaller in size than in the ordinary continental forms, but Messrs. Groves give a figure of one of the Portumna specimens in Dr. Moore's herbarium, which is furnished with large stipule-cells.

Nucules appear to be very rare in this plant. I have described them from Nordstedt and Wahlstedt's 'Characeæ Scandinaviæ Exsiccatae,' No. 88. The globules are frequently to be met with, and are much larger than the nucules.

Tomentose Chara.

SPECIES VI.—**CHARA FÆTIDA.** *A. Braun.*

PLATES 1914 AND 1915.

Monœcious. Dark green or more often greenish-grey or even greenish-white, from being encrusted with carbonate of lime. Stem slender or rather slender, brittle, translucent when not encrusted, but much more usually opaque from having a thick covering of carbonate of lime, strongly spirally striate, clothed with twice as many cortical cells as there are branchlets in a whorl, slightly rough, without spine-cells or with few or (more rarely) numerous scattered papilliform or oblong-cylindrical, generally appressed, obtuse spine-cells, situated on the primary cortical cells in the upper part of the internodes; stipule-cells in 2 whorls, inconspicuous, resembling papillæ. Branchlets 6 to 10 in a whorl, mostly 8, long or short, slender, often incurved but sometimes recurved, 5- to 7-jointed; clothed with cortical cells, except from 2 to 4, mostly 3 joints at the apex, which are naked. Bracts 4, rarely 6, developed on the inner side of the branch, those on the outer side rudimentary or absent, oblong-cylindrical or setaceous, obtuse, the two interior ones longer than the others, and generally twice or more

the length of the nucule, rarely only equalling it. Nucules in the axils of the bracts at 2 to 5 of the lowest nodes of the branchlet, oval-ovoid, 12- to 14-striate, with a conspicuous erect persistent crown. Globule solitary with the nucule, and placed immediately below it.

[Var. *a. genuina*.

PLATE 1914.

- Braun, Rabenh. & Stiz.* Char. Europ. Exsicc. Nos. 7, 39, 40, 41, 69, 82, 83, 91, 110.
Nordst. & Wahlst. Char. Scand. Exsicc. Nos. 90, 91, 92, 93, 94, 95, 96, 97.
C. fœtida, *A. Braun* in Ann. Sciences Nat. 2nd ser. Vol. I. p. 354; in Flora, 1835, Vol. I. p. 63; Schweiz. Char. p. 14; Consp. Char. Europ. p. 5; in Monatsber. Akad. Wissensch. 1867, p. 910; in *Cohn*, Krypt. Fl. Schles. Vol. I. p. 406; and *Fragm. Monog. Char.* p. 159. *Bischoff*, Handb. Bot. Term. und Syst. t. 57, f. 2807 and 2815. *Coss. & Germ.* Fl. Envir. Par. ed. i. p. 679; and Atlas, p. 37; ed. ii. p. 889, and Atlas, pl. 41, f. 1-7. *Ganterer*, Österr. Char. p. 18, t. ii. f. xii. xiii. *Wallm.* in Kongl. Vet. Akad. Handl. Stock. 1854, p. 304. *Wahlst.* Bidr. Skand. Char. p. 11; and *Monog. Sver. Norg. Char.* p. 26. *Nordst.* in *Anderss.* Bot. Notiser, 1863, p. 45. *Crepin* in Bull. Soc. Bot. Belg. Vol. II. p. 125. *Leonhardi* in Brunn Verhandl. Vol. II. p. 190. *Babing.* Man. ed. viii. p. 471. *Müller* in Bull. Soc. Bot. Genève, 1881, p. 70 (32 forms described). *Sydow*, Europ. Char. p. 72.
C. vulgaris, *Linn.* Sp. Pl. ed. i. p. 1156, in part. *Sm.* Engl. Bot. No. 336. *Wallroth*, Annus Bot. p. 179, t. i. *Bruzel*, Obs. Char. pp. 5 and 21. *Agardh*, Syst. Alg. p. 128. *Kütz.* Phyc. Gener. p. 319; Phyc. Germ. p. 258; Sp. Alg. p. 523; and Tab. Phyc. Vol. VII. p. 24, t. 58, f. i. *Rupr.* in Beitr. zur Pflanz. Russ. Reich. 1845, dritte liefer. p. 12. *Babing.* in Ann. Nat. Hist. 1850, Vol. V. p. 89. *H. & J. Groves* in Journ. Bot. 1880, p. 133, t. 208, f. 8.
C. montana, *Pers.* Synop. Vol. II. p. 530.
C. atrovirens, *Love* in Trans. Cambr. Philos. Soc. Vol. VI. p. 551.
C. funicularis, *Thuill.* Fl. Envir. Par. p. 473.
C. decipiens, *Desv.* in *Loisel. Deslong.* Notice sur le Pl. à ajouter à la Fl. de France, p. 138.
C. papillata, *Wallr.* Annus Bot. p. 183.
C. collabens, *Agardh*, Syst. Alg. Introd. p. xxviii. *Kütz.* Sp. Alg. p. 524.
C. stricta, *C. refracta*, *Kütz.* in Flora, 1834, Vol. II. p. 707; Phyc. Gener. p. 320; and also *C. polysperma*, Phyc. Germ. p. 258; Sp. Alg. p. 523-4; and Tab. Phyc. Vol. VII. p. 24, t. 59, f. i. and t. 58, f. ii. *Wallm.* in Kongl. Vet. Akad. Handl. Stockh. 1854, pp. 306, 307, 328.
C. seminuda and *C. longibracteata*, *Kütz.* Tab. Phyc. Vol. VII. pp. 24, 25, t. 59, f. ii. and t. 60, f. i.
C. crassicaulis (*Schreber*), *Kütz.* Tab. Phyc. Vol. VII. p. 25, t. 60, f. ii. *A. Braun*, Consp. Char. Europ. p. 5; in Monatsber. Akad. Wissensch. Berlin, 1867, p. 921; * and *Fragm. Monog. Char.* p. 168.

[* The description at this place does not agree with *crassicaulis*, but appears rather to belong to the form *subhispida*.]

- C. coarctata*, *C. sphagnoides*, *C. longibracteata*, and *C. crispa*. *Wallm.* in *Kongl. Vet. Akad. Handl. Stockh.* 1854, pp. 301, 302, 305, and 311.
- C. subhispidula*, *A. Braun* in *Cohn*, *Krypt. Fl. Schles. Vol. I.* p. 407; and *Fragm. Monog. Char.* p. 167.

Spine-bearing primary cortical cells, less prominent than the spineless secondary cells.

Var. β . *contraria*. *Coss. & Germ.*

PLATE 1915.

- Braun, Rabenh. & Stiz. Char. Europ. Exsicc.* Nos. 37, 38, 84, 88, 89, 90, 120.
- Nordst. & Wahlst. Char. Scand. Exsicc.* Nos. 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 77b.
- Chara foetida*, var. *contraria*, *Coss. & Germ. Fl. Envir. Par. ed. ii.* p. 890; and *Atlas*, pl. 41, f. 8.
- C. contraria*, *A. Braun ex Kütz. Phyc. Germ.* p. 258; *Sp. Alg.* p. 523; and *Tab. Phyc. Vol. VII.* p. 25, t. 61. *A. Braun, Schweiz. Char.* p. 15; *Consp. Char. Europ.* p. 6; in *Monatsber. Akad. Wissensch. Berlin*, 1867, p. 905; in *Cohn, Krypt. Fl. Schles. Vol. I.* p. 405; and *Fragm. Monog. Char.* p. 141. *Wallm.* in *Kongl. Vet. Akad. Handl. Stockh.* 1854, p. 304. *Wahlst. Bidr. Skand. Char.* p. 15; and *Monog. Sver. Norg. Char.* p. 31. *Crepin* in *Bull. Soc. Bot. Belg. Vol. II.* p. 126. *Nordst.* in *Anderss. Bot. Notiser*, 1863, p. 46. *Leonhardi* in *Brunn Verhandl. Vol. II.* p. 201. *H. & J. Groves* in *Journ. Bot.* 1881, p. 354, t. 224, f. 2. *Babing. Man. ed.* 8, p. 471. *Müller* in *Bull. Soc. Bot. Genève*, 1881, p. 64 (14 forms described). *Sydow, Europ. Char.* p. 57.
- C. foetida*, var. *moniliformis*, *A. Braun* in *Ann. Sciences Nat.* 2nd ser. Vol. I. p. 355.
- C. foetida*, var. *hispidula*, *Coss. & Germ. Fl. Envir. Par. ed. i.* p. 680; and *Atlas*, p. 37, f. 5.

Spine-bearing primary cortical cells more prominent than the spineless secondary cortical cells.]

In pools, ditches, streams, etc. [Var. α .—] Very common, and generally distributed, extending to Orkney. [Var. β .—Is recorded from several counties, and if searched for, will probably be found in most.]

England, Scotland, Ireland. Annual or perennial. Summer, Autumn.

A very variable plant, varying in length from 3 or 4 inches to nearly 2 feet, with stems usually about the thickness of a darning-needle, but sometimes considerably thicker. The distance of the whorls, the length and direction of the branches, the length of the bracts, the number and shape of the spine-cells, are all liable to great variation. One of the most distinct forms is the var. *crassicaulis* of Schleicher, which is regarded as a distinct species by Braun. This resembles *C. tomentosa* in miniature, having the stem and the branchlets thicker than in the type. Messrs. Groves state that there are in the British Museum and Kew Herbaria [Borrer Herbarium] specimens of this

form from Coventry Park, Warwick, collected by Mr. T. Kirk in 1856. [The Kew Herbarium also contains a specimen labelled 'Ireland, D. Moore.' The plant collected by Mr. G. Nicholson at Thornton-le-Street, near Thirsk, Yorkshire, is stated by Messrs. Groves in Journ. Bot. 1881, p. 356 to be var. *crassicaulis*, it is, however, not that plant, but the form *subhispidula*, (which Braun first described as a variety, afterwards as a species,) having very prominent secondary cortical cells and numerous spine-cells. The var. *crassicaulis* has all the cortical cells nearly equally prominent, no spine-cells, or only very minute ones, and short incurved stoutish branchlets, with their terminal uncorticated joints much stouter than usual, and in the dried state apparently inflated.] The figure they give of this plant in the 'Journal of Botany,' however, appears to have much more tapering branches than the specimens given in No. 69 of Braun, Rabenh. and Stiz. Char. Eur., and No. 97 of Wahlstedt and Nordstedt, Char. Scand. [This number (97) in the Kew set is not var. *crassicaulis* at all, but the form *subhispidula*, = *C. collabens*, Ag. !]

[A form in which the nucleus of the ripe nucules is black instead of brown (var. *melanopyrena*, A. Braun), is stated by Messrs. Groves to have been collected near Bridgerule, Cornwall, by Mr. W. Rogers in 1883.

Var. *contraria* is usually smaller, more rigid, and has shorter and more incurved branchlets than most of the forms of var. *a*, but exhibits much the same general range of variation, and some forms are only to be distinguished from the type, by the greater prominence of the primary cortical cells, i.e., those which correspond to the middle of the base of the branchlets, and upon which the spine-cells are placed, which is the chief and only reliable character; as in all the forms of var. *a* they are less prominent than the secondary ones. *C. jubata*, Braun (*C. contraria* var. *jubata*, Müller), which appears to be only a deep-water state of the var. *contraria*, and only differs from it by its longer stems with very distant whorls of exceedingly short branchlets, which are sometimes reduced to mere papillæ $\frac{1}{6}$ to $\frac{1}{8}$ of a line long, sometimes 1 to 3 lines long, may perhaps be found in some of our lakes.]

Generally speaking, *C. foetida* is more or less whitish from being encrusted with carbonate of lime, but dark bright green forms, [*C. atrovirens*,] without encrustation occasionally occur. [The variety or state, *gymnophylla*, A. Braun, in which the branchlets are uncorticated, is not unlikely to occur, and should be searched for.] Messrs. Groves, in their excellent paper on British Characeæ in the 'Journal of Botany,' have reverted to the name *vulgaris* for this species, but although the name *foetida* has been used with different degrees of latitude by Braun himself, it is generally accepted subject to different opinions as to species and varieties. At any rate, the name *vulgaris* is untenable as dating back to Linnæus, who under it included forms now universally considered distinct. *C. foetida* possesses in a special degree an unpleasant odour.

Fetid Chara.

SPECIES VII.—**CHARA HISPIDA.** [*Oeder* and other authors,
not of Linn.*]

PLATES 1916–1918.

Monœcious. Dark green or more often greenish-grey or greenish-white, from being encrusted with carbonate of lime. Stem stout or rather stout, brittle, opaque from having a thick covering of carbonate of lime, spirally sulcate, clothed with twice as many cortical cells as there are branchlets in a whorl, rough with few or numerous, sometimes very numerous, more or less fasciculated, retrorse or retrorsely-spreading, setaceous, acute, deciduous spine-cells, situated on the primary cortical cells in the upper part of the stem and branches; stipule-cells in 2 whorls, very conspicuous, resembling short setaceous spines. Branchlets 7 to 11 in a whorl, mostly 10, rather long, rather slender, ascending-spreading or slightly incurved, 6- to 9-jointed, clothed with cortical cells, except one or two minute joints, [in some varieties 3 to 6 joints] at the apex, which are naked. Bracts 6 to 10 in a whorl, setaceous, acute, unequal, from 2 to 5 of the interior ones being much longer than the others, and generally twice or more the length of the nucule—rarely only equalling it, the outer ones shorter or more rarely rudimentary. Nucules in the axils of the bracts, at 2 to 5, mostly 4 of the lowest nodes of the branchlet, broadly oval-ovoid, 12- to 15-striate, with a conspicuous erect-spreading persistent crown. Globules solitary with the nucule and placed immediately below it.

Var. *a. genuina.*

PLATE 1916.

Braun, Rabenh. & Stiz. Char. Europ. Exsicc. Nos. 2, 3, 4, 49, 70, 71, 85, 86, 87, 117.

Nordst. & Wahlst. Char. Scand. Exsicc. Nos. 55a and b, 56, 57a and b, 58, 59, 59b, 60a, b, c, and d, 61; (*rudis*, 62, 63, 64a and b, 65, 66); (*horrida*, 98, 99a and b, 100, 101.)

Chara hispida, *Oeder*, Fl. Danica, t. 154. *Sm.* Eng. Bot. No. 463. *Wallr.* Annus Bot. p. 187, t. iv. *Bruz.* Obs. Char. pp. 9 and 20. *Agardh*, Syst. Alg. p. 128. *Bischoff*, Krypt. Gewächse, p. 26, t. i. f. 9–11; and Handb. Bot. Term. und Syst. t. 56, f. 2799–2801, and t. 57, f. 2813. *A. Braun* in Ann. Sciences Nat. 2nd ser. Vol. I.

[* According to Linnæus' type specimen, the plant he described as *C. hispida* is that now well known as *C. aspera*! But the name *C. hispida* is so universally adopted for the plant here described as such, that there is little use now in substituting the name *C. spinosa*, Rupr. for it, which should be done if the Linnæan name *C. hispida* were retained for *C. aspera*.]

- p. 355; Schweiz. Char. p. 17; Consp. Char. Europ. p. 5; in *Cohn*, Krypt. Fl. Schles. Vol. I. p. 407; and *Fragm. Monog. Char.* p. 171. *Coss. & Germ.* Fl. Envir. Par. ed. i. p. 679; and Atlas, pl. 38 f. B, 1-2; ed. ii. p. 888; and Atlas, pl. 42, f. B, 1-2. *Kütz.* Phyc. Gener. p. 320; Phyc. Germ. p. 259; Sp. Alg. p. 524; and Tab. Phyc. Vol. VII., pp. 26, 27, t. 65 to 67, f. i. *Ganterer*, Österr. Char. p. 17, t. ii. f. xiv. *Babing.* in Ann. Nat. Hist. 1850, Vol. V. p. 89; and Man. ed. 8, p. 471. *Wallm.* in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 308. *Wahlst.* Bidr. Skand. Char. p. 25; and Monog. Sver. Norg. Char. p. 28. *Crepin* in Bull. Soc. Bot. Belg. Vol. II. p. 125. *Leonhardi* in Brunn Verhandl. Vol. II. p. 186. *H. & J. Groves* in Journ. Bot. 1880, p. 131, t. 208, f. 7. *Müller* in Bull. Bot. Genève, 1881, p. 83. *Sydow*, Europ. Char. p. 80.
- C. spinosa, *Rupr.* in Beitr. zur Pflanz. des Russ. Reich. 1845, dritte liefer. p. 15. *Nordst.* in *Anderss.* Bot. Notiser, 1863, p. 47.
- C. equisetina, *Kütz.* in Flora, 1834, Vol. II. p. 706; Phyc. Gener. p. 320; Phyc. Germ. p. 259; Sp. Alg. p. 525; and Tab. Phyc. Vol. VII. p. 27, t. 68, f. i.; *Wallm.* in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 319.
- C. horrida, *Wallm.* (under *C. baltica* var. *fastigiata*) in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 314. *A. Braun*, Consp. Char. Europ. p. 6; and *Fragm. Monog. Char.* p. 172. *Wahlst.* Bidr. Skand. Char. p. 24; and Monog. Sver. Norg. Char. p. 30. *Nordst.* in *Anderss.* Bot. Notiser, 1863, p. 49. *Sydow*, Europ. Char. p. 84.
- C. acicularis, *Wallm.* in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 315?
- C. rudis, *A. Braun*, Consp. Char. Europ. p. 6; in *Cohn*, Krypt. Fl. Schles. Vol. I. p. 408; and *Fragm. Monog. Char.* p. 173. *Leonhardi* in Brunn Verhandl. Vol. II. p. 185. *Wahlst.* Monog. Sver. Norg. Char. p. 29. *Sydow*, Europ. Char. p. 83.
- C. subspinosa, *Rupr.* Symbolæ, p. 225.

Encrusted. Spine-bearing primary cortical cells less prominent than the spineless secondary cortical cells. Spine-cells few or numerous.

[Var. *β. baltica.* Hartmann.]

PLATE 1917.

- Braun*, *Rabenh. & Stiz.* Char. Europ. Exsicc. Nos. 44, 96, 114.
Nordst. & Wahlst. Char. Scand. Exsicc. Nos. 35, a, b, c, and d, 36, 37, 38, 39, 40, 103, 104, 105a and b.
- Chara hispida*, var. *baltica*, "*Hartm.* Skand. Fl. ed. i. p. 377," *Wahlenberg*, Fl. Succ. ed. 1, p. 693.
- C. *baltica*, "*Fries* in *Aspegren's* Blekings Fl. p. 65;" *Agardh*, Syst. Alg. p. 127. *Bruzel*, Obs. Char. pp. 11 and 19. *A. Braun* in Ann. Sciences Nat. 2nd ser. Vol. I. p. 354; Consp. Char. Europ. p. 6; and *Fragm. Monog. Char.* p. 156. *Kütz.* Phyc. Germ. p. 259; Sp. Alg. p. 524; and Tab. Phyc. Vol. VII. p. 26, t. 63, f. ii. *Wallm.* in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 313. *Wahlst.* Bidr. Skand. Char. p. 16; and Monog. Sver. Norg. Char. p. 34. *Nordst.* in *Anderss.* Bot. Notiser, 1863, p. 49. *Hornemann*, Fl. Danica, t. 2311. *Babing.* Man. ed. 8, p. 472. *Sydow*, Europ. Char. p. 64.
- C. *firma*, *Agardh*, Syst. Alg. Introd. p. xxviii. *Kütz.* Tab. Phyc. Vol. VII. p. 26, t. 64, f. i. *Nordst.* in *Anderss.* Bot. Notiser, 1863, p. 50.

- C. Nolteana*, *A. Braun* in Ann. Sciences Nat. 2nd ser. Vol. I. p. 354; and in Flora, 1835, Vol. I. p. 62. *Kütz.* Tab. Phyc. Vol. VII. p. 26, t. 64, f. ii. *Wallm.* in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 312. *Nordst.* in *Anderss.* Bot. Notiser, 1863, p. 49.
- C. Liljebliadii*, *Wallm.* in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 314. *Nordst.* in *Anderss.* Bot. Notiser, p. 50.
- C. baltica*, var. *affinis*, *H. & J. Groves*, in Journ. Bot. 1881, p. 354, t. 224, f. 1.

Not encrusted. Spine-bearing primary cortical cells as prominent as, or more prominent than the secondary cells. Spine-cells few or numerous.]

? Var. γ . *pseudocrinita*. *A. Braun*.

PLATE 1918.

- Braun*, *Rabenh. & Stiz.* Char. Europ. Exsicc. Nos. 48, 72, 97, 119.
- Nordst. & Wahlst.* Char. Scand. Exsicc. Nos. 78, 79, 80a and b.
- Chara hispida*, var. *pseudocrinita*, *A. Braun* in Ann. Sciences Nat. 2nd ser. Vol. I. p. 355; and in Flora, 1835, Vol. I. p. 67. *Coss. & Germ.* Fl. Envir. Par. ed. i. p. 679; and Atlas, p. 38, f. v 3; ed. ii. p. 889; and Atlas, pl. 42, f. v 3. *Wallm.* in Kongl. Vet. Akad. Handl. Stock. 1854, p. 311.
- C. hispida*, var. *dasyacantha*, *A. Braun*, Schweiz. Char. p. 18. *Kütz.* Sp. Alg. p. 525; and Tab. Phyc. Vol. VII. p. 27, t. 66, f. b.
- C. polyacantha*, *A. Braun* in *Br.* Rabenh. & Stiz. Exsicc. No. 48; Consp. Char. Europ. p. 6; and Fragm. Monog. Char. p. 150. *Wahlst.* Bidr. Skand. Char. p. 29; and Monog. Sver. Norg. Char. p. 34. *Nordst.* in *Anderss.* Bot. Notiser, 1863, p. 48. *Leonhardi* in Brunn Verhandl. Vol. II. p. 199. *Lange*, Fl. Danica, t. 2746. *H. & J. Groves*, in Journ. Bot. 1880, p. 131, t. 208, f. 6. *Babing.* Man. ed. 8, p. 472. *Müller* in Bull. Soc. Bot. Genève, 1881, p. 63. *Sydow*, Europ. Char. p. 61.
- C. pedunculata*, *Kütz.* in Flora, 1834, Vol. II. p. 706—altered to *C. spondylophylla* in *Kütz.* Phyc. Gener. p. 320; Phyc. Germ. p. 259. Sp. Alg. p. 525; and Tab. Phyc. Vol. VII. p. 27, t. 68, f. ii. (by error printed *C. spondylophora*). *Wallm.* in Kongl. Vet. Akad. Handl. Stock. 1854, p. 311.
- C. intertexta*, *Tenore*, Viagg. in Abruzzo, 1830, p. 90; and Syllog. Fl. Neapol. p. 484 (according to an authentic specimen at Kew, not of Desveaux).

Encrusted. Spine-bearing primary cortical cells more prominent than the spineless secondary cortical cells. Spine-cells very numerous.

In ponds, pools, and ditches, &c. Var. α not uncommon, and generally distributed in England; less frequent in Scotland, where it has been recorded from the counties of Berwick, Roxburgh, Haddington, Fife, Forfar, Sutherland, and Perth. In Ireland in counties Wicklow, Galway, Westmeath, and Derry.

[Var. β , rare. In a stream running into Kynance Cove, and in the neighbouring pools, Cornwall.]

Var. γ , rare. Recorded from Cambridgeshire, Yorkshire, Hickling Broad, Norfolk, Cumberland, Anglesea, Roxburgh, Fife, Cork, Galway, and Mayo.

England, Scotland, Ireland. Perennial. Summer, Autumn.

A very variable plant, generally much encrusted. Stems 1 to 3 feet long, often as thick as a crow-quill, and sometimes equalling a goose-quill. The number and length of the spines is very variable, and they appear to be more persistent in some forms than in others. The length of the stipule-cells and bracts is also liable to much variation.

One of the most striking varieties is the *C. horrida* of Wallman, which is an unencrusted form with short branchlets, and very numerous persistent spine-cells, and with bulbils on the buried portion of the stem [which also occur on typical and other forms of *hispidæ*]. Braun enters it as a species in the *Consp. Char. Europ.* p. 6, and *Exsicc. Nos.* 71 and 87, but remarks, “*Ch. hispidæ proxima, cujus varietas marina esse videtur.*” Messrs. Groves give “*Goldens Common, Freshwater, Isle of Wight, Herb. A. G. More.*”

[The variety *baltica* is a maritime form, distinguished by its greener unencrusted stems, with more prominent primary cortical cells: the spine-cells are very variable in number and size, being sometimes reduced to mere papillæ, sometimes short and more or less spreading, sometimes (as in all the Cornish specimens seen) long and more or less appressed to the stem, or (“spreading,” H. & J. Groves). *C. Liljebladii* is merely a large state of this variety, with much longer and more spreading branchlets; and *C. Nolteana* is a state in which the branchlets are stout and uncorticated except the lowest joint.]

Var. *pseudocrinitu* is perhaps a subspecies; it is more spinous than any of the forms of true *hispidæ*, except the form *horrida*, which it considerably resembles, except in the relative size of the primary and secondary cortical cells. I should be inclined to attach more importance to the character taken from the cortical cells, were it not that in *C. contraria*, Braun, we have a plant bearing the same relation to *C. foetida* that *C. polyacantha* does to *C. hispidæ*.

When we find two plants, which let us call A and B, have forms allied to them which let us call *a* and *b*. If A is to *a* as B is to *b*, then the probability is that *a* and *b* are but varieties of A and B. It is the rule that species have varieties similarly related to them; but true species, and even subspecies, seldom follow any such relation.

C. hispidæ bears considerable resemblance to the forms of *C. foetida*,* in which the stem is furnished with spine-cells; but it is a stouter plant, with the stem more furrowed when dry, and with

[* In the *Monatsbericht Akad. Wissenschaften Berlin*, 1867, p. 922, Braun states *C. hispidæ* to be a subspecies of *C. foetida*.]

more numerous and fasciculated spine-cells in the upper part; the stipule-cells are more developed, the branches have more of the joints clothed with cortical cells, the bracts are more numerous at each node, and the nucules are broader in proportion to their length.

The form or variety *horrida*, and the variety or subspecies *pseudocrinita*, especially the latter, bear considerable resemblance to the larger states of *C. crinita*; but their stems are stouter, and have more numerous cortical cells than in *crinita*; the branchlets are stouter, the bracts more unequal and less spine-like; the nucules are larger, more deeply striate and with a larger crown, and each accompanied by a globule.

[*C. rudis*, Braun, is a slight form in which the secondary cortical cells are more prominent than usual.

Another trifling variety of this variable species, which will probably be found to occur, is *C. papillosa*, Kütz. (*C. intermedia*, Braun). It is like typical *C. hispida*, but has the primary cortical cells more prominent than the secondary ones, and few spine-cells, which are sometimes minute and papilliform, sometimes spine-like. Braun quotes *C. aculeolata*, Kütz. as one of the synonyms of his *C. intermedia*; but to judge from Kützing's figure, and a specimen at Kew named by Braun, it belongs rather to the var. *pseudocrinita*. As so many other characters of Characeæ are found to be inconstant, it is probable that the relative prominence of the cortical cells is likewise so, and that some of the so-called varieties or species are but states of one plant; this requires deciding by careful experimental cultivation.]

Bristly Chara.

[D. *Stem clothed with three times as many rows of cortical cells as there are branchlets in a whorl; stipule-cells in two whorls, all setaceous, or the lower whorl or both whorls often rudimentary.*]

SPECIES VIII.—CHARA ASPERA. Willd.

PLATE 1919.

Braun, Rabenh. & Stiz. Char. Europ. Exsicc. Nos. 11, 12, 50, 74a, b, c, 98, 99, 111, 116.
Nordst. & Wahlst. Char. Scand. Exsicc. Nos. 106, 107, 108, a, b, c, 109a, b, 110, 111, 112a, b, 113, 114.

Chara aspera, Willd. in Gesellschaft Nat. Freunde zu Berlin Mag. Vol. III. p. 298.
Wallr. Annus Bot. p. 185. t. vi. f. 3. *Agardh*, Syst. Alg. p. 130. *Bruzel*, Obs. Char. pp. 12 and 22. *Greville*, Scottish Crypt. Fl. Vol. VI. p. 45, t. 339. *Wilson* in Suppl. to Engl. Bot. 1834, Vol. II. No. 2738. *A. Braun* in Ann. Sciences Nat. 2nd ser. Vol. I. p. 356; in Flora, 1835, Vol. I. p. 71; Schweiz. Char. p. 20; Consp. Char. Europ. p. 6; in Monatsber. Akad. Wissensch. Berlin, 1867, p. 923; in *Cohn*, Krypt. Fl. Schles. Vol. I. p. 408; and Fragm. Monog. Char. p. 174. *Coss. & Germ.* Fl. Envir. Par. ed. i. p. 680; and Atlas pl. 38, f. D; ed. ii. p. 891; and Atlas, pl.

- 42, f. d. *Kütz.* Phyc. Gener. p. 320; Phyc. Germ. p. 257; Sp. Alg. p. 521; and Tab. Phyc. Vol. VII. p. 21, t. 51, f. ii. and t. 52. *Ganterer*, Österr. Char. p. 15. *Babing.* in Ann. Nat. Hist. 1850, Vol. V. p. 90; and Man. ed. 8, p. 472. *Wallm.* in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 322. *Wahlst.* Bidr. Skand. Char. p. 32; and Monog. Sver. Norg. Char. p. 35. *Leonhardi* in Brunn Verhandl. Vol. II. p. 204. *H. & J. Groves* in Journ. Bot. 1880, p. 129, t. 207, f. 4. *Müller* in Bull. Soc. Bot. Genève, 1881, p. 87. *Allen* in Bull. Torrey Bot. Club, Vol. IX. p. 43, pl. xxi. *Sydow*, Europ. Char. p. 85.
- C. hispida*, *Linm.* Sp. Pl. ed. i. p. 1156. *Horneman*, Fl. Danica, t. 1940. *Rupr.* in Beitr. zur Pflanz. des Russ. Reich. 1845, dritte liefer. p. 17. *Nordst.* in *Anderss.* Bot. Notiser, 1863, p. 44.
- C. intertexta*, *Desv.* in *Loisel. Deslongch.* Notice sur les Pl. à ajouter à la Fl. de France, p. 138.
- C. canescens*, *Loisel. Deslongch.* Notice, &c. p. 139.
- C. galioides*, and *C. fallax*, *Agardh*, Syst. Alg. Introd. pp. xxvii. and xxviii. (not *C. galioides*, *De Candolle*).
- C. tenuispina*, *A. Braun* in Flora, 1835, Vol. I. p. 68; Consp. Char. Europ. p. 7; in *Cohn*, Krypt. Fl. Schles. Vol. I. p. 409; and Fragm. Monog. Char. p. 181, t. vii. f. 267–268. *Kütz.* Phyc. Germ. p. 259. *Wallm.* in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 312. *Müller* in Bull. Soc. Bot. Genève, 1881, p. 89. *Sydow*, Europ. Char. p. 92. *C. tenuissima*, *A. Braun* in Ann. Sciences Nat. 2nd ser. Vol. I. p. 355 (not of *Desv.*) is probably a misprint for *C. tenuispina*.
- C. equisetifolia* (*Nolte*), *Kütz.* in Flora, 1834, Vol. II. p. 705.
- C. hirta*, *Meyen*, in Linnæa, Vol. II. p. 78.
- C. curta* (*Nolte*), *Kütz.* Tab. Phyc. Vol. VII. p. 22, t. 53, f. i. *A. Braun*, Fragm. Monog. Char. p. 177.
- “*C. corallina*, *Wallm.* in *Liljeblad*, Svensk. Fl. ed. 3” (*Wallman*).

Diœcious, [rarely monœcious]. Pale pea-green, or often greenish-grey or greenish-white, from being encrusted with carbonate of lime. Stem slender or very slender, rather brittle, translucent or opaque, when encrusted faintly striate, clothed with three times as many cortical cells as there are branchlets in a whorl, with numerous or few, scattered or fasciculate, spreading or retrorse, setaceous, acute, subpersistent spine-cells, situated on the primary cortical cells, especially in the upper part of the stem, but the spine-cells sometimes reduced to papillæ throughout, or at least on the lower part of the stem; subterranean part of the stem generally producing at the nodes 2 or 3, rarely 4, smooth, globose, 1-celled bulbils; stipule-cells in 2 whorls resembling the spine-cells, being very conspicuous when these are long, and papilliform when the latter are short or few. Branchlets 6 to 11 in a whorl, mostly 8, short, very slender, ascending or slightly incurved, 5- to 9-jointed; their joints clothed with cortical cells, except the minute mucro-like apical cell, which is naked and sometimes also the second from the apex. Bracts in the female plant

8 to 10 in a whorl; the 5 inner ones longer, and usually exceeding the nucule; those on the outside of the branchlet shorter, and those at the upper nodes of the branchlet, which do not produce nucules, shorter, and often rudimentary. Bracts in the male plant usually shorter than in the female, and only 2 of them longer than the others, which are sometimes rudimentary. Nucules in the axils of the bracts, at 2 to 5 of the lowest nodes of the branchlet, oval-ovoid, deeply 12- to 14-striate, with a prominent erect-spreading persistent crown. Globules on separate plants from those bearing nucules, solitary in the axils of the bracts, at several of the lower nodes of the branchlets, [or rarely on the same plant and placed below the nucules (*C. tenuispina*).]

In lakes, ponds, and ditches, and more rarely in brackish pools; rather rare, but widely distributed, reaching from Cornwall and Hants, north to Orkney and Shetland; more common in Scotland; also more common in Ireland, where it extends from north to south of the island.

England, Scotland, Ireland. Perennial. Summer, Autumn.

Stems slightly branched, slender, often capillary, 3 inches to 1 foot long, with the internodes usually rather distant. Branchlets $\frac{1}{8}$ to $\frac{1}{2}$ inch long. The more spinous and condensed states resemble *C. crinita*, but the stems are much more faintly striate from the cortical cells being smaller; the bracts and stipule-cells are usually shorter and less spine-like, particularly the bracts towards the extremity of the branchlets; the nucules are much more strongly striate, and the whole plant is much more brittle when dry. The stouter states of *C. aspera* often much resemble small forms of *C. hispida*, particularly its var. *pseudocrinita*, [as for example *C. aspera* var. *dasyacantha*, A. Braun, in which the stem is densely covered with long setaceous spine-cells]; but the stems and branchlets are more slender, the cortical cells smaller, and the plant is dioecious, and usually of a much brighter green tint.

C. tenuispina, A. Braun (Char. Europ. Exsicc. No. 74), is doubtless a monoecious form, [the hermaphrodite plant,] variety, or at most subspecies, of *C. aspera*.

[Occasionally the spine-cells are reduced to mere rudiments like those of some states of *C. fragilis*, from which it is then difficult to distinguish this species. See remarks under *C. fragilis*.

One of the most marked forms is *C. fallax*, Ag., a small state in which the spine-cells are papilliform, and the branchlets variously ecorticate, sometimes having the lowest joint or joints clothed with cortical cells, and the rest naked, and sometimes having all the joints

without cortical cells. The description given (Syst. Alg. Introd. p. xxviii.) is, by a typographical error, a repetition of that of *C. collabens*, as is stated by Agardh himself on the label of a typical specimen in the Kew Herbarium, there being no description of *C. fallax*.]

Rough Chara.

SPECIES IX.—**CHARA FRAGILIS.** *Desv.*

PLATES 1920 AND 1921.

Monœcious [or rarely dicecious]. Green, pale pea-green, more rarely greyish-green, from being slightly encrusted with carbonate of lime. Stem slender or very slender, very brittle, usually translucent, faintly spirally-striate, clothed with three times as many cortical cells as there are branchlets in a whorl, smooth, without spine-cells, [or the spine-cells very minute and wart-like or papilliform]; subterranean part of the stem sometimes producing bulbils at the nodes; bulbils consisting of an aggregation of cells, forming a subglobular, granulated mass. Stipule-cells in 2 whorls, papilliform, generally very minute, but the upper row sometimes conspicuously developed, and even spine-like. Branchlets 6 to 10 in a whorl, generally 7 or 8, short, or sometimes long, often slightly, [rarely (in var. β) strongly] incurved, slender, tapering, 7- to 13-jointed, their joints clothed with cortical cells, except the minute mucro-like apical cell, which is naked and sometimes also the second from the apex, [rarely all ecorticate]. Bracts mostly developed on the inner side of the branchlet; those at the fertile nodes usually shorter than the nucules, but not unfrequently 2 to 4 of them equalling or exceeding it, sometimes conspicuously so; those at the upper nodes of the branchlet, which do not produce nucules, shorter and often rudimentary, [rarely (in var. β) all absent or rudimentary]. Nucules in the axils of the bracts, at 2 to 5 of the lowest nodes of the branchlet, narrowly oval-ovoid, deeply 12- to 15-striate, with a long slender erect persistent crown, often abortive, and then shorter and indistinctly striate. Globule solitary, placed immediately below the nucule, [or on a separate plant].

[Var. *a. genuina.*

PLATE 1920.

Braun, Rabenh. & Stiz. Char. Europ. Exsicc. Nos. 13, 14, 15, 75, 100, 112, 115, 121.

Nordst. & Wahlst. Char. Scand. Exsicc. Nos. 115a, b, 116, 117, 118, 119, 120.

Chara fragilis, Desv. in *Loisel. Deslong.* Notice sur le Pl. à ajouter à la Fl. de France,

- p. 137. *Bischoff*, Handb. Bot. Term. t. 57, f. 2806 and 2814. *A. Braun* in Ann. Sciences Nat. ser. 2, Vol. I. p. 356; in Flora, 1835, Vol. I. p. 68; Schweiz. Char. p. 21; Consp. Char. Europ. p. 7; in *Cohn*, Krypt. Fl. Schles. Vol. I. p. 410; in Monatsber. Akad. Wissensch. Berlin, 1867, p. 938; and Fragm. Monog. Char. p. 181. *Coss. & Germ.* Fl. Envir. Par. ed. i. p. 680; and Atlas, pl. 38, f. c; ed. ii. p. 890; and Atlas, pl. 42, f. c. *Kütz.* Phyc. Gener. p. 319; Phyc. Germ. p. 257; Sp. Alg. p. 521; and Tab. Phyc. Vol. VII. p. 22, t. 54. *Rupr.* in Beitr. zur Pflanz. des Russ. Reich. 1845, dritte Liefer. p. 16. *Ganterer*, Österr. Char. p. 20, t. ii. f. xv. *Babing.* in Ann. Hist. 1850, Vol. V. p. 91; and Man. ed. 8, p. 473. *Wallm.* in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 329. *Wahlst.* Bidr. Skand. Char. p. 38; and Monog. Sver. Norg. Char. p. 36. *Nordst.* in *Anderss.* Bot. Notiser, 1863, p. 42. *Crepin* in Bull. Soc. Bot. Belg. Vol. II. p. 126. *Leonhardi* in Bruun Verhandl. Vol. II. p. 207. *Lange*, Fl. Danica. t. 2796–2798 (six forms). *H. & J. Groves* in Journ. Bot. 1880, p. 101, t. 207, f. 1. *Müller* in Bull. Soc. Bot. Genève, 1881, p. 89, (13 forms described). *Allen* in Bull. Torrey Bot. Club, Vol. IX. p. 45, pl. xxii. *Sydow*, Europ. Char. p. 94.
- C. globularis*, *Thuill.* Fl. Envir. Par. p. 472.
- C. capillacea*, *Thuill.* Fl. Envir. Par. p. 474. *Wallm.* in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 330. *Kütz.* Tab. Phyc. Vol. VII. p. 23, t. 55, f. ii.
- C. delicatula*, *Desv.** in *Loisel. Deslong.* Notice, &c. p. 137; and Fl. de l'Anjou, p. 21. *Agardh*, Syst. Alg. p. 130. *Rupr.* in Beitr. zur Pflanz. des Russ. Reich. dritte Liefer. p. 16. *A. Braun* in *Cohn*, Krypt. Fl. Schles. Vol. I. p. 411; and Fragm. Monog. Char. p. 184, t. vii. f. 269, 270.
- C. pulchella*, *Wallr.* Annus Bot. p. 184, t. ii. *Bischoff*, Krypt. Gewäch. p. 26, t. 1, f. 12, 13. *Berkeley* in Suppl. to Engl. Bot. 1843, Vol. III. No. 2824.
- C. pilifera*, *Agardh*, Syst. Alg. Introd. p. xxviii.
- C. Hedwigii*, *Agardh* in *Bruzel*, Obs. Char. pp. 7 and 21. *Berkeley* in Suppl. to Engl. Bot. 1834, Vol. II. No. 2762. *Kütz.* Tab. Phyc. Vol. VII. p. 23, t. 55, f. i.
- “*C. viridis*, *Hartm.* Skand. Fl. ed. i. p. 378” (*Wallman*).
- C. foliolata*, *Hartm.* Skand. Fl. ed. 1843, p. 357.
- C. virgata*, and *C. trichodes*, *Kütz.* in Flora, 1834, Vol. II. p. 705; and Tab. Phyc. Vol. VII. p. 23, t. 56, f. i. ii.
- C. fulcrata*, *Ganterer*, Österr. Char. p. 20, t. ii. f. xvi. *Wallm.* in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 331.
- “*C. diffusa*, *Wallm.* in *Liljeblad*, Svensk. Fl. ed. iii. addend.” (*Wallm.*)
- C. annulata*, *Wallm.* in Kongl. Vet. Akad. Handl. Stockh. 1854, p. 328.
- C. verrucosa*, *Itzigsohn* in Bot. Zeit. 1850, p. 338.

Monœcious.

[* *A. Braun* and others consider *C. delicatula*, *Desv.* as distinct from *C. delicatula*, *Ag.*, placing *Desveaux's* plant under *C. aspera*. They may be right, but there are no authentic specimens at Kew of either; yet from description they appear to be the same, and *Desveaux* himself in his Fl. de l'Anjou unites his *C. delicatula* with *C. fragilis*. The oldest name for *C. fragilis* is *C. globularis*, *Thuill.*; but as he also described it under another name (*C. capillacea*) in the same book, it is perhaps better to retain the name *C. fragilis*.]

Var. ? *β. connivens*.

PLATE 1921.

C. connivens (*Salzmann* herb.), *A. Braun* in Flor. 1835, Vol. I. p. 73; *Consp. Char. Europ.* p. 7; in *Monatsber. Akad. Wissensch. Berlin*, 1867, p. 927; and *Fragm. Monog. Char.* p. 180. *Kütz.* Sp. Alg. p. 521; and *Tab. Phyc.* Vol. VII. p. 26, t. 63, f. i. *Wallm.* in *Kongl. Vet. Akad. Handl. Stockh.* 1854, p. 327. *Chaboisseau* in *Bull. Soc. Bot. France*, Vol. XVIII. p. 149, pl. 1. *Wahlst.* *Monog. Sver. Norg. Char.* p. 35, footnote. *Babing.* Man. ed. 8, p. 472. *H. & J. Groves* in *Journ. Bot.* 1880, p. 103, t. 207, f. 3. *Sydow*, *Europ. Char.* p. 89. *Coss. & Germ.* *Atlas Fl. Envir. Par.* ii. pl. 43.

C. connivens, var. *Duriæi*, *Kralik*, *Pl. Alger.* No. 154, and *Pl. Tunet.* No. 385 (exsicc.)*

Dicœcious.]

In ponds, lakes, and ditches, &c., more rarely in running water.

[Var. *a.*—] Common and generally distributed; apparently more rare in Scotland, but extending north to Orkney and Shetland. In Ireland it occurs from south to north.

[Var. ? *β.*—Rare; Stokes Bay, Gosport, Hampshire; and Slapton Sands, near Dartmouth, Devonshire.]

England, Scotland, Ireland. Perennial. Summer, Autumn.

Stems 2 inches to 2 feet; slender, often capillary; the branchlets $\frac{1}{4}$ to $\frac{3}{4}$ or even, [in large forms,] 1–2 $\frac{1}{2}$ inches long.

In the form *C. Hedwigii*, *Agardh*, the plant is dark green and much stouter than the ordinary form, sometimes nearly 2 feet long, and the branchlets $\frac{3}{4}$ to 2 $\frac{1}{2}$ inches long; [a state of it in which all the joints of the branchlets are without cortical cells, has been collected near Blairgowrie, East Perthshire, by Mr. A. Sturrock, and described as var. *Sturrockii* by Messrs. Groves in 'Journ. Bot. 1884,' p. 2.] The bract cells are extremely variable in length, sometimes much shorter than the nucule, and scarcely perceptible at the upper part of the branches; at other times they are all conspicuously longer than the nucule, but perhaps most generally there are 2 of the bracts equalling the nucule, and 2 shorter; [and on the branchlets of barren specimens they are frequently all rudimentary or absent.] The crusted forms are rare, and more brittle than the ordinary green form.

[* *Kralik's* specimens only differ from *Salzmann's* in being more slender. And *C. connivens*, var. *Duriæi*, *A. Br.* in *Explor. de l'Algér.* pl. 39, f. 2 (*C. concinna*, *Durieu* and *Coss.* in *Bull. Soc. Bot. France*, Vol. VI. p. 183, footnote; *C. Duriæi*, *A. Br.* in *Monatsber. Akad. Wissensch. Berlin*, 1867, p. 926; and *Fragm. Monog. Char.* pp. 22, 179, t. vii. f. 252–254, which are reduced copies of those in *Explor. de l'Algér.*); only appears to be a mere form in which the bracts are developed at nearly all the nodes of the branchlets; there is no specimen of it at Kew.—N. E. B.]

[*C. connivens* appears to be but a sexual state of *C. fragilis*, as strictly it only differs from that plant in sex; the greater incurving of the branchlets and shortness or absence of bracts given as distinctive marks are variable and unreliable characters. In the typical form of *C. connivens* (the branch and magnified portion of stem, with the more incurved branchlets represented on Plate 1921, which I have drawn from a typical specimen of Salzmann's in the Kew Herbarium), the branchlets are very much incurved and the bracts absent or rudimentary; but in the British specimens seen, the bracts are nearly half as long as the nucule, and the Slapton plant (a branch and magnified portion of a branchlet of which is shown on Plate 1921, taken from a specimen in the collection of Mr. Arthur Bennett of Croydon) has the branchlets only slightly incurved, whilst the Gosport specimen in Mr. Borrer's Herbarium (now at Kew) has only a few whorls of branchlets strongly incurved as in Salzmann's plant (not all of them as shown in 'Journ. of Bot.' 1880, t. 207, f. 3), and the rest but slightly incurved as in ordinary *C. fragilis*.]

C. fragilis bears a close resemblance to some states of *C. aspera*, but is without the very distinct spine-cells [characteristic of that species. Some forms of *C. fragilis*, however, have minute wart-like or papilliform spine-cells, and sometimes the spine-cells of *C. aspera* are reduced to a similar condition, it then becomes difficult to distinguish the two species, the only distinctive character (besides that of sex, on which no reliance can be placed) appears to be that of the bulbils; in *C. aspera* these appear to be always simple, consisting of a single, smooth, rather large, globose cell, and although two or more such bulbils may arise from the same node, they are not united to each other in a mass; whilst in *C. fragilis* the bulbils are always compound, consisting of numerous very small cells united into a granulated mass]. The globules in *C. fragilis* are brilliant scarlet, and contrast well with the bright green of the plant; they are very evanescent, and after their fall the specimen might be mistaken for the female of a dioecious species.

[The Kew Herbarium contains a specimen of *C. fragilis* from the hot springs of Iceland, on the label of which it is stated that, "the temperature of the spring in which this plant was growing was such as to boil an egg in four minutes." A remarkable fact *if* the water was really so hot *at the exact spot where the Chara grew*, as one would scarcely expect protoplasm to retain vitality at a temperature high enough to coagulate albumen.]

Fragile Chara.

SPECIES X.(?)—**CHARA FRAGIFERA.** *Durieu.*

PLATE 1922.

*Braun, Rabenh. & Stiz. Char. Europ. Exsicc. No. 73a, b.**Chara fragifera, Durieu in Bull. Soc. Bot. France, 1859, Vol. VI. p. 185. A. Braun, Consp. Char. Europ. p. 7; in Monatsber. Akad. Wissensch. Berlin, 1867, p. 863; and Fragm. Monog. Char. p. 180. Wahlst. Monog. Sver. Norg. Char. p. 35, footnote. Trimen in Journ. Bot. 1877, p. 353, t. 192. H. & J. Groves in Journ. Bot. 1880, p. 102, t. 207, f. 2. Babing. Man. ed. 8, p. 473. Sydow, Europ. Char. p. 91.*

Dioecious [or rarely monoecious*]. Bright green. Stem very slender, flexible, translucent, spirally striate, clothed with 3 times as many cortical cells as there are branchlets in a whorl, smooth without spine-cells; subterranean part of the stem producing bulbils at the nodes; bulbils consisting of an aggregation of cells, forming a subglobular, granulated mass; stipule-cells in 2 whorls, papilliform, generally very minute and inconspicuous. Branchlets 6 to 10 in a whorl, rather long, capillary, flexuous, rarely firm, ascending or slightly incurved, 10- to 16-jointed, their joints clothed with cortical cells, except the smaller apical cell, which is naked, and sometimes also the second, and even the third, from the apex. Bracts in the female plant 1 to 5 on the inner side of the branchlet, the longest of them about half the length of the nucule; those of the upper node of the branchlet, which do not produce nucules, rudimentary or absent. Bracts in the male plant usually 2, very minute and tooth-like. Nucules in the axils of the bracts, at 1 to 3 of the lowest nodes of the branchlet, oval-ovoid, deeply 11- to 13-striate, with a rather prominent erect or spreading, persistent crown; globules on separate plants from those bearing nucules, solitary between the minute bracts at several of the lower nodes of the branchlets, [rarely on the same plant, and placed immediately beneath the nucule].

In pools, very rare in West Cornwall and Tresco in the Scilly Isles. First found by Mr. J. Ralfs in 1877.

England. Perennial. Summer, Autumn.

A very delicate plant, 3 inches to 1 foot long, resembling the smaller states of *C. fragilis*; branchlets mostly $\frac{3}{4}$ to $1\frac{1}{4}$ inch long,

* [According to Messrs. Groves ('Journ. Bot. 1882,' p. 350), and they are doubtless right, but I have not seen a monoecious specimen.—N. E. B.]

resembling the filaments of a *Conferva*; more rarely, as in a plant from the Lizard Downs, $\frac{1}{4}$ inch long, and somewhat setaceous. Bracts shorter than in most forms of *C. fragilis*, particularly in the male plant; nucules with a shorter crown.

The bulbils of *C. fragifera* are remarkable for their large size, being $\frac{1}{10}$ to $\frac{1}{8}$ inch in diameter; they are formed of an aggregation of cells, and are white.

[*C. fragifera* bears a close resemblance to the more slender states of *C. fragilis*, and may possibly be only a distinct variety of that plant; it is, however, more slender, more flexible, the branchlets have more numerous joints, and the bulbils are usually larger and appear to be more unilateral with respect to the node they arise from, whilst on *C. fragilis* they seem more generally to grow out all round the node, though this may not be at all constant. With No 73b of Braun, Rabenh. and Stiz. Char. Exsicc., a specimen bearing unicellular bulbils is given as belonging to *C. fragifera*; but in the Kew set (and no doubt, from the statement made on No. 73a, in all other sets) this specimen is not *C. fragifera* at all, but *C. aspera*! of which such bulbils are characteristic, the specimen is partly decomposed; but where cortical cells remain on the stem, spine-cells are very evident, the branchlets are also those of *C. aspera*. Doubtless Durieu has been mistaken in the cases stated on No. 73a, in supposing the specimens with simple bulbils to be *C. fragifera*; he appears only to have found them on plants in a more or less decomposed condition, in which state the characteristics of *C. aspera* might easily be overlooked, especially if growing in a locality where *C. fragifera* was found.]

My British specimens of *C. fragifera* are through the Botanical Exchange Club, from Chy-an-hal, near Penzance, and Pond of Lizard Downs, Mr. J. Ralfs, and Gorkhill Down, Helston, Mr. J. Cunnack.

Strawberry Chara.

[ERRATUM.—For Arthur Bennett on p. 173, line 21, read A. W. Bennett.]

NOTE BY THE EDITOR,

Defining the sense in which certain terms have been employed in the descriptions of plants given in the Third Edition of 'English Botany.'

TERMS APPLIED TO GENERAL FIGURES OF PLANES.

Oval.—One and a half to twice as long as broad, broadest in the middle; sides curved.

Elliptical.—Three to four times as long as broad, broadest in the middle; sides curved.

Ovate.—One and a half to twice as long as broad, broadest between the base and the middle; sides curved.

Lanceolate.—Three to four times as long as broad, broadest between the base and the middle; sides curved.

Obovate.—Once and a half to twice as long as broad, broader between the middle and the apex; sides curved.

Oblanceolate.—Three to four times as long as broad, broadest between the middle and the apex; sides curved.

Oblong.—Two to three times as long as broad; sides parallel.

Strapshaped.—Four to six times as long as broad; sides subparallel.

Linear.—Eight or more times as long as broad; sides subparallel.

Rhombic.—Any figure which is broadest in the middle and with an angle on each side; the lines running from this angle to the base and apex being nearly equal and nearly straight.

Deltoïd.—An equilateral triangle broadest at the base; sides nearly straight to the apex.

Triangular.—Limited to triangular figures of which the sides are conspicuously longer than the base.

Obdeltoïd.—An equilateral triangle with its apex towards the base of the organ described.

Wedge-shaped.—A triangular figure (in the restricted sense defined above) with its apex towards the base of the organ described.

In most of these definitions some latitude is allowed in regard to their relative length and breadth, and when it becomes necessary to

use more precise terms *broadly* or *narrowly* is employed to qualify them. Figures intermediate between two forms are called by the two terms answering to the forms, joined by a hyphen, the latter term being that to which the figure under consideration most nearly approaches. Thus *oval-obovate* denotes a figure which is nearer obovate than oval, and *obovate-oval* one which is more nearly oval than obovate. In every case these terms are used without reference to the shape of the base and apex, which is defined by terms in general use, such as *acute*, *obtuse*, *cordate*, *obcordate*, or to the nature of the margins, which is indicated by the generally received terms *entire*, *serrate*, *crenate*, *toothed*, etc. The word *cut* or *incised* is applied to the form of the margin when the general outline of the figure appears to have incisions made *into* it. The word *lobed* is used where there are protuberances extending *beyond* the general outline of the figure.

TERMS APPLIED TO THE GENERAL FIGURE OF SOLIDS.

Ovoid.—A solid whose transverse section is a circle, and its longitudinal section a figure longer than broad with curved sides. When it is necessary to define the shape more minutely, the figure of the plane found in the longitudinal section is prefixed to *ovoid*. Thus *ovate-ovoid* is a body whose longitudinal section gives an *ovate* figure.

Oblong-ovoid.—A solid of which the longitudinal section is *oblong-oval* or *oblong-elliptical*.

Cylindrical.—A solid of which the cross section is a circle and of which the longitudinal section is rectangular; the shape is defined by prefixing *oblong*, *strapshaped* or *linear*.

Fusiform.—A solid of which the transverse section is a circle, and its longitudinal section a *strapshaped-elliptical* or *linear-elliptical* figure.

Clavate.—A solid whose transverse section is a circle, and longitudinal section is a *strapshaped-oblancheolate* or *linear-oblancheolate* figure.

USE OF MARK OF INTERROGATION IN THE BODY OF THE WORK.

When a ? is placed *before* the word "subspecies" it implies that perhaps the plant ought to be treated as a species, and when before "var." the variety is perhaps a subspecies; but if the ? is placed *after* the words "species," "subspecies," [or "variety"], it denotes that the first should perhaps be considered a *subspecies*, the second a *variety*. [and the last as being probably a mere *form* or *condition*].

INDEX.

[Species in CAPITALS, Sub-species in small letters, Synonyms and foreign names in *italics*.]

N.B.—The pages given in this index, are made in agreement with the supposition, that the owner has entered into the body of the work the errata to be found at the end of each volume.



	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
Aaron's Beard	267	147	ii.	<i>Acker Ehrenpreis</i> (Ger.)		152	vi.
A'BIES				— <i>Fuchsschwanz</i> (Ger.)		23	xi.
— [exce'l'sa, DC.] (excluded)	285		viii.	— <i>Gauchheil</i> (Ger.)		151	vii.
<i>Abste'hender Schwingel</i> (Ger.)	105		xi.	— <i>Hornkraut</i> (Ger.)		89	ii.
<i>Abweichende Segge</i> (Ger.)	90		x.	— <i>Hunds-Kamille</i> (Ger.) ..		52	v.
ACANTHUS				— <i>Klee</i> (Ger.)		47	iii.
— [mol'lis, Linn.] (excluded)	201		vi.	— <i>Kleinling</i> (Ger.)		153	vii.
A'CER				— <i>Knautie</i> (Ger.)		253	iv.
— CAMPE'S'TRE, Linn.	321	232	ii.	— <i>Ochsenzunge</i> (Ger.)		109	vii.
— PSEU'DO-PLAT'ANUS,				— <i>Rade</i> (Fr.)		74	ii.
<i>Linn.</i>	320	230	ii.	— <i>Rettig</i> (Ger.)		121	i.
AC'ERAS				— <i>Senf</i> (Ger.)		124	i.
— ANTHROPOPH'ORA,				— <i>Sherardie</i> (Ger.)		232	iv.
<i>Br.</i>	1447	87	ix.	— <i>Trespe</i> (Ger.)		172	xi.
— <i>densiflo'ra</i> , Boiss.	1465	108	ix.	— <i>Winde</i> (Ger.)		85	vi.
— <i>hirci'na</i> , Lindl.	1448	90	ix.	<i>Ackerdaun</i> (Ger.)		63	vii.
— <i>intac'ta</i> , Reich. fil.	1465	108	ix.	<i>Ackermeier</i> (Ger.)		231	iv.
— <i>pyramida'lis</i> , Reich. fil. ...	1449	91	ix.	<i>Ackersteinsame</i> (Ger.)		97	vii.
— <i>secundiflo'ra</i> , Lindl.	1465	108	ix.	<i>Aconit</i> (Fr.)		65	i.
<i>Ache odorante</i> (Fr.)	99		iv.	<i>Aconite</i> , Common Winter	43	56	i.
ACHILLE'A				ACONITUM			
— alpi'na, Koch		59	v.	— NAPEL'LUS, Linn.	48	64	i.
— DECOLO'RANS, Schrad.	729	59	v.	<i>Acore odorant</i> (Fr.)		11	ix.
— <i>dentif'era</i> , DC.	728	58	v.	AC'ORUS			
— MILLEFO'LIUM, Linn.	727	57	v.	— CAL'AMUS, Linn.	1391	11	ix.
— PTAR'MICA, Linn.	730	59	v.	ACROP'TERIS			
— <i>serra'ta</i> , Sm.	729	59	v.	— <i>septentriona'lis</i> , Link	1882	138	xii.
— TANACETIFO'LLA, All.	728	58	v.	ACROS'TICHUM			
— TOMENTO'SA, Linn.	726	56	v.	— alpi'num, Bolton	1863	99	xii.
<i>Achille'e auf feuilles de Tanaisie</i>				— <i>hyperbo'reum</i> , Liljeb.	1863	99	xii.
(Fr.)		58	v.	— <i>Iven'se</i> , Linn.	1862	98	xii.
— Bouton d'argent (Fr.)		60	v.	— <i>septentriona'le</i> , Linn.	1882	138	xii.
— cotonneuse (Fr.)		57	v.	— <i>Thelyp'teris</i> , Linn.	1848	52	xii.
— Millefeuille (Fr.)		57	v.	ACTÆA			
<i>Achtblättrige Dryade</i> (Ger.)		202	iii.	— SPICA'TA, Linn.	49	67	i.
<i>Achter Alant</i> (Ger.)		98	v.	<i>Actée en épi</i> (Fr.)		67	i.
<i>Achtes Labkraut</i> (Ger.)		215	iv.	ACTINOCARPUS			
— Müdesüss (Ger.)		127	iii.	— DAMASONIUM, Hook.	1442	74	ix.
AC'INOS				<i>Adder's Tongue</i> , Common	1835	20	xii.
— vulga'ris, Pers.	1048	32	vii.	— Dwarf	1836	22	xii.

	PLATE	PAGE	VOL.
ADENARIUM			
— <i>peploides</i> , Raf.	239	106	ii.
ADIANTUM			
— CAPILLUS-VENERIS ,			
<i>Linn.</i>	1887	146	xii.
ADONIS			
— AUTUMNALIS , <i>Linn.</i>	13	14	i.
<i>Adonisblume</i> (Ger.)	14		i.
ADOXA			
— MOSCHATELLINA , <i>Linn.</i> 636	198		iv.
<i>Aloxe Moscatelline</i> (Fr.)	198		iv.
<i>Aechte Kamille</i> (Ger.)	48		v.
<i>Aechter Wiederstoss</i> (Ger.)	162		vii.
<i>Achriger Marbel</i> (Ger.)	12		x.
— <i>Teufelskrallen</i> (Ger.)	7		vi.
ÆGHILOPS			
— [ova'ta, L.] (excluded) ...	203		xi.
ÆGOPDIUM			
— PODAGRARIA , <i>Linn.</i>	580	108	iv.
<i>Aestiges Habichtskraut</i> (Ger.) ...	179		v.
ÆTHUSA			
— CYNAPIUM , <i>Linn.</i>	600	132	iv.
AGATHOPHYTON			
— Bonus-Henricus , Reich....	1199	24	viii.
AGRAPHIS			
— <i>mutans</i> , Link	1528	200	ix.
AGRAULUS			
— <i>caninus</i> , P. de B.	1718	46	xi.
AGRIMONIA			
— EUPATORIA , <i>Linn.</i>	417	129	iii.
— <i>Eupatoria</i> , var. <i>odora'ta</i> ,			
<i>Benth.</i>	418	131	iii.
— <i>odora'ta</i> , <i>Mill.</i>	418	131	iii.
<i>Agrimony</i> , Common	417	130	iii.
— <i>Fragrant</i>	418	131	iii.
— <i>Hemp</i>	785	121	v.
<i>Agripaume cardiaque</i> (Fr.)	68		vii.
AGROPYRUM			
— <i>acutum</i> , Reich.	1811	180	xi.
— ——— R. & S.	1812	182	xi.
— <i>caninum</i> , R. & S.	1809	176	xi.
— <i>junceum</i> , P. de B.	1813	183	xi.
— <i>littorale</i> , Reich.	180		xi.
— <i>pubgens</i> , Gr. & Godr.	180		xi.
— ——— R. & S.	1811	180	xi.
— <i>pyrenanthum</i> , G. & G.	180		xi.
— <i>repens</i> , P. de B.	1810	178	xi.
AGROSTEMMA			
— <i>Githago</i> , <i>Linn.</i>	215	74	ii.
<i>Agrostide blanche</i> (Fr.)	48		xi.
— <i>commune</i> (Fr.)	50		xi.
— <i>des chiens</i> (Fr.)	47		xi.
— <i>jouet du vent</i> (Fr.) ...	44		xi.
AGROSTIS			
— <i>alba</i> , Sm.	1719	48	xi.
— ALBA , <i>Linn.</i>	1719 & 1720	47	xi.
— ——— var. <i>stolonifera</i> , Sm. 1720	48		xi.
— ———, var. <i>subrepens</i> , Bab. 1720	48		xi.

AGROSTIS

	PLATE	PAGE	VOL.
— ANEMAGROSTIS , <i>Syme</i>	1715 & 1716	43	xi.
— <i>australis</i> , <i>Linn.</i>	1711	37	xi.
— CANYNA , <i>Linn.</i>	1718	46	xi.
— <i>effusa</i> , DC.	1728	60	xi.
— <i>interrupta</i> , <i>Linn.</i>	1716	44	xi.
— <i>londigera</i> , DC.	1711	37	xi.
— <i>littoralis</i> , Sm.	1714	41	xi.
— <i>luto'sa</i> , Poir.	1714	41	xi.
— <i>minima</i> , <i>Linn.</i>	1689	7	xi.
— <i>panicca</i> , Ait.	1713	40	xi.
— <i>pu'mila</i> , <i>Linn.</i>	50		xi.
— SETACEA , <i>Curt.</i>	1717	45	xi.
— <i>Spica-venti</i> , <i>Linn.</i>	1715	43	xi.
— <i>stolonifera</i> , Fries. 1719 & 1720	47		xi.
— <i>stolonifera</i> , Sm.	1720	48	xi.
— VULGARIS , <i>With.</i>	1721	49	xi.
— ———, var. <i>pu'mila</i> , <i>Syme.</i>	50		xi.
<i>Allkirsehe</i> (Ger.)	124		iii.
<i>Abrenblüthiges Tausendblatt</i>			
(Ger.)	32		iv.
<i>Abrentragender Ehrenpreis</i> (Ger.)	162		vi.
<i>Aigremoine eupatoire</i> (Fr.)	130		iii.
— <i>odorante</i> (Fr.)	131		iii.
<i>Ail à tête ronde</i> (Fr.)	209		ix.
— <i>cirette</i> (Fr.)	216		ix.
— <i>des lieux cultivés</i> (Fr.)	214		ix.
— <i>des ours</i> (Fr.)	219		ix.
— <i>des vignes</i> (Fr.)	211		ix.
— <i>poireau</i> (Fr.)	206		ix.
— <i>rocambole</i> (Fr.)	208		ix.
— <i>trigone</i> (Fr.)	218		ix.
AI'RA			
— <i>aggregata</i> , Tim.	70		xi.
— <i>alpi'na</i> , <i>Linn.</i>	1730	65	xi.
— <i>aquat'ica</i> , <i>Linn.</i>	1750	94	xi.
— <i>caerulea</i> , <i>Linn.</i>	1747	90	xi.
— <i>cæspitosa</i> , <i>Benth.</i> ...1730 & 1731	63		xi.
— <i>cæspitosa</i> , <i>Linn.</i>	1730	64	xi.
— ——— var. <i>brevifolia</i> , <i>Parn.</i>	64		xi.
— ——— <i>pseudalpi'na</i> , <i>Syme.</i>	64		xi.
— <i>canes'cens</i> , <i>Linn.</i>	1729	62	xi.
— <i>capilla'ris</i> , <i>Mert. & Koch.</i>	71		xi.
— <i>caryophyll'ea</i> , <i>Bor.</i>	70		xi.
— CARYOPHYLLEA ,			
<i>Linn.</i>	1734	69	xi.
— ——— var. <i>aggregata</i> , <i>Syme</i>	70		xi.
— ——— <i>pat'ulipes</i> , <i>Syme</i>	70		xi.
— ——— <i>erista'ta</i> , <i>Linn.</i>	1746	88	xi.
— ——— <i>discolor</i> , <i>Thuill.</i>	1733	68	xi.
— ——— <i>eu-flexuosa</i> , <i>Syme</i>	1732	67	xi.
— ——— <i>flexuosa</i> , <i>Auct.</i>	1732	67	xi.
— FLEXUOSA , <i>Linn.</i> 1732 & 1733	66		xi.
— ———, var. β , <i>Hook. fil.</i> ...	1733	68	xi.
— ——— var. <i>montana</i> , <i>Syme</i>	67		xi.
— ——— <i>lævigata</i> , <i>Sm.</i>	1731	65	xi.
— MAJOR , <i>Syme.</i> ...1730 & 1731	63		xi.
— <i>montana</i> , <i>Linn.</i>	67		xi.
— <i>multicul'mis</i> , <i>Dumort.</i>	71		xi.

	PLATE	PAGE	VOL.
AIRA			
— <i>patulipes</i> , Jord.		70	xi.
— <i>pleisantha</i> , Jord.		70	xi.
— <i>provincialis</i> , Jord.		71	xi.
— PRÆCOX, Linn.		1735	71 xi.
— <i>setacea</i> , Huds.		1733	68 xi.
— <i>uliginosa</i> , Weihe.		1733	68 xi.
<i>Aircelle anguleuse</i> (Fr.)		25	vi.
— <i>Canneberge</i> (Fr.)		21	vi.
— <i>ponctuée</i> (Fr.)		23	vi.
— <i>veinée</i> (Fr.)		24	vi.
AIROCHLOA			
— <i>cristata</i> , Link.		1746	88 xi.
AIROPSIS			
— <i>caryophylla</i> 'a, Fries.		1734	69 xi.
— <i>praecox</i> , Fr.		1735	71 xi.
A'JAX			
— <i>lobularis</i> , Haw.		158	ix.
— <i>Pseudomureisus</i> , Haw. ...		1501	137 ix.
<i>Ajout de Legall</i> (Fr.).....		7	iii.
— <i>d'Europe</i> (Fr.).....		5	iii.
— <i>nain</i> (Fr.)		7	iii.
A'JUGA			
— <i>alpina</i> , Auct. Angl.		78	vii.
— [—, Linn.] (excluded)		87	vii.
— [—, Sm.] (excluded) ...		87	vii.
— CHAMÆPITYS, Linn.		1090	80 vii.
— [Genevensis, Linn.] (ex- cluded)		87	vii.
— PYRAMIDA'LIS, Linn.		1089	79 vii.
— REPTANS, Linn.		1088	77 vii.
<i>Akelei</i> (Ger.)		61	i.
ALBU'CEA			
— <i>nuttans</i> , Reich.		1523	194 ix.
ALCHEMILLA			
— ALPINA, Linn.		425	140 iii.
— —, var. <i>B</i> , Hook. & Arn.		424	139 iii.
— ARVEN'SIS, Scop.		422	136 iii.
— CONJUNCTA, Bab.		424	139 iii.
— <i>montana</i> , Willd.		138	iii.
— VULGARIS, Linn.		423	137 iii.
— —, var. <i>montana</i> , Syne.		138	iii.
— —, var. <i>subsericea</i> , Koch.		138	iii.
<i>Alchemille des Alpes</i> (Fr.).....		141	iii.
— <i>des champs</i> (Fr.)		137	iii.
— <i>vulgaire</i> (Fr.)		138	iii.
Alder, Berry-bearing		319	229 ii.
— Common		1294	179 viii.
ALECTOROLOPHUS			
— <i>grandiflorus</i> , a. <i>glabratus</i> , Vall.		999	181 vi.
— <i>major</i> , var. <i>glabra</i> , Reich.		999	181 vi.
— <i>minor</i> , Reich.		998	180 vi.
— <i>parviflorus</i> , Wall.		998	180 vi.
Alexanders, Common		631	177 iv.
<i>Aline glutineux</i> (Fr.).....		179	viii.
<i>Alister Atouchier</i> (Ger.)		244	iii.
— <i>aubépine</i> (Fr.)		237	iii.
— <i>torminal</i> (Fr.)		242	iii.

	PLATE	PAGE	VOL.
ALISMA			
— <i>damasodium</i> , Linn.		1442	74 ix.
— <i>lanceolatum</i> , With.		1438	70 ix.
— NA'TANS, Linn.		1441	73 ix.
— PLANTA'GO, Linn. 1437 & 1438		1437	70 ix.
— —, Bor.		1437	70 ix.
— —, var. <i>lanceolatum</i> , Syne.		1438	70 ix.
— <i>ranunculoïdes</i> , Sm.		1439	72 ix.
— RANUNCULOÏDES, Linn.		1439 & 1440	71 ix.
— —, var. <i>repens</i> , Sm.		1440	72 ix.
— <i>repens</i> , Davies.		1440	72 ix.
Alkanet, Common		1112	110 vii.
— Evergreen		1113	112 vii.
Allgood		1199	25 viii.
ALLIARIA			
— <i>officinalis</i> , Andr.		100	146 i.
ALLIUM			
— [<i>ambiguum</i> , Sibth. & Sm.] excluded		227	ix.
— AMPELOPRA'SUM, Linn.		1530 & 1531	204 ix.
— —, Sm.		1530	204 ix.
— —, var. <i>Babingtonii</i> , Syne.		1531	204 ix.
— — <i>bulbiferum</i> , Syne.		204	ix.
— <i>arenarium</i> , Sm.		1538	216 ix.
— —, Linn.		1532	207 ix.
— <i>Babingtonii</i> , Borrer.		1531	204 ix.
— [<i>carinatum</i> , Linn.] (ex- cluded).....		226	ix.
— —, Sm.		1536	212 ix.
— <i>compactum</i> , Thuill.		210	ix.
— <i>complanatum</i> , Bor.		1536	212 ix.
— <i>Desglisii</i> , Bor.		1533	208 ix.
— <i>eu-Schoenoprasum</i> , Syne.		1537	215 ix.
— <i>foliosum</i> , Clair.		1538	216 ix.
— <i>Halleri</i> , Bab.		1531	204 ix.
— [Mo'ly, Linn.] (excluded)		227	ix.
— [<i>nitrum</i> , Linn.] (excluded)		227	ix.
— OLERA'CEUM, Linn. 1535 & 1536		1535 & 1536	212 ix.
— —, Sm.		1535	212 ix.
— —, var. <i>angustifolium</i> , Koch.		1535	212 ix.
— —, var. <i>complanatum</i> , Fries.		1536	212 ix.
— [<i>paradoxum</i> , Don] (exclu- ded)		227	ix.
— [<i>roseum</i> , Linn.] (excluded)		227	ix.
— SCHENOPRA'SUM, Koch.		1537 & 1538	214 ix.
— —, Linn.		1537	215 ix.
— —, var. <i>a</i> , Bab.		1537	215 ix.
— —, var. <i>alpinum</i> , Gaud.		1538	216 ix.
— —, var. <i>Sibiricum</i> , Hook. & Arn.		1538	216 ix.
— SCORDOPRA'SUM, Linn.		1532	207 ix.
— <i>Sibiricum</i> , Linn.		1538	216 ix.

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
ALLIUM				ALSINE			
— SPHÆROCEPH'ALON,				— visco'sa, Schreb.	114	ii.	
— <i>Linn.</i>	1533	208	ix.	<i>Alsine à feuilles menues</i> (Fr.) ...	114	ii.	
— TRIQUE'TRUM, <i>Linn.</i>	1539	217	ix.	— <i>de Jaquin</i> (Fr.)	115	ii.	
— URSI'NUM, <i>Linn.</i>	1540	218	ix.	— <i>printanière</i> (Fr.)	110	ii.	
— VINEA'LE, <i>Linn.</i>	1534	210	ix.	ALTHÆ'A			
— var. bulbif'erum,				— HIRSUTA, <i>Linn.</i>	277	162	ii.
— <i>Syme.</i>	1534	210	ix.	— OFFICINA'LIS, <i>Linn.</i> ...	278	163	ii.
— var. capsulif'erum,				<i>Alysson à calices persistans</i> (Fr.)	197	i.	
— <i>Syme</i>	210	ix.		— <i>maritime</i> (Fr.)	198	i.	
— var. compac'tum,				ALYSSUM			
— <i>Syme</i>	210	ix.		— CALYCPNUM, <i>Linn.</i>	139	196	i.
ALLOSO'RUS				— [inca'num, <i>Linn.</i>], excluded	224	i.	
— aquil'i'nus, Presl	1886	145	xii.	— MARITIMUM, <i>Lamarck</i>	140	197	i.
— eris'pus, Bernhardt	1844	44	xii.	— sat'i'rum, Sm.....	141	199	i.
ALL-seed, Four-leaved	258	134	ii.	Alyssum, Calycine.....	139	197	i.
ALNUS				— Seaside	140	198	i.
— GLUTINOSA, <i>Gärtn.</i> ...	1294	178	viii.	— Sweet	140	198	i.
— var. inci'sa, <i>Syme</i> ...	179	viii.		Amaranth, Wild.....	1177	103	vii.
<i>Aloeblütrige Krebscheere</i> (Ger.)	81	ix.		<i>Amaranthe blette</i> (Fr.)	185	vii.	
ALOPECUR'US				AMARAN'THUS. See AMARANT'US.			
— AGRES'TIS, <i>Linn.</i>	1699	22	xi.	AMARANT'US			
— ALP'NUS, <i>Sm.</i>	1704	28	xi.	— BLITUM, <i>Linn.</i>	1177	184	vii.
— var. Wats'oni, <i>Syme</i>	29	xi.		— [retroflex'us, <i>Linn.</i>] (ex-			
— bulbo'sus, <i>Linn.</i>	1702	26	xi.	cluded)	185	vii.	
— ful'vus, <i>Sm.</i>	1700	23	xi.	American Cress	124	176	i.
— genicula'tus, <i>Linn.</i>	1701	25	xi.	<i>Amerianischer Kresse</i> (Ger.) ...	176	i.	
— <i>hyb'ridus</i> , Wimmer	26	xi.		AME'SIUM			
— <i>monspeliensis</i> , <i>Linn.</i>	1713	40	xi.	— <i>Germanicum</i> , Newm.	1881	136	xii.
— PALUS'TRIS, <i>Syme</i>				— <i>Ru'ta-muraria</i> , Newm. ...	1880	135	xii.
	1700-1702	23	xi.	— <i>septentrionalis</i> , Newm.....	1882	138	xii.
— <i>pa'nicus</i> , Lam.....	1713	40	xi.	<i>Amethystfarbene Sommerwurz</i> (Ger.)...	200	vi.	
— PRATEN'SIS, <i>Linn.</i>	1703	27	xi.	AMMI			
— <i>pratensis-genicula'tus</i> , Wichura	26	xi.		— [ma'jus, <i>Linn.</i>] (excluded)	179	iv.	
— <i>pro'vus</i> , Mitten	26	xi.		AMMOPI'LLA			
<i>Alpen Hornkraut</i> (Ger.)	86	ii.		— <i>arenaria</i> , Link.....	1722	51	xi.
— <i>Pfeimylkraut</i> (Ger.)	205	i.		— <i>arundinacea</i> , Host	1722	51	xi.
Alsike Clover	361	54	iii.	<i>Ampferblättriger Knöterich</i> (Ger.)	77	viii.	
ALSINANTHE				ANACAMP'TIS			
— <i>stri'cta</i> , Reich.	244	115	ii.	— <i>pyramidalis</i> , Rich.	1449	91	ix.
ALSINE				ANACHARIS			
— CHERLERIA, <i>Fenzl.</i> ...	240	108	ii.	— <i>Alsinas'trum</i> , Bab.	1446	81	ix.
— FASTIGIA'TA, <i>Bab.</i> 243 (<i>bis</i>)	114	ii.		— <i>Canadensis</i> , Planch.	1446	81	ix.
— <i>hyb'rida</i> , Vill.	113	ii.		— <i>Nuttallii</i> , Planch.	1446	81	ix.
— <i>Jacquini</i> , Koch	243 (<i>bis</i>)	114	ii.	ANACYCLUS			
— <i>lax'a</i> , Jord.	113	ii.		— [radia'tus, <i>Pers.</i>] (excluded)	216	v.	
— <i>me'dia</i> , <i>Linn.</i>	229	93	ii.	ANAGAL'LIS			
— <i>peploides</i> , <i>Syme</i>	239	106	ii.	— ARVEN'SIS, <i>Linn.</i> 1146 & 1147	150	vii.	
— RUBEL'LA, <i>Wahl.</i>	242	111	ii.	— Sm.	1146	150	vii.
— <i>stri'cta</i> , <i>Wahl.</i>	244	115	ii.	— var. <i>cæru'lea</i> , <i>Syme</i> ...	1147	151	vii.
— TENUIFO'LIA, <i>Crantz</i> ...	243	112	ii.	— var. <i>phœni'cia</i> , <i>Syme</i>	1146	150	vii.
— Bor.	243	112	ii.	— <i>cæru'lea</i> , Sm.	1147	151	vii.
— var. <i>hyb'rida</i> , <i>Syme</i> ...	113	ii.		— <i>phœni'cea</i> , Lam.	1146	150	vii.
— var. <i>lax'a</i> , <i>Syme</i>	113	ii.		— TENEL'LA, <i>Linn.</i>	1148	152	vii.
— var. <i>visco'sa</i> , <i>Bab.</i> ...	113	ii.		ANCHU'SA			
— ULIGINO'SA, <i>Vill.</i>	244	115	ii.	— ARVEN'SIS, <i>M. Bieb.</i> ...	1111	109	vii.
— VER'NA, <i>Bart.</i>	241	109	ii.	— OFFICINA'LIS, <i>Linn.</i> ...	1112	110	vii.
— var. Gerar'di, <i>Syme</i> ...	110	ii.		— SEMPERVIRENS, <i>Linn.</i> 1113	111	vii.	
— var. <i>glucia'lis</i> , <i>Led.</i> 292	111	ii.					

	PLATE	PAGE	VOL.
<i>Ancolic</i> (Fr.)		61	i.
ANDROMEDA			
— <i>cæru'lea</i> , Linn.	886	34	vi.
— <i>Daboec'ia</i> , Linn.	885	33	vi.
— POLIFOLIA , Linn.	883	30	vi.
<i>Andromède à feuilles de Polium</i> (Fr.).....		31	vi.
ANDROSÆMUM			
— <i>fo'etulum</i> , Spach	266	146	ii.
— <i>officina'le</i> , All.	264	143	ii.
— <i>parviflorum</i> , "Spach," Hook. & Arn.	265	145	ii.
<i>Androsème officinale</i> (Fr.)		144	ii.
ANEMAGROS'TIS			
— <i>interrupta</i> , Trin.	1716	44	xi.
— <i>Spica-ven'ti</i> , Trin.	1715	43	xi.
ANEMONE			
— APENNINA , Linn.	10	12	i.
— NEMOROSA , Linn.	11	12	i.
— PULSATILLA , Linn. ...	9	10	i.
— RANUNCULOIDES , Linn.	12	13	i.
<i>Anemone</i>		9	i.
— Blue		10	i.
— Crowfoot Wood.....		12	i.
— Wood		11	i.
— Yellow Wood		12	i.
<i>Anémone</i> (Fr.)		11	i.
ANETHUM			
— <i>Fœniculium</i> , Linn.	601	133	iv.
ANGELICA			
— ARCHANGELICA , Linn.	608	146	iv.
— Garden		608	iv.
— SYLVESTRIS , Linn. ...	607	145	iv.
— Wild		607	iv.
<i>Angelique officinale</i> (Fr.)		147	iv.
— <i>sauvage</i> (Fr.)		145	iv.
Anise		586	iv.
<i>Ausérine à feuilles de figuier</i> (Fr.).....		16	viii.
— <i>Argentine</i> (Fr.)		150	iii.
— <i>blanche</i> (Fr.)		15	viii.
— <i>bon Henri</i> (Fr.)		25	viii.
— <i>botride</i> (Fr.)		21	viii.
— <i>de ville</i> (Fr.)		20	viii.
— <i>des murs</i> (Fr.).....		17	viii.
— <i>fétide</i> (Fr.)		13	viii.
— <i>glauque</i> (Fr.)		24	viii.
— <i>hybride</i> (Fr.)		18	viii.
— <i>polysperme</i> (Fr.).....		12	viii.
— <i>rougâtre</i> (Fr.)		23	viii.
ANTENNA'RIA			
— <i>dioc'ca</i> , Gärtn.	747 & 748	78	v.
— <i>hyperbo'rea</i> , D. Don	748	78	v.
— <i>margarita'cea</i> , R. Br.	746	77	v.
ANTHEMIS			
— <i>An'glica</i> , Spr.	722	51	v.
— ARVEN'SIS , Linn.	721 & 722	50	v.

	PLATE	PAGE	VOL.
ANTHEMIS			
— <i>arven'sis</i> , Sm.	721	51	v.
— COTULA , Linn.....	720	49	v.
— <i>marit'ima</i> , Sm.	722	51	v.
— NOBILIS , Linn.	724	53	v.
— TINCTORIA , Linn.	723	52	v.
ANTHRICUM			
— <i>bi'color</i> , Desf.	1541	220	ix.
— <i>calycula'tum</i> , Linn.	1543	223	ix.
— <i>Ossif'ragum</i> , Linn.	1542	222	ix.
— <i>planiflorum</i> , Linn.	1541	220	ix.
— <i>serot'inum</i> , Linn.	1521	192	ix.
ANTHOXANTHUM			
— <i>odora'tum</i> , Dum.	1696	17	xi.
— ODORA'TUM , Linn.	1696	17	xi.
— var. <i>villo'sum</i> , Syme		17	xi.
— <i>villo'sum</i> , Dum.		17	xi.
ANTHRIS'CUS			
— <i>aborti'vus</i> , Jord.		168	iv.
— <i>Cerefolium</i> , Hoffm.	623	167	iv.
— <i>sylves'tris</i> , Hoffm.	624	168	iv.
— <i>vulgar'is</i> , Pers.	622	166	iv.
<i>Anthyllide vulnéraire</i> (Fr.)		20	iii.
ANTHYLLIS			
— <i>Dillen'ii</i> , Schultz		20	iii.
— VULNERARIA , Linn....	333	19	iii.
— Bor.		333	iii.
— var. <i>Dillen'ii</i> , Syme... ..		20	iii.
— var. <i>vulgar'is</i> , Syme		333	iii.
ANTIRRHINUM			
— <i>Cymbala'ria</i> , Linn.	955	133	vi.
— <i>Elat'ine</i> , Linn.	956	134	vi.
— <i>Lina'ria</i> , Linn.	962-964	140	vi.
— <i>Lina'ria</i> , <i>Pelo'ria</i>	963	142	vi.
— MA'JUS , Linn.	953	130	vi.
— <i>mi'nus</i> , Linn.....	966	143	vi.
— <i>Monspessula'num</i> , Linn. ...		139	vi.
— ORONTIUM , Linn.	954	131	vi.
— <i>Pelisseria'num</i> , Linn.	959	138	vi.
— <i>purpu'reum</i> , Linn.	960	138	vi.
— <i>re'pens</i> , Linn.....	961	139	vi.
— <i>spu'rium</i> , Sm.	957	135	vi.
— <i>sup'num</i> , Linn.....	958	137	vi.
APALAN'THE			
— <i>Schwein'it'zii</i> , Planch.	1446	81	ix.
APAR'GIA			
— <i>autumna'lis</i> , Willd. ...	794 & 795	134	v.
— <i>his'pida</i> , Willd.....	793	133	v.
APE'RA			
— <i>interrupta</i> , P. de B.	1716	44	xi.
— <i>Spica-ven'ti</i> , P. de B.	1715	43	xi.
APHANES			
— <i>arven'sis</i> , Linn.	422	136	iii.
APIUM			
— GRAVEOLENS , Linn....	572	98	iv.
— <i>imunda'tum</i> , Reich. fil.....	575	102	iv.
— <i>nodiflorum</i> , Reich. fil.....	573	100	iv.
— <i>Petroselinum</i> , Linn.....	576	103	iv.

	PLATE	PAGE	VOL.
APIUM			
— <i>re'pens</i> , Reich. fil.....	574	100	iv.
APORANTHUS			
— <i>Trifolius'trum</i> , Blomf.....	345	34	iii.
Apple, Crab	489	255	iii.
— Wild	490	256	iii.
AQUILE'GIA			
— VULGA'RIS, Linn.	46	60	i.
<i>Arabette</i> (Fr.).....	163		i.
— <i>à velue</i> (Fr.)	166		i.
— <i>de Thalle</i> (Fr.)	164		i.
— <i>des pierres</i> (Fr.)	165		i.
AR'ABIS			
— Allio'niï, DC.....	168		i.
— arcua'ta, Schuttl.....	168		i.
— cilia'ta, R. Brown.....	117	166	i.
— var. his'pida, Syme ...	167		i.
— <i>Crantzia'na</i> , Ehrh. ?.....	113	164	i.
— Gerar'di, Bess.	168		i.
— glabre (Fr.)	170		i.
— HIRSU'TA, Syme ...	116 & 117	166	i.
— Auct. Angl.	116	167	i.
— his'pida, Linn. fil.	113	164	i.
— PERFOLIA'TA, Lamarek ...	119	169	i.
— PETRE'A, Lamarek	113	164	i.
— Reichenbach'ii, Syme	168		i.
— sagitta'ta, DC.	116	167	i.
— var. glabra'ta, Syme	168		i.
— STRIC'TA, Huds.	114	165	i.
— THALIA'NA, Linn.	115	163	i.
— <i>Tourrette</i> (Fr.)	169		i.
— TURRI'TA, Linn.	118	169	i.
<i>Arabischer Schneckenklee</i> (Ger.)	28		iii.
<i>Arbousier Busserole</i> (Fr.).....	28		vi.
— <i>des Alpes</i> (Fr.).....	27		vi.
— <i>Fraisier</i> (Ger.).....	29		vi.
<i>Arbutus</i>	882	29	vi.
AR'BUTUS			
— alp'i'na, Linn.	880	26	vi.
— UNE'DO, Linn.	882	28	vi.
— U'ru-ur'si, Linn.	881	27	vi.
<i>Archangel, Yellow</i>	1087	77	vii.
ARCHANGELICA			
— officina'lis, Hoffm.	608	146	iv.
ARCTIUM			
— eu-mi'nus, Syme	702	26	v.
— interm'dium, Lange	700	25	v.
— Bab.	701	25	v.
— <i>Lappu</i> , Linn. var. a, Hook. & Arn.	699	23	v.
— Linn. var. B, Hook. & Arn.	700-702	24	v.
— MA'JUS, Schkuhr	699	23	v.
— MINUS, Schkuhr	700-702	24	v.
— Bab.	702	26	v.
— nemoro'sum, Lej.	701	25	v.
— pu'bens, Bab.	700	25	v.
— tomento'sum, Bab.....	699	23	v.
— [— Pers.] (excluded) ...	215		v.

ARCTOSTAPHYLOS

	PLATE	PAGE	VOL.
— ALPI'NA, Spreng.	880	26	vi.
— U'VA-UR'SI, Winn.	881	27	vi.

AREMONIA

— [agrimonioi'des, DC.] (ex- cluded).....	260		iii.
--	-----	--	------

ARENARIA

— CILIA'TA, Linn.	238	104	ii.
— var. Benth.	237	104	ii.
— <i>fastigia'ta</i> , Sm.	243 (bis)	114	ii.
— <i>fascicula'ta</i> , Jacq.	243 (bis)	114	ii.
— leptocla'dos, Guss.	236	102	ii.
— Lloyd'ii, Jord.	103		ii.
— mari'na, Sm.	257	131	ii.
— Roth	255	129	ii.
— <i>margina'ta</i> , DC.	257	131	ii.
— me'dia, Linn.	257	131	ii.
— NORVEGICA, Gunn. ...	237	104	ii.
— <i>peplo'des</i> , Linn.	239	106	ii.
— <i>quadri'val'vis</i> , R. Brown ...	242	111	ii.
— ru'bra, Linn.	254	129	ii.
— Sm., E. B. ed. i. ? ...	235	129	ii.
— rubel'a, Hook.	212	111	ii.
— SERPYLLIFO'LIA, Linn.	235 & 236	102	ii.
— Auct. Pl.	235	102	ii.
— Ten.	236	102	ii.
— var. glutino'sa, Koch	103		ii.
— var. leptocla'dos, Reich.	236	102	ii.
— var. sphaerocar'pa, Syme.....	235	102	ii.
— var. tenu'or, Koch ...	236	102	ii.
— sphaerocar'pa, Ten.	235	102	ii.
— tenuifo'lia, Linn.	243	112	ii.
— TRINER'VIS, Linn.	234	101	ii.
— <i>uligno'sa</i> , Schlecht.	244	115	ii.
— ver'na, Hook. & Arn.	241	109	ii.
— var., Benth.	242	111	ii.
— var. glacia'lis, Ledeb.	242	111	ii.
<i>Argousier faux nerprun</i> (Fr.) ...	83		viii.
<i>Aristoloché clématite</i> (Fr.)	92		viii.

ARISTOLOCHIA

— CLEMAT'IS, Linn. ...	1250	91	viii.
<i>Armblüthige Simse</i> (Ger.).....	55		x.

ARME'RIA

— alp'i'na, Willd.	158		vii.
— elonga'ta, Hoffm.	158		vii.
— mari'tima, Willd.	1152	157	vii.
— PLANTAGIN'E'A, Willd.	1154	159	vii.
— sabulo'sa, Jord.	1154	159	vii.
— vulga'ri - plantagi'na, (?) Syme.....	1155	159	vii.
— VULGA'RIS, Benth. 1152 & 1153	157		vii.
— var. mari'tima, Syme	1152	157	vii.
— var. planifo'lia, Syme	1153	157	vii.
— var. pubes'cens, Reich. fil. (?)	1153	157	vii.
<i>Armérie à feuilles de Plantain</i> (Fr.) ...	159		vii.
— <i>gazon l'Olympe</i> (Fr.) ...	158		vii.

	PLATE	PAGE	VOL.
<i>Armoise Absinthe</i> (Fr.)		62	v.
— <i>commune</i> (Fr.)		63	v.
— <i>des champs</i> (Fr.)		65	v.
— <i>maritime</i> (Fr.)		66	v.
ARMORACIA			
— <i>amphibia</i> , "Koch"	128	181	i.
— <i>rusticana</i> , "Fl. der Welt."	129	183	i.
ARNOSERIS			
— <i>PUSILLA</i> , Gärtn.	788	127	v.
<i>Arrhenathère élevée</i> (Fr.)		83	xi.
ARRHENATHERUM			
— <i>arcuatum</i> , P. de B.	1742	81	xi.
— <i>bulbosum</i> , Presl		82	xi.
— <i>elatius</i> , M. & K.	1742	81	xi.
— <i>elatius</i> , Presl		82	xi.
<i>Arroche des rîrages</i> (Fr.)		28	viii.
— <i>en fer de lance</i> (Fr.)		32	viii.
— <i>étaléc</i> (Fr.)		30	viii.
— <i>laciniéc</i> (Fr.)		36	viii.
— <i>pendouculée</i> (Fr.)		38	viii.
— <i>pompiér</i> (Fr.)		37	viii.
Arrowgrass, Marsh.		1433	65 ix.
— Sea-side		1434	66 ix.
Arrowhead, Common		1436	69 ix.
ARTEMISIA			
— <i>ABSINTHIUM</i> , Linn.	731	61	v.
— <i>cærulescens</i> , Linn. (excluded)		216	v.
— <i>CAMPES'TRIS</i> , Linn.	733	64	v.
— <i>Gal'lica</i> , Willd.	735	66	v.
— <i>MARITIMA</i> , Linn.	734 & 735	65	v.
— Sm.	734	65	v.
— var. <i>gal'lica</i> , Syme	735	66	v.
— <i>sal'na</i> , Willd.	734	65	v.
— <i>VULGARIS</i> , Linn.	732	63	v.
ARTHROBIUM			
— <i>chractatum</i> , DC.	279	78	iii.
A'RUM			
— <i>ITALICUM</i> , Mill.	1393	15	ix.
— <i>MACULATUM</i> , Linn.	1392	13	ix.
ARUNDO			
— <i>arcu'ria</i> , Linn.	1722	51	xi.
— <i>Calamagros'tis</i> , Linu.	1724	54	xi.
— <i>color'ata</i> , Willd.	1697	19	xi.
— <i>Epige'ios</i> , Linn.	1723	53	xi.
— <i>epige'ios</i> (Fr.)		54	xi.
— <i>neglec'ta</i> , Ehrh.	1725	55	xi.
— <i>nig'ricans</i> , Merat.		53	xi.
— <i>Phragmi'tes</i> , Linn.	1727	58	xi.
— Merat.	1727	58	xi.
— <i>Pseu'do-phragmi'tes</i> , Lej.		58	xi.
— <i>stric'ta</i> , Schrad.	1725	55	xi.
Asarabacca		1249	90 viii.
<i>Asarét d'Europe</i> (Fr.)		90	viii.
AS'ARUM			
— <i>EUROPÆ'UM</i> , Linn.	1249	90	viii.
Ash, Drooping		59	vi.
— Mountain	486	248	iii.
— Mountain, Bastard	485	247	iii.
— Shrew	902	58	vi.

	PLATE	PAGE	VOL.
Ash, Taller or Common	902 & 903	56	vi.
Asparagus	1515	183	ix.
ASPAR'AGUS			
— <i>OFFICINA'LIS</i> , Linn.		182	ix.
— var. <i>campes'tris</i> , Syme		182	ix.
— <i>marit'imus</i> , Syme	1515	182	ix.
— <i>prostra'tus</i> , Du Mort.?	1515	182	ix.
Aspen		1301	viii.
<i>Asperge officinale</i> (Fr.)		183	ix.
ASPERUGO			
— <i>PROCUMBENS</i> , Linn.	1120	120	vii.
ASPER'ULA			
— <i>ARVEN'SIS</i> , Linn.	662 (bis)	230	iv.
— <i>CYNAN'CHICA</i> , Linn.	661	229	iv.
— <i>ODORA'TA</i> , Linn.	660	228	iv.
— <i>TAURI'NA</i> , Linn.	662	229	iv.
<i>Aspérule à trois nervures</i> (Fr.)		230	iv.
— <i>des champs</i> (Fr.)		231	iv.
— <i>des sables</i> (Fr.)		229	iv.
— <i>odorante</i> (Fr.)		228	iv.
Asphodel, Lancashire		1542	222 ix.
— Scottish		1543	224 ix.
ASPIDIUM			
— <i>abbreviatum</i> , Poir.		61	xii.
— <i>aculeatum</i> , Milde	1861	95	xii.
— Sm.		93	xii.
— Willd.	1860	92	xii.
— var. <i>aculeatum</i> , Hook. & Bak.		93	xii.
— var. <i>angula're</i> , Gren. & Godr.	1861	95	xii.
— <i>lobatum</i> , Hook. & Bak.	1860	93	xii.
— var. <i>vulga're</i> , Döll.	1860	92	xii.
— <i>adna'tum</i> , Blume		60	xii.
— <i>æmulum</i> , Swartz	1858	88	xii.
— <i>aff'ine</i> , Fischer & Meyer		59	xii.
— <i>alpe'stre</i> , Schkuhr 1870 & 1871		112	xii.
— <i>alpi'num</i> , Swartz	1866	104	xii.
— <i>angula're</i> , Willd.	1861	95	xii.
— <i>Braun'ii</i> , Milde		97	xii.
— <i>crini'tum</i> , Martins & Ga-leotti		60	xii.
— <i>cristatum</i> , Milde	1853	70	xii.
— Swartz	1853	70	xii.
— var. <i>spinulo'sum</i> , Hook. & Arn.	1855	77	xii.
— var. <i>uligino'sum</i> , Milde	1854	73	xii.
— <i>dilatatum</i> , var. <i>recur'vum</i> , Bree		1858	88 xii.
— Swartz	1857	82	xii.
— <i>Donnia'nun</i> , Spreng.		59	xii.
— <i>dunctorum</i> , Sm.		84	xii.
— <i>Filix-fœ'mina</i> , Swartz	1869	108	xii.
— <i>Filix-mas</i> , Swartz	1850	57	xii.
— " <i>Filix-mas</i> , var. <i>elongatum</i> , Hook."	1852	67	xii.

	PLATE	PAGE	VOL.
ASPID'IUM			
— <i>Filix-mas</i> , var. <i>glandulo-sum</i> , Milde		61	xii.
— — var. <i>recurvum</i> , Francis		60	xii.
— <i>fontanum</i> , Swartz.....	1872	117	xii.
— <i>fragrans</i> , Gray.....	1851	65	xii.
— <i>lobatum</i> , Schkuhr	1860	92	xii.
— — Smith	1860	93	xii.
— <i>Louche'tis</i> , Swartz	1859	90	xii.
— <i>montanum</i> , Ascherson ...	1849	54	xii.
— — Swartz	1868	106	xii.
— <i>Oreopteris</i> , Swartz	1849	54	xii.
— <i>paleaceum</i> , Don	59	xii.	
— <i>parallelogrammum</i> , Kunze	60	xii.	
— <i>patentissimum</i> , Don	59	xii.	
— <i>recurvum</i> , Bree	1858	88	xii.
— <i>remotum</i> , A. Braun.....	1852	67	xii.
— <i>Rhæticum</i> , Swartz 1871 & 1872	112	xii.	
— <i>rigidum</i> , var. <i>remotum</i> , A. Braun	1852	67	xii.
— — Swartz	1851	65	xii.
— <i>rufidulum</i> , Swartz	1862	98	xii.
— — var. α , Fries.....	1855	77	xii.
— <i>spinulosum</i> , Swartz.....	1855	77	xii.
— — \times <i>cristatum</i> , Milde	1854	73	xii.
— — var. <i>dilatatum</i> , Fries	1857	82	xii.
— — var. γ , Hook. & Arn.	1858	88	xii.
— — var. <i>clavatum</i> , A. Braun	1855	78	xii.
— — var. <i>exaltatum</i> , Lasch	78	xii.	
— — var. <i>multiflorum</i> , Hook. & Arn.	1857	82	xii.
— <i>Thelypteris</i> , Schwartz.....	1848	52	xii.
— <i>Wallichianum</i> , Spreng. ...	59	xii.	
ASPLE'NIUM			
— <i>acutum</i> , "Bory, MS."	1875	123	xii.
— ADIAN'TUM-NIGRUM , Linn.	1874 & 1875	121	xii.
— — var. <i>acutum</i> , Poll. ...	1875	123	xii.
— — var. <i>obtusatum</i> , Moore	122	xii.	
— — var. <i>obtusum</i> , Kit. & Milde	122	xii.	
— — var. <i>obtusum</i> , Moore	123	xii.	
— — var. <i>serpenti'ni</i> , Koch	123	xii.	
— — var. <i>Virgil'ii</i> , Heubl. 1875	123	xii.	
— <i>aterrifolium</i> , Wulf.	1881	136	xii.
— <i>alpestre</i> , Mettenius 1870 & 1871	112	xii.	
— — <i>Rabenk.</i>	1870	113	xii.
— <i>Brey'ni</i> , Retz	1181	136	xii.
— <i>Ceterach</i> , Linn.	1883	139	xii.
— CLERMONTÈ , Syme ...	1879	132	xii.
— [<i>ebeneum</i> , Ait.] (excluded)	118	xii.	
— <i>Filix-fo'mina</i> , Bernh.....	1869	108	xii.
— FONTANUM , Bernh. ...	1872	117	xii.
— [— <i>Milde</i>] (excluded)... ..	148	xii.	
— — var. <i>angustatum</i> , Koch ...	119	xii.	
— — <i>pedicularifolium</i> , Koch ...	119	xii.	
— GERMANICUM , Weiss. 1881	136	xii.	
— <i>Halleri</i> , Spreng.	1872	117	xii.
— LANCEOLATUM , Huds. 1873	119	xii.	

ASPLENIUM

	PLATE	PAGE	VOL.
— <i>lanceolatum</i> , var. <i>mi'crodon</i> , Moore	120	xii.	
— — <i>obovatum</i> , Gren. & Godr.	120	xii.	
— MARINUM , Linn.....	1876	127	xii.
— — var. <i>acutum</i> , Moore	128	xii.	
— — var. <i>mi'crodon</i> , Moore 1873	120	xii.	
— — <i>muralis</i> , Bernh.....	1880	135	xii.
— <i>obovatum</i> , Viviani	120	xii.	
— <i>obtusum</i> , Kit. & Milde.....	122	xii.	
— — Presl.....	123	xii.	
— <i>Onopteris</i> , var. <i>acutum</i> , Milde	1875	123	xii.
— <i>Petrar'c[è]e</i> , Newm.	1879	132	xii.
— <i>productum</i> , Lowe	1875	123	xii.
— [<i>refractum</i> , Moore] (excl.)	148	xii.	
— <i>Rut'a-mura'ria</i> , var. <i>cuneata-</i> <i>tum</i> , Moore	1880	136	xii.
— RU'TA-MURA'RIA , Linn. 1880	135	xii.	
— — var. <i>elatum</i> , Lang ...	135	xii.	
— <i>Scolopendrium</i> , Linn.	1884	141	xii.
— SEPTENTRIONALE , Hull.....	1882	138	xii.
— <i>Serpenti'ni</i> , Tausch	123	xii.	
— TRICHOMANES , Linn. 1878	131	xii.	
— — var. <i>au'ceps</i> , Soland.	131	xii.	
— — <i>pseudogermanicum</i> , Heufler.....	136	xii.	
— <i>Virgil'ii</i> , Guss	1875	123	xii.
— VIRIDE , Huds.	1877	129	xii.
ASPRELLA			
— <i>oryzoides</i> , Lam.....	1686	2	xi.
ASTER			
— [bruma'lis, Nees] (excluded).....	217	v.	
— <i>des Lieux Salés</i> (Fr.)	111	v.	
— [leucan'themus, Desf.] (ex- cluded)	217	v.	
— LINOSYRIS , Bernh.	777	112	v.
— [No'vi-bel'gii, Linn.] (ex- cluded)	217	v.	
— Sea-side	776	111	v.
— TRIPOLIUM , Linn.	776	110	v.
— — var. <i>discoideus</i> , Syme	776	111	v.
ASTEROCEPH'ALUS			
— <i>columbarius</i> , Reich.	678	251	iv.
— <i>Astige Ingelsholbe</i> (Ger.)	6	ix.	
— <i>Astige Sommerwurz</i> (Ger.)	191	vi.	
— <i>Astragale hypoglotte</i> (Fr.)	75	iii.	
— — <i>réglisse</i> (Fr.)	76	iii.	
ASTRAG'ALUS			
— ALPINUS , Linn.	375	73	iii.
— <i>campes'tris</i> , Linn.	374	72	iii.
— GLYCYPHYL'LUS , Linn. 377	75	iii.	
— HYPOGLOT'TIS , Linn. 376	74	iii.	
— <i>uralen'sis</i> , Linn.	373	71	iii.
— <i>Astracee à grandes feuilles</i> (Fr.)	92	iv.	
ASTRANTIA			
— Greater	567	92	iv.
— MA'JOR , Linn.	567	91	iv.

	PLATE	PAGE	VOL.
ATHAMANTA			
— <i>Libano'tis</i> , Sm.	602	137	iv.
— <i>Me'um</i> , Linn.	605	141	iv.
ATHANASIA			
— <i>marit'ima</i> , Linn.	725	55	v.
ATHYRIUM			
— ALPESTRE, <i>Milde</i>			
— — 1870 & 1871	112	xii.	
— — var. <i>flex'ile</i> , <i>Milde</i> ...	1871	115	xii.
— — var. <i>obtusatum</i> , <i>Syme</i>	114	xii.	
— <i>convexum</i> , <i>Newm</i>	109	xii.	
— <i>eu-alpes'tre</i> , <i>Syme</i>	1870	113	xii.
— FILLIX-FEMINA, <i>Roth</i> 1869	108	xii.	
— — var. <i>allatum</i> , <i>Moore</i>	111	xii.	
— — var. <i>confluens</i> , <i>Moore</i>	111	xii.	
— — var. <i>dissectum</i> , <i>Wall.</i>	111	xii.	
— — var. <i>erectum</i> , <i>Syme</i>	109	xii.	
— — var. <i>latifolium</i> , <i>Bab.</i>	111	xii.	
— — var. <i>maritimum</i> , <i>Moore</i>	111	xii.	
— — var. <i>molle</i> , <i>Moore</i>	111	xii.	
— — var. <i>plumosum</i> , <i>Moore</i>	111	xii.	
— — var. <i>Watsoni</i> , <i>Syme</i> ... 1869	110	xii.	
— <i>flex'ile</i> , <i>Syme</i>	1871	115	xii.
— <i>fontanum</i> , <i>Roth</i>	1872	117	xii.
— <i>Halleri</i> , <i>Roth</i>	1872	117	xii.
— <i>incisum</i> , "Roth".....	110	xii.	
— <i>molle</i> , <i>Roth</i>	111	xii.	
— <i>Rhe'ticum</i> , "Roth".....	109	xii.	
ATRIPLEX			
— <i>angustifolia</i> , Sm.	1202	29	viii.
— ARENARIA, <i>Woods</i>	1207	34	viii.
— BABINGTONII, <i>Woods</i> 1206	33	viii.	
— <i>calotheca</i> , <i>Fries</i>	33	viii.	
— <i>crassifolia</i> , <i>Fries</i>	1206	33	viii.
— — <i>Gren. and Godr.</i>	1207	34	viii.
— <i>deltoides</i> , <i>Bab.</i>	1204	31	viii.
— — var. <i>triangularis</i> , <i>Bab.</i>	31	viii.	
— <i>erecta</i> , <i>Auct.</i>	29	viii.	
— — Sm.	1203	29	viii.
— HASTATA, <i>Linn.</i> 1204 & 1205	31	viii.	
— — <i>Huds.</i>	1205	32	viii.
— [hortensis, <i>Linn.</i>] (excluded) ...		39	viii.
— <i>laciniata</i> , Sm.	1207	34	viii.
— <i>latifolia</i> , <i>Wahl.</i> ... 1204 & 1205	31	viii.	
— LITTORALIS, <i>Wahl.</i>			
— — 1200 & 1201	26	viii.	
— <i>littoralis</i> , <i>Linn.</i>	1200	27	viii.
— — var. <i>maritima</i> , <i>Linn.</i> ... 1201	27	viii.	
— — var. <i>serrata</i> , <i>Moq.-Tand.</i>	1201	27	viii.
— <i>maritima</i> , <i>Linn.</i>	1201	27	viii.
— [nitens, <i>Reb.</i>] (excluded)	39	viii.	
— <i>patula</i> , Sm.	1205	32	viii.
— PATULA, <i>Wahl.</i> 1202 & 1203	29	viii.	
— — var. <i>angustifolia</i> , <i>Syme.</i>	1202	29	viii.
— — var. <i>erecta</i> , <i>Syme</i>	1203	29	viii.
— — var. γ , Sm.	1206	33	viii.
— — var. <i>muricata</i> , 'Led.' 1203	29	viii.	

	PLATE	PAGE	VOL.
ATRIPLEX			
— <i>patula</i> , var. <i>serrata</i> , <i>Syme</i>	29	viii.	
— PEDUNCULATA, <i>Linn.</i> 1209	37	viii.	
PORTULACOIDES			
— <i>Linn.</i>	1208	36	viii.
— <i>prostrata</i> , <i>Bab. (olim)</i>	31	viii.	
— <i>ro'sea</i> , <i>Benth.</i>	1207	34	viii.
— — <i>Bab. (olim)</i>	1206	33	viii.
— <i>serrata</i> , <i>Huds.</i>	1201	27	viii.
— <i>Smithii</i> , <i>Syme</i>	1205	32	viii.
— <i>triangularis</i> , 'Willd.'	31	viii.	
ATROPA			
— BELLADONNA, <i>Linn.</i> 934	100	vi.	
— <i>Aubepine à style (Fr.)</i>	238	iii.	
— <i>Aufgeblasener Taubenkropf (Ger.)</i>	57	ii.	
— <i>Aufrechte Mönchje (Ger.)</i>	77	ii.	
— — <i>Trespe (Ger.)</i>	160	xi.	
— <i>Aunée charnue (Fr.)</i>	101	v.	
— — <i>commune (Fr.)</i>	104	v.	
— — <i>dyssentérique (Fr.)</i>	103	v.	
— — <i>officinale (Fr.)</i>	98	v.	
— — <i>rude (Fr.)</i>	99	v.	
— <i>Ausdauer Lein (Ger.)</i>	183	ii.	
— <i>Ausdauerndes Bingelkraut (Ger.)</i>	115	viii.	
— — <i>Knauel (Ger.)</i>	183	vii.	
— <i>Ausbreitete Glockenblume (Ger.)</i>	16	vi.	
— — <i>Melde (Ger.)</i>	30	viii.	
— <i>Ausbreitetes Glaskraut (Ger.)</i>	126	viii.	
— <i>Ausgedehnte Segge (Ger.)</i>	156	x.	
AVE'NA			
— <i>alpina</i> , <i>Kunth</i>	1739	76	xi.
— <i>bromoides</i> , <i>Linn.</i>	77	xi.	
— <i>bulbosae</i> , <i>Willd.</i>	82	xi.	
— <i>caryophyllaea</i> , <i>Wigg.</i>	1734	69	xi.
— ELA'TIOR, <i>Linn.</i>	1742	81	xi.
— — <i>Willd.</i>	1742	82	xi.
— — var. <i>nodosum</i> , <i>Reich.</i>	82	xi.	
— FAT'UA, <i>Linn.</i>	1741	79	xi.
— — var. <i>intermedia</i> , <i>Syme</i>	79	xi.	
— — var. <i>pilosissima</i> , <i>Gray</i>	79	xi.	
— FLAVESCENS, <i>Linn.</i> ... 1736	73	xi.	
— <i>flexuosa</i> , M. & K.	1732	67	xi.
— <i>hybrida</i> , <i>Peterm.</i>	79	xi.	
— <i>intermedia</i> , <i>Lindg.</i>	79	xi.	
— <i>lanata</i> , <i>Köl.</i>	1744	84	xi.
— <i>mol'lis</i> , <i>Köl.</i>	1743	83	xi.
— <i>orientalis</i> , <i>Schreb.</i>	78	xi.	
— [planicul'mis, <i>Schrad.</i>]			
— (excluded)	200	xi.	
— <i>planicul'mis</i> , Sm.	1739	76	xi.
— <i>pre'cox</i> , P. de B.	1735	71	xi.
— PRATEN'SIS, <i>Linn.</i>			
— — 1738 & 1739	75	xi.	
— — Sm.	1738	76	xi.
— — var. <i>alpina</i> , <i>Syme</i> ... 1739	76	xi.	
— PUBESCENS, <i>Linn.</i>	1737	74	xi.
— STRIGOSA, <i>Schreb.</i>	1740	77	xi.
— [subspicata, <i>Link</i>] (excluded).....	200	xi.	

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
AVENELLA				<i>Barbarée à Siliques étalées</i> (Fr.)	171	i.	
— <i>flexuosa</i> , Parl.	1732	67	xi.	— <i>præcoce</i> (Fr.)	176	i.	
Avens, Intermediate	458	199	iii.	<i>Barberkraut</i> (Ger.)	171	i.	
— Mountain	460	201	iii.	Barberry, Common	51	72	i.
— Water	459	200	iii.	<i>Bardane</i> (Fr.)	25	v.	
— Wood	457	198	iii.	— <i>commune</i> (Fr.)	24	v.	
<i>Aroine cultivée</i> (Fr.)	74	xi.		<i>Bärenlauch</i> (Ger.)	219	ix.	
— <i>des prés</i> (Fr.)	77	xi.		<i>Bärentraube</i> (Ger.)	27, 29	vi.	
— <i>follette</i> (Fr.)	80	xi.		BARKHAUSIA			
— <i>pubescente</i> (Fr.)	75	xi.		— <i>foetida</i> , DC.	815	157	v.
— <i>rude</i> (Fr.)	78	xi.		— <i>setosa</i> , DC.	817	159	v.
Awlwort, Water	143	201	i.	— <i>taraxacifolia</i> , DC.	816	158	v.
AZALEA				Barley, Meadow	1821	194	xi.
— <i>procumbens</i> , Linn.	884	32	vi.	— Sea	1813	197	xi.
— Trailing	884	32	vi.	— Wall	1812	195	xi.
<i>Azalée couchée</i> (Fr.)	32	vi.		— Wood	1820	193	xi.
				Barren Strawberry	427	144	iii.
<i>Bachbunje</i> (Ger.)	170	vi.		Barrenwort, Alpine	52	74	i.
<i>Bach Montie</i> (Ger.)	137	ii.		BARTSIA			
— <i>Nelkenwurz</i> (Ger.)	200	iii.		— ALPINA, Linn.	995	177	vi.
BÆOTHRY'ON				— Alpine	995	177	vi.
— <i>cæspitosum</i> , Dietr.	1590	55	x.	— ODONTITES, Huds.	993	174	vi.
— <i>num</i> , Dietr.	1591	56	x.	— var. <i>rotunda'ta</i> , Syme	174	vi.	
— <i>pauciflorum</i> , Dietr.	1589	54	x.	— var. <i>sero'tina</i> , Syme	174	vi.	
BALDELLIA				— var. <i>vulga'ris</i> , Syme	993	174	vi.
— <i>ranunculoïdes</i> , Parl. 1439 & 1440	71	ix.		— Red	993	175	vi.
BALDIN'GERA				— VISCO'SA, Linn.	994	176	vi.
— <i>arundinacea</i> , Dum.	1697	19	xi.	— Yellow	994	176	vi.
— <i>colorata</i> , Fl. Wett.	1697	19	xi.	<i>Bartsie des Alpes</i> (Fr.)	177	vi.	
<i>Baldingère colorée</i> (Fr.)	20	xi.		— <i>rouge</i> (Fr.)	175	vi.	
Bald-Money	605	141	iv.	— <i>riqueteuse</i> (Fr.)	176	vi.	
BALLO'TA				Base Rocket	162	3	ii.
— <i>foetida</i> , Lam.	1065	52	vii.	Basil Thyme	1048	32	vii.
— NIGRA, Linn. ... 1065 & 1066	52	vii.		— Wild	1047	32	vii.
— var. <i>foetida</i> , Koch	1065	52	vii.	Basket-Osier, Fine, var. β	1321	222	viii.
— var. <i>rudera'lis</i> , Koch	1066	52	vii.	Bastard Balm	1062 & 1063	50	vii.
— <i>rudera'lis</i> , Svensk. Bot.	1066	52	vii.	— Cress, Perfoliate-leaved	145	204	i.
<i>Ballotte noire</i> (Fr.)	53	vii.		— Klee (Ger.)	54	iii.	
Balm, Bastard	1062 & 1063	50	vii.	— Mountain Ash	485	247	iii.
— Common	1053	38	vii.	— Pimpernel	1149	154	vii.
— leaved Figwort	950	125	vi.	— Toadflax	1248	88	viii.
Balsam, Orange	314	218	ii.	BATRA'CHIUM			
— Small	315	218	ii.	— <i>circindatum</i> , Fries	15	16	i.
— Yellow	313	217	ii.	— <i>heterophyllum</i> , Fries	19	21	i.
<i>Balsamine jaune</i> (Fr.)	217	ii.		— <i>peltatum</i> , Fries	17 & 18	19	i.
<i>Baltische Binse</i> (Ger.)	27	x.		<i>Bauernsenf</i> (Ger.)	208	i.	
Baneberry	49	67	i.	Bay, Rose	495 & 496	10	iv.
BARBARE'A				Bay-leaved Willow	1303	203	viii.
— <i>arcuata</i> , Reich.	121	172	i.	Beam, White, Common	482	244	iii.
— <i>eu-vulgaris</i> , Syme	120	171	i.	— Lobed-leaved	484	247	iii.
— <i>intermedia</i> , Boreau	123	174	i.	— Rock	483	245	iii.
— <i>parviflora</i> , Fries	122	173	i.	Bearberry, Alpine	880	27	vi.
— <i>patula</i> , Fries	124	175	i.	— Common	881	28	vi.
— PRÆCOX, R. Brown	124	175	i.	Beard-grass, Annual	1713	41	xi.
— Fries	121	172	i.	— Perennial	1714	42	xi.
— <i>stricta</i> , Andr.	122	173	i.	Bear's-foot	45	59	i.
— VULGARIS, R. Br. ... 120-123	171	i.		BEC'CHIA			
— Auct. Plur.	120	171	i.	— <i>albida</i> , Paul.	1461	103	ix.

	PLATE	PAGE	VOL.
Bedford Willow	1308	208	viii.
Bedstraw, Common Great	650	218	iv.
Cross-leaved	646	213	iv.
Diffuse.....	648 (bis)	216	iv.
Heath	651	219	iv.
Hispid-fruited, Corn	657	225	iv.
Marsh	653 & 654	222	iv.
Mountain	652	220	iv.
Narrow-leaved, Great	649	217	iv.
.....	var. γ		
.....	649 (bis)	217	iv.
Rough Corn	659	227	iv.
Rough Marsh	655	223	iv.
Slender, var. β	652	221	iv.
Wall	656	224	iv.
Yellow	628	215	iv.
Bee Orchis	1467	111	ix.
Beech, Common	1291	165	viii.
Fern	1847	50	xii.
<i>Beerentrager der Hühnerbiss</i> (Ger.) ...		55	ii.
Beet, Sea.....	1184	9	viii.
<i>Behaarte Fahnwicke</i> (Ger.)		73	iii.
<i>Plutterbee</i> (Ger.)		104	iii.
<i>Behaarter Ginst</i> (Ger.)		9	iii.
<i>Marbel</i> (Ger.)		6	x.
Belladonna	934	100	vi.
<i>Belladonne vénéneuse</i> (Fr.)		100	vi.
Bell-flower, Clustered	866	8	vi.
Creeping	869	12	vi.
Giant	868	11	vi.
Hare-bell	870	13	vi.
Ivy-leaved	875	19	vi.
Nettle-leaved.....	867	9	vi.
Peach-leaved	871	14	vi.
Rampion	872	15	vi.
Spreading	873	16	vi.
BEL' LIS			
PEREN'NIS, Linn.	772	104	v.
Bennet, Herb	629	174	iv.
<i>Benoite commune</i> (Fr.)		198	iii.
<i>des ruisseaux</i> (Fr.)		200	iii.
<i>intermédiaire</i> (Fr.)		199	iii.
Bent-grass, Bristle-leaved	1717	46	xi.
Brown	1718	47	xi.
Common	1721	50	xi.
Dense-flowered Silky	1716	45	xi.
Marsh.....	1719 & 1720	44	xi.
Spreading Silky ...	1715	44	xi.
BER'BERIS			
VULGARIS, Linn.....	51	71	i.
<i>Berce Bruneursine</i> (Fr)		154	iv.
<i>Berg Ehrenpreis</i> (Ger.).....		167	vi.
<i>Harthen</i> (Ger.)		159	ii.
<i>Hundzunge</i> (Ger.)		120	vii.
<i>Jasione</i> (Ger.)		5	vi.
<i>Platterbse</i> (Ger.)		111	iii.
<i>Schotenweiderich</i> (Ger.) ...		13	iv.
<i>-Segge</i> (Ger.)		126	x.
Bergamot Mint	1029	13	vii.

	PLATE	PAGE	VOL.
<i>Berle à feuilles étroites</i> (Fr.) ...		119	iv.
<i>larges feuilles</i> (Fr.)		118	iv.
<i>Bertram Garbe</i> (Ger.)		60	v.
<i>Berufte Fethenne</i> (Ger.)		54	iv.
BER'ULA			
<i>angustifolia</i> , Koch	588	118	iv.
<i>Besenartige Pfrienen</i> (Ger.).....		11	iii.
BE'TA			
MARIT'IMA, Linn.	1184	8	viii.
<i>vulgaris</i> , var. <i>marit'ima</i> , Moq.-Tand.	1184	8	viii.
<i>Betübender Kälberkopf</i> (Ger.)		169	iv.
BETONICA			
<i>officinalis</i> , Linn.	1067	54	vii.
Betony, Common Water	947	121	vi.
Ehrhart's Water	948	123	vi.
Wood	1067	54	vii.
<i>Bette maritime</i> (Fr.)		9	viii.
BET'ULA			
AL'BA, Linn.	1295 & 1296	181	viii.
Koch	1295	182	viii.
Reich.	1296	186	viii.
var. α , Hook. & Arn.	1295	182	viii.
var. β , Hook. & Arn.	1296	186	viii.
<i>Al'nus</i> , Linn.....	1294	178	viii.
<i>carpat'ica</i> , Walds. & Kit.		186	viii.
<i>glutinos'a</i> , Fries	1296	186	viii.
Wallr.	1296	186	viii.
var. <i>denuda'ta</i> , Gr. & Godr.....		186	viii.
var. <i>pubes'cens</i> , Syme		187	viii.
[interme'dia, Thomas] (excluded)		261	viii.
<i>lacinia'ta</i> , Wahl.		182	viii.
<i>NANA</i> , Linn.	1297	187	viii.
<i>odora'ta</i> , Bech	1295	182	viii.
<i>pen'dula</i> , Roth		182	viii.
<i>pubes'cens</i> , Ehrh.	1296	186	viii.
Wallr.		187	viii.
<i>verruco'sa</i> , Ehrh.	1295	182	viii.
BID'ENS			
CER'NUA, Linn.	763	93	v.
var. <i>discoi'dea</i> , Syme	763, fig. a	93	v.
var. <i>radia'ta</i> , Syme ...	763, fig. b	93	v.
TRIPARTI'TA, Linn. ...	764	94	v.
<i>Bident penché</i> (Fr)		94	v.
<i>tréfolié</i> (Fr.)		95	v.
<i>Biegsames Nickkraut</i> (Ger.)		63	ix.
<i>Bienenähnliche Frauenthraue</i> (Ger.)...		111	ix.
Bilberry, Common.....	879	25	vi.
Great	878	24	vi.
Bindweed, Large	924	87	vi.
Sea	925	88	vi.
Small	923	85	vi.
<i>Binsenformiger Weizen</i> (Ger.)...		184	xi.
Birch, Common	1296	187	viii.
Dwarf	1297	188	viii.
White	1295	183	viii.

	PLATE	PAGE	VOL.
Bird Cherry.....	413	124	iii.
Bird's-Foot.....	345	35	iii.
Least.....	378	78	iii.
Sand.....	379	79	iii.
Trefoil, Common ...	368	66	iii.
Bird's-nest Orchis.....	1478	122	ix.
Yellow.....	901	54	vi.
Birthwort, Common.....	1250	92	viii.
Bisanduftender Reicherschnabel (Ger.)	208	ii.	
Bischofsmütze (Ger.).....	74	i.	
Bistort, Amphibious ...	1241 & 1242	78	viii.
Common.....	1243	79	viii.
Viviparous.....	1244	81	viii.
Bitterblatt (Ger.).....	70	vi.	
Bitter Candytuft.....	149	208	i.
Cress.....	108	158	i.
Milkwort, Small.....	189	41	ii.
-sweet.....	930	96	vi.
Vetch, Black.....	407	112	iii.
Tuberous.....	406	111	iii.
Wood.....	386	89	iii.
Bittere Schaumkraut (Ger.).....	158	i.	
Schleifenblume (Ger.).....	208	i.	
Bitterkraut Sommerwurz (Ger.).....	198	vi.	
Bittersüss (Ger.).....	96	vi.	
Blackberry.....	444-455	163	iii.
Black Bitter Vetch.....	407	112	iii.
Bryony.....	1508	170	ix.
Currant.....	523	45	iv.
Horehound.....	1065 & 1066	53	vii.
Knapweed, var. α	706	32	v.
var. β	707	32	v.
Medick.....	337	24	iii.
Mustard.....	85	127	i.
Nightshade.....	931 & 932	98	vi.
Oat.....	1740	78	xi.
Poplar.....	1302	199	viii.
Saltwort.....	1150	154	vii.
Spleenwort.....	1874 & 1875	{122, 123}	xii.
Blackthorn.....	408	115	iii.
Bladder Campion, Common.....	199	57	ii.
Sea.....	200	58	ii.
-fern, Alpine.....	1867	104	xii.
Brittle.....	1865	102	xii.
Mountain.....	1868	107	xii.
-Nut, Common.....	322	235	ii.
Sedge.....	1682	171	x.
-seed, Cornish.....	630	176	iv.
Bladderwort, Greater.....	1125	127	vii.
Intermediate.....	1127	129	vii.
Lehman's.....	1125 (bis)	127	vii.
Lesser.....	1126	128	vii.
Blasensegge (Ger.).....	171	x.	
Blasse Segge (Ger.).....	133	x.	
Blass-gelber Klee (Ger.).....	42	iii.	
Blasses Habichtskraut (Ger.).....	185	v.	
Blattlose Platterbse (Ger.).....	103	iii.	
Blätloser Wüderbart (Ger.).....	131	ix.	
Blaue Molinie (Ger.).....	91	xi.	

	PLATE	PAGE	VOL.
Bläuliche Sommerwurz (Ger.) ...	193	vi.	
Bläuliches Habichtskraut (Ger.).....	193	v.	
Bleaberry.....	879	25	vi.
BLECHNUM			
<i>boreale</i> , Swartz.....	1885	143	xii.
<i>Spicant</i> , Roth.....	1885	143	xii.
BLITUM			
<i>Bo'nus-Henri'cus</i> , Reich....	1199	24	viii.
<i>glau'cum</i> , Koch.....	1198	23	viii.
<i>rubrum</i> , Reich, 1195, 1196, 1197	20	viii.	
[<i>virga'tum</i> , <i>Lin.</i>] (excluded) ...	38	viii.	
Bloody Crane's-bill.....	293	192	ii.
-veined Dock.....	1211	42	viii.
Blue-bottle.....	709	34	v.
Blumenblattlose Sagine (Ger.).....	119	ii.	
Blut-Hirse (Ger.).....	11	xi.	
Blutrother Kranichschnabel (Ger.) ...	192	ii.	
BLYS'MUS			
Broad-leaved.....	1583	48	x.
COMPRESSUS, Panz.	1583	48	x.
Narrow-leaved.....	1584	49	x.
RUFUS, <i>Link.</i>	1584	48	x.
Bocks Riemenzunge (Ger.).....	91	ix.	
Bogbean.....	920 & 921	79-81	vi.
Bog Hair-grass.....	1733	69	xi.
Myrtle.....	1298	190	viii.
Orchis.....	1489	135	ix.
Pimpernel.....	1148	153	vii.
Sandwort.....	244	116	ii.
Stitchwort.....	233	100	ii.
Bois franc (Fr.).....	220	ii.	
Borage, Common.....	1114	13	vii.
BORA'GO			
OFFICINA'LIS, <i>Lin.</i> ...	1114	112	vii.
BORKHAUS'IA			
<i>fo'etida</i> , Hook. & Arn.	815	157	v.
<i>seto'sa</i> , Hook. & Arn.	817	158	v.
<i>taraxacifo'lia</i> , Hook. & Arn. 816	158	v.	
Borstenförmige Simse (Ger.) ...	60	x.	
Borstige Grundfeste (Ger.).....	159, 160	v.	
Borstiges Rapünzchen (Ger.) ...	244	iv.	
BOTRYAN'THUS			
<i>odo'rus</i> , Kunth.....	1529	201	ix.
BOTRYCH'IUM			
<i>incisum</i> , Milde.....	1837	25	xii.
[<i>lancoela'tum</i> , <i>Angstrom</i>]			
(excluded).....	28	xii.	
<i>Luna'ria</i> , Fries.....	1837	25	xii.
Lowe.....	1837	25	xii.
LUNA'RIA, Swartz.....	1837	24	xii.
[— var. δ , <i>Sm.</i>] (excluded) ...	27	xii.	
var. <i>incisum</i> , Milde.....	25	xii.	
var. <i>Moor'ei</i> , Lowe... ..	25	xii.	
var. <i>ruta'ceum</i> , Fries.....	25	xii.	
<i>luna'tum</i> , Gray.....	1837	24	xii.
[<i>matricariifo'lium</i> , <i>A.</i>			
<i>Braun</i>] (excluded)	27	xii.	
[<i>ruta'ceum</i> , <i>Newm.</i>] (ex-			
cluded).....	28	xii.	

BOTRYCHIUM

	PLATE	PAGE	VOL.
— [Ruta'ceum, Swartz] (ex-cluded)			xii.
Bottle Sedge	1680	169	x.
<i>Boucage à grandes feuilles</i> (Fr.)		116	iv.
<i>Boucage Saxifrage</i> (Fr.)		116	iv.
<i>Bouleau blanc</i> (Fr.)		183	viii.
<i>Bouleau nain</i> (Fr.)		188	viii.
<i>Bouleau pubescent</i> (Fr.)		187	viii.
<i>Bourache officinale</i> (Fr.)		113	vii.
Box, Common	1252	95	viii.
<i>Brachypode des Bois</i> (Fr.)		174	xi.
<i>Brachypode primelle</i> (Fr.)		176	xi.

BRACHYPODIUM

— <i>grac'ile</i> , P. de B.	1807	173	xi.
— <i>lolia'ceum</i> , Fr.	1792	153	xi.
— — R. & S.	1759	110	xi.
— PINNATUM, P. de B. ...	1808	175	xi.
— — var. <i>glabres'cens</i> , <i>Syme</i>		175	xi.
— — <i>pubes'cens</i> , <i>Syme</i>		175	xi.
— SYLVATICUM, R. & S.	1807	173	xi.
— — var. <i>glabres'cens</i> , <i>Syme</i>		174	xi.
— — var. <i>pubes'cens</i> , <i>Syme</i>		174	xi.
Bracken Fern.....	1886	145	xii.

BRACONNOT'IA

— <i>elymo'id'es</i> , Godr.	1809	176	xi.
Brake Fern.....	1886	145	xii.
Brakes, Common	1886	145	xii.
Bramble, Balfour's		192	iii.
— Bloxam's		181	iii.
— Broad-leaved		170	iii.
— Brownish-black		186	iii.
— Buckthorn-leaved ...	446	169	iii.
— Coarse		183	iii.
— Coleman's		174	iii.
— Common	447	163	iii.
— Cuspidate-leaved.....	451	179	iii.
— Dwarf		182	iii.
— File-stemmed	452	185	iii.
— Glandular-stemmed... ..	404	191	iii.
— Grabowski's	449	174	iii.
— Günther's		189	iii.
— Hazel-leaved	455	193	iii.
— Hedgehog		181	iii.
— Hornbeam-leaved		176	iii.
— Imbricated-leaved		170	iii.
— Incurved-leaved		170	iii.
— Intermediate.....		167	iii.
— Köhler's	453	186	iii.
— Large-leaved.....	450	178	iii.
— Leafy-flowered		190	iii.
— Lejeune's		188	iii.
— Lesser sub-erect		166	iii.
— Lindley's		168	iii.
— Long-clustered.....	448	173	iii.
— Mallow-leaved		194	iii.
— Pilose-stemmed		176	iii.
— Plaited-leaved	445	167	iii.
— Pyramidal-flowered... ..		188	iii.

	PLATE	PAGE	VOL.
Bramble, Rose-flowered		182	iii.
— Rough		183	iii.
— Salter's		175	iii.
— Sprengel's.....		180	iii.
— Stone	441	160	iii.
— Sub-erect	444	165	iii.
— Thyrsus-flowered.....		172	iii.
— Trailing.....		190	iii.
— Tubercular		195	iii.
— Various-leaved.....		187	iii.
Brandy Bottle	54	79	i.

BRASSICA

— ADPRES'SA, Boiss.	86	129	i.
— AL'BA, Boiss.	84	125	i.
— BREVIPES, <i>Syme</i>	94 & 95	140	i.
— <i>campes'tris</i> , Linn.....	89	134	i.
— — L. (cultivated vars.)		135	i.
— Cheiran'thus, Vill.	92	139	i.
— eu-monen'sis, <i>Syme</i>	91	138	i.
— MONEN'SIS, Huds. ...91 & 92		138	i.
— — Auct. Plur.	91	138	i.
— mura'lis, Boiss.	94	140	i.
— — var. <i>Babington'ii</i> , <i>Syme</i>		141	i.
— Na'pus, Linn.	88	133	i.
— NI'GRA, Koch	85	126	i.
— OLERA'CEA, Linn.	87	130	i.
— — L. (cultivated vars.)		131	i.
— <i>orienta'lis</i> , Linn.	101	148	i.
— <i>perfolia'ta</i> , Lamarek.....	101	148	i.
— POLYMOR'PHA, <i>Syme</i>	88-90	133	i.
— Ra'pa, Linn.	90	135	xi.
— — L. (cultivated vars.)		136	i.
— SINAPIS'TRUM, Boiss....	83	124	xi.
— TENUIFO'LIA, Boiss. ...	93	139	i.
— vi'minea, Boiss.....	95	142	i.
<i>Braune Moorsimse</i> (Ger.)	46	x.	
— <i>Simse</i>	49	x.	
<i>Breitblättrige Glockenblume</i> (Ger.) ...	11	vi.	
— <i>Linde</i> (Ger.)		173	ii.
— <i>Platterbse</i> (Ger.)... ..		108	iii.
— <i>Sumpfwurcz</i> (Ger.)		125	ix.
— <i>Wolfsmilch</i> (Ger.)		101	viii.
<i>Breitblättriger Merk</i> (Ger.)		118	iv.
<i>Breitblättriges Knabenkraut</i> (Ger.) ...		101	ix.
— <i>Kolbenrohr</i> (Ger.)		3	ix.
— <i>Pfefferkraut</i> , or <i>Kresse</i> (Ger.)		213	i.
<i>Breitfrüchtiger Wasserstern</i> (Ger.) ...		120	viii.
<i>Brennende Nessel</i> (Ger.)		131	viii.
Briar, Baker's	473	217	iii.
— Leathery-leaved	472	221	iii.
— Scentless	471	215	iii.
Bristle-fern	1839	35	xii.
Bristle-grass, Green	1693	14	xi.
— Rough	1694	14	xi.
Bristol Rock Cress	114	166	i.
Brittle Bladder-fern	1865	102	xii.

BRIZA

— <i>lutes'cens</i> , Fouc.....		131	xi.
---------------------------------	--	-----	-----

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.	
BRIZA				BROMUS				
— ME'DIA, Linn.	1774	180	xi.	— RACEMO'SUS, Linn.				
— MI'NOR, Linn.	1775	132	xi.	— — var. <i>commuta'tus</i> , Hook, f.	1802 & 1803	166	xi.	
<i>Brize commune</i> (Fr.)		131	xi.	— — —	1802	168	xi.	
— <i>fluetie</i> (Fr.)		132	xi.	— <i>rig'idus</i> , Koch	1798	162	xi.	
<i>Brombeere</i> (Ger.)		158	iii.	— — — Roth		161	xi.	
Brome-grass, Barren	1799	164	xi.	— SECALI'NUS, L. 1800 & 1801	165	xi.		
— Confused	1802	169	xi.	— — — Schrad.	1800	165	xi.	
— False, Barren	1808	176	xi.	— — — var. <i>diver'gens</i> , Reich.		166	xi.	
— Wood	1807	174	xi.	— — — var. <i>veluti'nus</i> , Syme	1801	166	xi.	
— Field.....	1806	172	xi.	— <i>sero'tinus</i> , Benek.	1795	157	xi.	
— Great.....	1798	163	xi.	— [squamro'sus, L.] (excluded)	202	xi.		
— Racemose	1803	168	xi.	— STER'ILIS, L.	1799	163	xi.	
— Rough	1795	158	xi.	— <i>syvat'icus</i> , Sm.	1807	173	xi.	
— Rye	1800 & 1801	166	xi.	— [Tecto'rum, L.] (excluded)	201	xi.		
— Soft	1804 & 1805	171	xi.	— <i>triflo'ra</i> , Linn.	1794	156	xi.	
— Tall	1793 & 1794	156	xi.	— [unioloi'des, Willd.] (excluded)	201	xi.		
— Upright Annual ...	1797	162	xi.	— <i>veluti'nus</i> , Schrad.....	1801	166	xi.	
— — — Perennial	1796	160	xi.	Brooklime	990	170	vi.	
<i>Brome des prés</i> (Fr.)		168	xi.	Brook Saxifrage, Alpine	553	76	iv.	
— <i>dresse</i> (Fr.)		160	xi.	— weed	1151	156	vii.	
— <i>rude</i> (Fr.)		158	xi.	Broom, Common	329	11	iii.	
— <i>stérile</i> (Fr.)		164	xi.	— — — rape, Bluish.....	1017	200	vi.	
BROMUS				— — — Branched	1007	191	vi.	
— <i>amb'igens</i> , Jord.....	1798	162	xi.	— — — Clove-scented ..	1012	196	vi.	
— ARVEN'SIS, Linn.	1806	171	xi.	— — — Greater	1010	194	vi.	
— Sm.	1802	168	xi.	— — — Ivy	1015	199	vi.	
— <i>as'per</i> , Benek.		157	xi.	— — — Lesser	1016	200	vi.	
— AS'PER, Murr.	1795	156	xi.	— — — Picris	1014	198	vi.	
— — var. <i>Bencken'ii</i> , Syme		157	xi.	— — — Purple	1009	193	vi.	
— — var. <i>sero'tinus</i> , Syme	1795	157	xi.	— — — Red	1011	195	vi.	
— <i>commuta'tus</i> , Schrad.	1802	168	xi.	— — — Sand	1008	192	vi.	
— <i>dian'drus</i> , Curt.	1797	160	xi.	— — — Tall Brown	1013	197	vi.	
— ERECTUS, Huds.	1796	159	xi.	Brownworts	947 & 948	{ 121- 123 }	vi.	
— — var. <i>villo'sus</i> , Syme... ..		159	xi.	<i>Bruch Weide</i> (Ger.)		207	viii.	
— eu-racemo'sus, Syme.....	1803	167	xi.	Brusewort		197	53	ii.
— <i>Ferron'ii</i> , Mab.		170	xi.	BRUNELLA . See PRUNELLA. 45			vii.	
— GIGANTE'US, Linn.				<i>Brunelle commune</i> (Fr.)		47	vii.	
— — — 1793 & 1794	155	xi.		BRUNIERA				
— — — var. <i>triflo'rus</i> , Syme... 1794	156	xi.		— <i>vivip'ara</i> , Franch.	1398	24	ix.	
— <i>horda'ceus</i> , Linn.....		170	xi.	<i>Brunnenkresse</i> (Ger.).....		176	i.	
— MADRITEN'SIS, Linn....	1797	160	xi.	<i>Bruyère à quatre faces</i> (Fr.).....		38	vi.	
— — R. & S.	1797	161	xi.	— — — <i>ceulrée</i> (Fr.)		41	vi.	
— — var. <i>Curtis'ii</i> , Bab.		161	xi.	— — — <i>commune</i> (Fr.)		44	vi.	
— — var. <i>rig'idus</i> , Bab.		161	xi.	— — — <i>vagabonde</i> (Fr)		42	vi.	
— MAX'IMUS, Desv.	1798	162	xi.	<i>Bryone diotique</i> (Fr.)		36	iv.	
— <i>mollifor'mis</i> , Lloyd	1805	170	xi.	BRYONIA				
— MOL'LIS, L.	1804 & 1805	169	xi.	— DIO'CA, Linn.	517	35	iv.	
— Fr.	1804	170	xi.	Bryony, Black	1508	170	ix.	
— — var. <i>glabres'cens</i> , Coss.		170	xi.	— — — Red-berried	517	36	iv.	
— — var. <i>Lloydia'nus</i> , Syme				BUCE'TUM				
(var. <i>Ferro'nii</i> on plate) 1805	170	xi.		— <i>clu'tius</i> , Parn.	1789 & 1790	150	xi.	
— <i>multiflo'rus</i> , Sm.	1801	166	xi.	— <i>gigant'um</i> , Parn. ... 1793 & 1794	155	xi.		
— [pat'ulus, M. & K.] (ex-				— <i>lolia'ceum</i> , Parn.	1792	153	xi.	
cluded)		201	xi.	— <i>praten'se</i> , Parn.....	1791	152	xi.	
— <i>pinna'tus</i> , L.	1808	175	xi.	<i>Buchweizen Knöterich</i> (Ger.) ...	60	viii.		
— <i>polysta'chyus</i> , DC.....	1797	160	xi.	Buckbean, Common	920	79	vi.	
— <i>praten'sis</i> , Ehrh.	1802	168	xi.					
— <i>ramo'sus</i> , Huds.	1795	156	xi.					
— <i>racemo'sus</i> , Fries	1803	167	xi.					

	PLATE	PAGE	VOL.
Buckbean, Round-leaved.....	921	81	vi.
<i>Buckelige Wasserlinse</i> (Ger.) ...		23	ix.
Buckler-fern, Female	1848	52	xii.
Buck's-horn Plantain	1168	174	vii.
Buckthorn, Breaking	319	229	ii.
—leaved Bramble ...	446	169	iii.
—Purging.....	318	227	ii.
—Sea	1245	83	viii.
Buckwheat, Climbing	1227	62	viii.
—Common	1226	60	viii.
—Copse	1228	63	viii.

BUFFONIA

— [an'nuā, DC.] (excluded)... ..	134	ii.	
— [<i>tenuifolia</i> , Sm.] (excluded)....	134	ii.	
Bugle, Common	1088	78	vii.
—Pyramidal	1089	79	vii.
— <i>faux-pin</i> (Fr.).....	80	vii.	
— <i>pyramidale</i> (Fr.)	79	vii.	
— <i>rampante</i> (Fr.) ..	78	vii.	
Bugloss, Common Viper's.....	1095	89	vii.
—Purple Viper's	1096	90	vii.
—Small	1111	109	vii.
<i>Buglosse des campagnes</i> (Fr.) ...	109	vii.	
— <i>officinale</i> (Fr.).....	110	vii.	
— <i>toujours verte</i> (Fr.).....	112	vii.	
<i>Bugrane des champs</i> (Fr.)	18	iii.	
— <i>épineuse</i> (Fr.)	16	iii.	
<i>Buis toujours vert</i> (Fr.).....	95	viii.	

BULBINE

— <i>planifolia</i> , R. & S.	1541	220	ix.
Bullace	409	117	iii.
Bull-dogs	953	131	vi.
Bullock's-wort	937	111	vi.
Bull-rush, Common	1596	63	x.
—Glaucous	1597	64	x.
—Leafy-stemmed	1600	67	x.
—Three-edged	1599	66	x.
—Trigonous-stemmed	1598	65	x.

BUNIAS

— <i>Cakile</i> , Linn.	79	117	i.
------------------------------	----	-----	----

BUNIAM

— <i>Bulbocastanum</i> , Linn.....	583	112	iv.
— <i>Carvi</i> , Bieb.	582	111	iv.
— FLEXUOSUM, With.	584	113	iv.
— <i>verticillatum</i> , Gr. & Godr.	581	110	iv.
Bunny	953	131	vi.
<i>Bunter Dawn</i> (Ger.)	66	vii.	

BUPLEURUM

— ARISTATUM, Bartl. ...	590	120	iv.
— FALCATUM, Linn.	592	122	iv.
— <i>Odontites</i> , Sm.	590	120	iv.
— ROTUNDIFOLIUM, Linn.	589	120	iv.
— TENUISIMUM, Linn... ..	591	121	iv.
<i>Buplèvre à feuilles rondes</i> (Fr.)	120	iv.	
<i>Buplèvre ariété</i> (Fr.)	121	iv.	
— <i>des haies</i> (Fr.)	123	iv.	
— <i>menu</i> (Fr.).....	122	iv.	
Burdock, Greater	699	24	v.
—Intermediate.....	700	25	v.

	PLATE	PAGE	VOL.
Burdock, Lesser	702	26	v.
—Narrow-leaved	701	26	v.
Bur-Marygold, Common	860	214	v.
—Nodding	763	94	v.
—Tripartite	764	95	v.
Bur Medick, Little	340	28	iii.
Burnet, Common Salad.....	409	143	iii.
—Great.....	421	132	iii.
—Muricated Salad	420	136	iii.
—Rose, Common	461	204	iii.
—Irish	463	206	iii.
—Red-fruited	462	205	iii.
—Saxifrage, Common.....	585	116	iv.
—Great	586	116	iv.
Bur-Parsley, Great	618	162	iv.
—Small	617	161	iv.
—reed, Branched.....	1387	6	ix.
—Floating	1389	8	ix.
—Small	1390	9	ix.
—Unbranched	1388	7	ix.
Bush Vetch	388	92	iii.
Butcher's-Broom, Common	1516	185	ix.
<i>Butone en ombelle</i> (Fr.)	76	ix.	

BU'TOMUS

— UMBELLATUS, Linn....	1443	76	ix.
Butter-and-eggs	962-964	142	vi.
—bur, Common (sub-female)	784	120	v.
—(sub-male)	783	120	v.
Buttercup	33	39	i.
Butterfly Orchis, Greater.....	1464	107	ix.
—Lesser	1463	106	ix.
Butterwort, Alpine	1123	125	vii.
—Common	1121	123	vii.
—Large-flowered	1122	124	vii.
—Pale.....	1124	125	vii.
<i>Buzbaum Segge</i> (Ger.)	108	x.	
Buxbaum's Speedwell	973	153	vi.

BUX'US

— SEMPERVIRENS, Linn.	1252	95	viii.
Cabbage Mustard	101	149	i.
—Sea	87	130	i.
—Wild	87	130	i.

CAKILE

— MARITIMA, Scop.....	79	117	i.
-----------------------	----	-----	----

CALAMAGROS'TIS

— arenaria, Roth	1722	51	xi.
— colorata, DC.	1697	19	xi.
— EPIGEIOS, Roth	1723	53	xi.
— LANCEOLATA, Roth ...	1724	54	xi.
— <i>Laponica</i> , Hook.	1726	56	xi.
— neglecta, Fl. Wett. 1725 & 1726 ..	1725 & 1726	55	xi.
— STRICATA, Nutt.	1725	55	xi.
—Hook.	1725	56	xi.
—var. <i>Hookei</i> , Syme... ..	1726	56	xi.
<i>Calament ascendant</i> (Fr.)	36	vii.	
— <i>des champs</i> (Fr.)	33	vii.	
— <i>des bois</i> (Fr.)	36	vii.	
— <i>Népeta</i> (Fr.)	34	vii.	
<i>Calamagrostis lanecolé</i> (Fr.).....	55	xi.	
Calamint, Common	1050 & 1051	36	vii.

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
Calamint, Lesser	1049	34	vii.	CAL'THA			
— Wood	1052	36	vii.	— palus'tris, var. mi'nor, <i>Syme</i>	51	i.	
CALAMIN'THA				— radi'cans, <i>Forster</i>	41	52	i.
— ACINOS, <i>Claire</i>	1048	32	vii.	— ripa'ria, <i>Don</i> ?	50	50	i.
— ascen'dens, <i>Jord</i> ...	1050 & 1051	34	vii.	— vulga'ris, <i>Schott</i>	50	50	i.
— CLINOPO'DIUM, <i>Spenn</i> .	1047	31	vii.	Caltrop, Water	41	52	i.
— MENTHIFO'LIA, <i>Host</i> .				CALYSTE'GIA			
— — 1050 & 1051		34	vii.	— <i>Se'pium</i> , R. Br.....	924	86	vi.
— — var. <i>Brigg'sii</i> , <i>Syme</i> ...	1051	35	vii.	— <i>Soldanel'la</i> , R. Br.	925	87	vi.
— NEP'ETA, <i>Claire</i>	1049	33	vii.	CAMELINA			
— officina'lis, <i>Jord</i>	1052	36	vii.	— <i>denta'ta</i> , "Pers."? <i>Boreau</i>	142	200	i.
— — Mönch	1050 & 1051	34	vii.	— eu-sati'va, <i>Syme</i>	141	199	i.
— — var. <i>ascen'dens</i> , <i>Reich</i> .				— fo'e'tida, <i>Fries</i>	142	200	i.
— — fil.	1051	35	vii.	— <i>macrocar'pa</i> , <i>Reich</i>	141	199	i.
— — var. <i>menthifo'lia</i> , <i>Reich</i> .				— SATI'VA, <i>Crantz</i>	141, 142	199	i.
— — fil.	1050	35	vii.	— — <i>Fries</i>	141	199	i.
— officina'lis, var. <i>vulga'ris</i> ,				<i>Cameline cultivée</i> (Fr.)	200	i.	
Reich. fil.....	1052	36	vii.	— <i>dentée</i> (Fr.)	200	i.	
— SYLVATICA, <i>Bromf.</i> ...	1052	36	vii.	<i>Camomille des champs</i> (Fr.)	52	v.	
CALEN'DULA				— <i>des teinturiers</i> (Fr.)	53	v.	
— [arven'sis, <i>Linn.</i>] (excluded) ...	216	v.		— <i>fetide</i> (Fr.)	50	v.	
— [officina'lis, <i>Linn.</i>] (excluded) ...	216	v.		— <i>Romaine</i> (Fr.)	54	v.	
<i>Callitriche à fruits larges</i> (Fr.)	120	viii.		<i>Campanula à feuilles radicales</i>			
— — <i>printanière</i> (Fr.) ...	119	viii.		— <i>rondes</i> (Fr.)	13	vi.	
CALLITRICHE				— — <i>à larges feuilles</i> (Fr.)	11	vi.	
— aqua'tica, <i>Sm.</i>	1271	119	viii.	— <i>agglonérée</i> (Fr.) ...	8	vi.	
— AUTUMNA' LIS, <i>Linn.</i> ...	1275	122	viii.	— <i>étalée</i> (Fr.)	16	vi.	
— — <i>Hook</i>	1274	121	viii.	— <i>fausse Raiponce</i> (Fr.) ...	12	vi.	
— — <i>Kütz</i>	1273	120	viii.	— <i>gantelée</i> (Fr.)	9	vi.	
— <i>cophocar'pa</i> , <i>Sendtn.</i>	119	viii.		— <i>Persicifolia</i> (Fr.) ...	14	vi.	
— eu-autumna'lis, <i>Syme</i>	1275	122	viii.	— <i>Raiponce</i> (Fr.)	15	vi.	
— eu-ver'na, <i>Syme</i>	1271	119	viii.	CAMPAN'ULA			
— hamula'ta, <i>Kütz.</i>	1273	120	viii.	— GLOMERA'TA, <i>Linn.</i> ...	866	8	vi.
— — var. <i>peduncula'ta</i> ,				— HEDERA'CEA, <i>Linn.</i> ...	875	18	vi.
Bab.	1274	121	viii.	— HYB'RIDA, <i>Linn.</i>	874	17	vi.
— <i>pallens</i> , <i>Gold</i>	119	viii.		— LATIFO'LIA, <i>Linn.</i>	868	10	vi.
— <i>peduncula'ta</i> , <i>DC.</i>	1274	121	viii.	— PAT'ULA, <i>Linn.</i>	873	15	vi.
— — var. <i>ses'silis</i> , <i>Bab.</i> ...	1273	120	viii.	— PERSICIFO'LIA, <i>Linn.</i>	871	14	vi.
— <i>platycar'pa</i> , <i>Kütz.</i>	1272	120	viii.	— RAPUNCULOIDES, <i>Linn.</i>	869	11	vi.
— <i>stagna'lis</i> , <i>Hegelm.</i>	1272	120	viii.	— RAPUN'GULUS, <i>Linn.</i> ...	872	14	vi.
— <i>trunca'ta</i> , <i>Guss.</i>	122	viii.		— ROTUNDIFO'LIA, <i>Linn.</i>	870	12	vi.
— <i>ver'na</i> , <i>Auct. Plur.</i>	1271	119	viii.	— — var. <i>monta'na</i> ,			
— VER'NA, <i>Linn.</i>	1271-1274	118	viii.	<i>Syme</i>	13	vi.	
— <i>verna'lis</i> , <i>Kütz.</i>	1271	119	viii.	— [<i>Spec'ulum</i> , <i>Linn.</i>] (excluded)...	19	vi.	
<i>Callitriche en crochet</i> (Fr.)	121	viii.		— TRACHELIUM, <i>Linn.</i> ...	867	9	vi.
CALLU'NA				<i>Campion</i>	202	60	ii.
— VULGA'RIS, <i>Salisb.</i>	894	43	vi.	— Common Bladder	199	57	ii.
— — var. <i>glabra'ta</i> , <i>Syme</i>	43	vi.		— Moss	205	63	ii.
— — var. <i>inca'na</i> , <i>Syme</i> ...	43	vi.		— Red	211	70	ii.
CAL'THA				— Sea Bladder	200	58	ii.
— <i>alpes'tris</i> , <i>Schott</i> ?	41	52	i.	— Striated	201	59	ii.
— en-palus'tris, <i>Syme</i>	40	50	i.	— White	210	68	ii.
— <i>flabellifo'lia</i> , <i>Boreau</i>	41	52	i.	<i>Canadian Fleabane</i>	773	108	v.
— — <i>Pursh</i>	52	i.		<i>Canadische Dürnwurz</i> (Ger.) ...	108	v.	
— <i>Guercange'rii</i> , <i>Boreau</i>	50	i.		<i>Canary-grass</i>	1698	21	xi.
— PALUS'TRIS, <i>Linn.</i>	40	50	i.	<i>Canche caryophyllée</i> (Fr.)	71	xi.	
— — <i>Auct. Plur.</i>	40	50	i.	— <i>gazonnante</i> (Fr.)	65	xi.	
— — <i>Boreau</i>	40	50	i.	— <i>précocée</i> (Fr.)	72	xi.	
				<i>Candytuft, Bitter</i>	149	208	i.

	PLATE	PAGE	VOL.
CAN'NABIS			
— SATIVA, <i>Linn.</i>	1283	131	viii.
Canterbury Bell	867	9	vi.
Caper Spurge	1267	113	viii.
CAPEL'LA			
— BUR'SA-PASTORIS,			
<i>Mönch</i>	152	211	vi.
<i>Capselle Bourse à-pasteur (Fr.)</i>	212		i.
Caraway, Common	582	111	iv.
— Whorled	581	110	iv.
<i>Caquille (Fr.)</i>	117		i.
<i>Caquillier maritime (Fr.)</i>	118		i.
CARDAM'NE			
— AMA'RA, <i>Linn.</i>	108	157	i.
— [bellidifo'lia, <i>Linn.</i>] (excluded)	224		i.
— BULBIF'ERA, <i>R. Br.</i>	107	156	i.
— eu-hirsu'ta, <i>Syme</i>	110	160	i.
— <i>hastula'ta</i> , <i>Sm.</i>	113	164	i.
— HIRSU'TA, <i>Linn.</i> ... 110 & 111	160		i.
— Eng. Bot.	111	161	i.
— Auct. Plur.	110	160	i.
— var. <i>sylvat'ica</i> , Auct. Plur.	111	161	i.
— IMPATIENS, <i>Linn.</i>	112	161	i.
— <i>petræ'a</i> , <i>Linn.</i>	113	164	i.
— PRATEN'SIS, <i>Linn.</i>	109	158	i.
— <i>sylvat'ica</i> , <i>Link</i>	111	161	i.
<i>Cardamine (Fr.)</i>	156		i.
— <i>amère (Fr.)</i>	158		i.
— <i>bulbifère</i>	157		i.
— <i>des prés (Fr.)</i>	159		i.
— <i>impatiente (Fr.)</i>	162		i.
— <i>velue (Fr.)</i>	160		i.
CARDAR'IA			
— <i>Dru'ba</i> , <i>De Vaux</i>	158	218	i.
<i>Cardère cultivée (Fr.)</i>	247		iv.
<i>Cardère sauvage (Fr.)</i>	246		iv.
CARDUUS			
— <i>acantho'des</i> , <i>Gr. & Godr.</i> ...	685	9	v.
— <i>Koch</i>	8		v.
— <i>Sm.</i>	684	7	v.
— <i>acau'li-arven'sis</i> , <i>Syme</i>	697		v.
(a misprint for <i>arven'si-acau'lis</i>)			
— <i>acau'li-praten'sis</i> , <i>Syme</i> ...	696	19	v.
— ACAULIS, <i>Linn.</i>	692 & 692 (bis)	16	v.
— <i>arven'si-acau'lis</i> , <i>Syme</i>	697	20	v.
— ARVEN'SIS, <i>Curt.</i>	693 & 694	17	v.
— var. <i>seto'sus</i> , <i>Syme</i> ...	694	18	v.
— CRISPUS, <i>Linn.</i>	684	7	v.
— var. <i>litigio'sus</i> , <i>Gr. & Godr.</i>	8		v.
— var. <i>polyan'themos</i> , <i>Godr.</i> ...	8		v.
— ERIOPH'ORUS, <i>Linn.</i> ...	687	11	v.
— HETEROPHYLLUS, <i>Linn.</i>	691	15	v.
— LANCEOLA'TUS, <i>Linn.</i>	686	10	v.
— <i>Maria'nus</i> , <i>Linn.</i>	681	4	v.
— <i>multiflo'rus</i> , <i>Gaud.</i>	8		v.

	PLATE	PAGE	VOL.
CARDUUS			
— NUTANS, <i>Linn.</i>	683	7	v.
— <i>nutan'ti-eris'pus</i> , <i>Soul.</i> ...	685	9	v.
— [olera'ceus, <i>Pers.</i>] (excluded) ...	215		v.
— PALUS'TRIS, <i>Linn.</i>	688	12	v.
— <i>polyacan'thos</i> , <i>Schreb.</i>	8		v.
— <i>polyan'themos</i> , <i>Döll.</i>	685	9	v.
— <i>Koch</i>	8		v.
— <i>praten'si-palus'tris</i> , <i>Syme</i> ...	695	19	v.
— PRATEN'SIS, <i>Huds.</i>	690	14	v.
— <i>pyenoceph'alus</i> , <i>Benth.</i>	682	6	v.
— TENUIFLO'RUS, <i>Curt.</i> ...	682	6	v.
— TUBEROSUS, <i>Linn.</i>	689	13	v.
— <i>Woodwar'dii</i> , <i>Wats.</i>	696	19	v.
CA'REX			
— <i>acu'ta</i> , <i>Curt.</i>	1678	165	x.
— ACU'TA, <i>Linn.</i>	1639	109	x.
— <i>agasta'chys</i> , <i>Ehrh.</i>	1660	139	x.
— ALPINA, <i>Swartz</i>	1636	106	x.
— AMPULLA'CEA, <i>Linn.</i>	1680	168	x.
— <i>ampulla'cea</i> , var. <i>Baker & Hunt.</i>	1681	169	x.
— AQUAT'ILIS, <i>Wahl.</i>	1641 & 1642	112	x.
— var. <i>Watsoni</i> , <i>Syme</i> ...	113		x.
— ARENARIA, <i>Linn.</i>	1618	86	x.
— <i>argyrogl'o'chin</i> , <i>Lond. Cat.</i>	104		x.
— ATRA'TA, <i>Linn.</i>	1635	104	x.
— AXILLA'RIS, <i>Good.</i>	1628	97	x.
— BENERVIS, <i>Sm.</i>	1667	147	x.
— BOENNINGHAUSENIA'NA, <i>Weite</i>	1629	98	x.
— [brizo'id'es, <i>Linn.</i>] (excluded) ...	174		x.
— BUXBAUM'II, <i>Wahl.</i> ...	1637	107	x.
— [<i>cæspito'sa</i> , <i>Fries</i>] (excluded) ...	175		x.
— <i>Gay</i>	1638	108	x.
— <i>Good.</i>	1643	114	x.
— <i>canes'cens</i> , <i>Linu.</i>	1637	107	x.
— <i>Koch</i>	1631	102	x.
— <i>capilla'ris</i> , <i>Leors</i>	1665	144	x.
— CAPILLA'RIS, <i>Linn.</i> ...	1662	138	x.
— <i>cilia'ta</i> , <i>Willd.</i>	1654	128	x.
— <i>clandest'i'na</i> , <i>Good.</i>	1651	124	x.
— <i>coll'i'na</i> , <i>Willd.</i>	1652	125	x.
— <i>cur'ta</i> , <i>Bab.</i>	1631	102	x.
— CUR'TA, <i>Good.</i> ... 1631 & 1632	101		x.
— var. <i>alpic'ola</i> , <i>Wahl.</i>	1632	102	x.
— DAVALLIA'NA, <i>Sm.</i> ...	1611	79	x.
— DEPAUPERA'TA, <i>Good.</i>	1664	142	x.
— DIGITA'TA, <i>Linn.</i>	1650	122	x.
— DIOI'CA, <i>Linn.</i>	1610	78	x.
— DISTANS, <i>Linn.</i>	1668	149	x.
— DISTICHA, <i>Huds.</i>	1617	85	x.
— DIVI'SA, <i>Huds.</i>	1616	84	x.
— <i>divul'sa</i> , <i>Gaud.</i>	93		x.
— <i>divul'sa</i> , <i>Good.</i>	1625	94	x.
— [Dre'jeri, <i>Lange</i>] (excluded) ...	175		x.
— <i>Dryme'ra</i> , <i>Ehrh.</i>	1665	144	x.
— <i>echin'ata</i> , <i>Murr.</i>	1626	94	x.
— <i>Ehrhartia'na</i> , <i>Hoppe</i>	1620	88	x.

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
CAREX				<i>Carex glauque</i> (Fr.)	118	x.	
— TERETIUSCULA, Good.				— <i>hérissé</i> (Fr.).....	163	x.	
— — var. Ehrhartia'na,	1619 & 1620	87	x.	— <i>interrompu</i> (Fr.).....	94	x.	
— — — <i>Syme</i>	1620	87	x.	— <i>jaune</i> (Fr.)	160	x.	
— TOMENTO'SA, Linn. ...	1656	130	x.	— <i>leporina</i> (Fr.)	104	x.	
— <i>undulata</i> , Kunze	132	x.		— <i>lissé</i> (Fr.).....	147	x.	
— USTULA'TA, Wahl.	1663	136	x.	— <i>pâle</i> (Fr.).....	133	x.	
— VAGINA'TA, Tausch. ...	1659	134	x.	— <i>panic</i> (Fr.)	134	x.	
— <i>Vahl'ii</i> , Schk.	1636	106	x.	— <i>paniculé</i> (Fr.).....	91	x.	
— VESICARIA, Linn.	1682	170	x.	— <i>ponctué</i> (Fr.)	151	x.	
— — var. <i>alpigena</i> , Fr. ...	1684	172	x.	— <i>précoce</i> (Fr.)	130	x.	
— — var. <i>involuta</i> , Bab....	1681	169	x.	— <i>puce</i> (Fr.).....	81	x.	
— <i>vit'ilis</i> , Fries	1632	102	x.	— <i>raide</i> (Fr.)	169	x.	
— <i>vi'rens</i> , Lam.	93	x.		CARLINA			
— VULGARIS, Fries	1643	114	x.	— racemo'sa, Linn. (excluded).....	215	v.	
— — var. Gibso'ni, <i>Syme</i>	115	x.		— VULGARIS, Linn.	698	21	v.
— — var. <i>uliginosa</i> , <i>Syme</i>	115	x.		<i>Carline commune</i> (Fr.)	22	v.	
— VULPINA, Linn.	1623	91	x.	<i>Carline Thistle</i>	698	22	v.
— <i>Withering'ii</i> , Gray	87	x.		<i>Carnation, Wild</i>	194	49	ii.
<i>Carex à deux épis</i> (Fr.).....	86	x.		<i>Carotte commune</i> (Fr.)	158	iv.	
— — <i>nervures</i> (Fr.).....	148	x.		— <i>de Boccone</i> (Fr.)	157	iv.	
— — <i>épis grêles</i> (Fr.)	142	x.		CARPINUS			
— — <i>pendants</i> (Fr.)	140	x.		— BETULUS, Linn.	1293	176	viii.
— — <i>pilules</i> (Fr.)	127	x.		— — var. <i>provincia'lis</i> , <i>Gay</i>	176	viii.	
— — <i>quatre fleurs</i> (Fr.)	83	x.		<i>Carrot, Sea</i>	615	157	iv.
— — <i>aigu</i> (Fr.).....	111	x.		— Wild	616	158	iv.
— — <i>alongé</i> (Fr.).....	100	x.		CA'RUM			
— — <i>ampoulé</i> (Fr.)	169	x.		— BULBOCAS'TANUM,			
— — <i>apauv'ré</i> (Fr.)	144	x.		— <i>Koch</i>	583	112	vi.
— — <i>arrondi</i> (Fr.)	89	x.		— CAR'VI, Linn.....	582	111	iv.
— — <i>capillaire</i> (Fr.)	139	x.		— <i>fleuro'sum</i> , Fries	584	113	iv.
— — <i>changeant</i> (Fr.)	90	x.		— VERTICILLA'TUM, <i>Koch</i>			
— — <i>clandestin</i> (Fr.)	125	x.		—	581	110	iv.
— — <i>commun</i> (Fr.).....	116	x.		<i>Carum carvi</i> (Fr.).....	111	iv.	
— — <i>compacte</i> (Fr.).....	92	x.		— <i>verticillé</i> (Fr.)	110	iv.	
— — <i>cotonneux</i> (Fr.)	131	x.		CARYOL'OPHA			
— — <i>de Buzbaum</i> (Fr.)	108	x.		— <i>sempervi'rens</i> , Fisch. & Traut.			
— — <i>de Daval</i> (Fr.).....	80	x.		—	1113	111	vii.
— — <i>de montagne</i> (Fr.)	126	x.		CASTA'NEA			
— — <i>d'Éder</i> (Fr.)	158	x.		— <i>sati'va</i> , Mill.	1290	159	viii.
— — <i>des bois</i> (Fr.)	145	x.		— <i>ves'ca</i> , Gärtn.	1290	159	viii.
— — <i>des bruyères</i> (Fr.)	129	x.		— VULGARIS, Linn.	1290	159	viii.
— — <i>des fanges</i> (Fr.)	120	x.		CATABRO'SA			
— — <i>des frimas</i> (Fr.)	112	x.		— AQUAT'ICA, P. de B. ...	1750	94	xi.
— — <i>des haies</i> (Fr.).....	93	x.		<i>Catabrose aquatique</i> (Fr.).....	95	xi.	
— — <i>des marais</i> (Fr.).....	166	x.		CATAPO'DIUM			
— — <i>des rives</i> (Fr.)	168	x.		— <i>lolia'ceum</i> , Link	1759	110	xi.
— — <i>des rochers</i> (Fr.)	82	x.		CATA'RIA			
— — <i>des sables</i> (Fr.)	87	x.		— <i>vulga'ris</i> , Münch	1054	38	vii.
— — <i>digité</i> (Fr.)	123	x.		<i>Catchfly</i>	201	59	ii.
— — <i>dioïque</i> (Fr.)	79	x.		— Common Garden.....	204	62	ii.
— — <i>en deuil</i> (Fr.)	106	x.		— English	202	60	ii.
— — <i>en vessie</i> (Fr.)	171	x.		— Italian	208	66	ii.
— — <i>espacé</i> (Fr.)	97, 150	x.		— Lobel's	204	62	ii.
— — <i>étré</i> (Fr.).....	156	x.		— Night-flowering	209	67	ii.
— — <i>étoilé</i> (Fr.)	95	x.		— Nottingham	207	65	ii.
— — <i>fauve</i> (Fr.)	154	x.		— Red Alpine	214	73	ii.
— — <i>faux souchet</i> (Fr.)	164	x.		— Red German	213	72	ii.
— — <i>filiforme</i> (Fr.)	161	x.					

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
Catchfly, Spanish	206	64	ii.	CENTAUREA			
—— Spotted.....	203	61	ii.	—— [Salaman'tica, <i>Linn.</i>] (ex-			
—— Variegated	203	61	ii.	cluded)	215	v.	
CATHARTOLINUM				—— SCABIOSA, <i>Linn.</i>	708	33	v.
—— <i>pratense</i> , Reich.	289	181	ii.	—— <i>serotina</i> , Bor.		31	v.
Cat Mint	1054	39	vii.	—— SOLSTITIALIS, <i>Linn.</i> ..	712	38	v.
Cat's-ear Hawkweed.....	842	187	v.	<i>Centauree Bleuet</i> (Fr.)		34	v.
—— Long-rooted	790	130	v.	—— <i>Chausse-trappe</i> (Fr.)		37	v.
—— Smooth	789	129	v.	—— <i>du Solstice</i> (Fr.)		38	v.
—— Spotted	791	130	v.	—— <i>Jacea</i> (Fr.)		31	v.
Cat's-Tail, Common	1385	3	ix.	—— <i>noir</i> (Fr.)		32	v.
—— Narrow-leaved	1386	4	ix.	—— <i>rude</i> (Fr.)		36	v.
<i>Caucalide Anthrisque</i> (Fr.)	164		iv.	—— <i>scabieuse</i> (Fr.).....		33	v.
—— à feuilles de Carotte				Centaury, Broad-leaved	907	66	vi.
(Fr.).....	161		iv.	—— Common	909	68	vi.
—— à larges feuilles (Fr.)	162		iv.	—— Narrow-leaved	908	67	vi.
—— <i>novæuse</i> (Fr.).....	165		iv.	—— Slender	910	69	vi.
CAUCALIS				—— Yellow	913	72	vi.
—— ANTHRISCUS, <i>Huds.</i>	620	163	iv.	<i>Centenille naine</i> (Fr.)	153	vii.	
—— DAUCOIDES, <i>Linn.</i>	617	160	iv.	<i>Centrante Chausse-trappe</i> (Fr.)	235	iv.	
—— INFESTA, <i>Curt.</i>	619	162	iv.	<i>rouge</i> (Fr.)	234	iv.	
—— LATIFOLIA, <i>Linn.</i>	618	161	iv.	CENTRANTHUS			
—— NODOSA, <i>Huds.</i>	621	164	iv.	—— CALCITRAPA, <i>DC.</i>	665	234	iv.
CAULINIA				—— RUBER, <i>DC.</i>	664	233	iv.
—— <i>flexilis</i> , Willd.	1432	63	ix.	CENTUNCULUS			
Celandine, Common	67	100	i.	—— MINIMUS, <i>Linn.</i>	1149	153	vii.
—— Crowfoot	39	49	i.	CEPHALANTHERA			
—— Lesser	39	49	i.	—— ENSIFOLIA, <i>Rich.</i>	1484	128	ix.
Celery, Wild	572	99	iv.	—— GRANDIFLORA, <i>Bab.</i> ..	1485	129	ix.
CENTAUREA				—— <i>Lonchophyllum</i> , Reich. fil.	1485	129	ix.
—— <i>amara</i> , <i>DC.</i>	31		v.	—— <i>pal lens</i> , <i>Rich.</i>	1485	129	ix.
—— ASPERA, <i>Linn.</i>	710	36	v.	—— RUBRA, <i>Rich.</i>	1483	127	ix.
—— CALCITRAPA, <i>Linn.</i>	711	37	v.	—— <i>Xiphophyllum</i> , Reich. fil.	1484	128	ix.
—— [Chu'sii, <i>Gay</i>] (excluded)...	215		v.	CEPHALARIA			
—— CYANUS, <i>Linn.</i>	709	34	v.	—— <i>pilosula</i> , Gr. & Godr.	676	248	iv.
—— <i>Debrauxii</i> , Gr. & Godr. ...	707	32	v.	<i>Céraiste à larges feuilles</i> (Fr.) ...	88	ii.	
—— <i>decipiens</i> , Thuill.	707	32	v.	<i>commun</i> (Fr.)	83	ii.	
—— [intyba'cea, <i>Linn.</i>] (ex-				<i>des Alpes</i> (Fr.).....	86	ii.	
cluded).....	216		v.	<i>des champs</i> (Fr.).....	89	ii.	
—— <i>Isnar'di</i> , <i>Linn.</i>	710	36	v.	<i>grêle</i> (Fr.).....	79	ii.	
—— JA'CEA, <i>Linn.</i>	705	30	v.	<i>nain</i> (Fr.).....	80	ii.	
—— [Kotschya'na, <i>Koch</i>] (ex-				<i>pentandre</i> (Fr.)	81	ii.	
cluded).....	215		v.	<i>trivialis</i> (Fr.)	84	ii.	
—— [leucopha'a, <i>Jord.</i>] (ex-				<i>Cerfeuil Anthrisque</i> (Fr.).....	167	iv.	
cluded).....	215		v.	<i>hérissé</i> (Fr.).....	166	iv.	
—— <i>microphyllum</i> , Gr. & Godr....	707	32	v.	<i>penché</i> (Fr.)	169	iv.	
—— [monta'na, <i>Linn.</i>] (ex-				<i>sauvage</i> (Fr.)	168	iv.	
cluded)	216		v.	CERAMANTHE			
—— <i>nemorialis</i> , <i>Jord.</i>	31		v.	—— <i>vernalis</i> , Reich.	951	125	vi.
—— NIGRA, <i>Linn.</i>	706 & 707	31	v.	CERASTIUM			
—— Hook. & Arn.	706	31	v.	—— ALPINUM, <i>Linn.</i>	223	84	ii.
—— var. <i>decipiens</i> , <i>Bab.</i> ..	707	32	v.	—— Reich. ?.....		85	ii.
—— <i>nigrescens</i> , Gr. & Godr. ...	707	32	v.	—— var. <i>hirsutum</i> , Gr. &			
—— Willd. (?) Hook. &				Godr.	85	ii.	
Arn.	707	32	v.	—— var. <i>lanatum</i> , <i>Syme</i>	85	ii.	
—— [paniculata, <i>Linn.</i>] (ex-				—— var. <i>pilosopubes'cens</i> ,			
cluded).....	215		v.	<i>Benth.</i>	224	87	ii.
—— <i>pratensis</i> , (?) Gr. & Godr. ..	707	32	v.	—— var. <i>pubes'cens</i> , <i>Syme</i>	85	ii.	
—— pullata, <i>Linn.</i>	36		v.	—— <i>aquat'icum</i> , <i>Linn.</i>	227	91	ii.

	PLATE	PAGE	VOL.
CERAS'TIUM			
— ARVEN'SE, <i>Linn.</i>	225	88	ii.
— — var. <i>Andrew'sii</i> , <i>Syme</i>	89	89	ii.
— — var. <i>pubes'cens</i> , <i>Syme</i>	225	89	ii.
— <i>atrov'rens</i> , <i>Bab.</i> (olim) ...	218	78	ii.
— <i>glaciale</i> , <i>Gaud.</i>.....	.....	88	ii.
— <i>glau'cum</i> , var. <i>γ. quater-</i> <i>nel'tum</i> , <i>Gr. & Godr.</i> ...	217	77	ii.
— GLOMERA'TUM, <i>Thuill.</i>	221	82	ii.
— <i>glutin'o'sum</i> , <i>Fries</i>	219	79	ii.
— <i>laur'tum</i> , <i>Lam.</i>	223	85	ii.
— <i>loricifo'lium</i> , <i>Vill.?</i>	89	89	ii.
— <i>latifo'lium</i> , <i>Auct. Scand.</i>	87	87	ii.
— — <i>Edmonst.</i>	87	87	ii.
— LATIFOL'IUM, <i>Smith</i> ...	224	86	ii.
— — var. <i>compac'tum</i> , <i>Syme</i>	87	87	ii.
— — var. <i>Edmonstou'ii</i> , <i>Bab.</i>	87	87	ii.
— — var. <i>nigres'cens</i> , <i>Syme</i>	87	87	ii.
— — var. <i>Smith'ii</i> , <i>Syme</i>	87	87	ii.
— <i>nigres'cens</i> , <i>Edmonst.</i>	87	87	ii.
— <i>obscu'rum</i> , <i>Chaub.</i>	219	79	ii.
— PUMILUM, <i>Curtis</i>	219	79	ii.
— — <i>Gr. & Godr.</i>	218	78	ii.
— QUATERNEL'LUM, <i>Fenzl.</i>	217	77	ii.
— SEMIDECAN'DRUM, <i>Linn.</i>	220	81	ii.
— <i>stric'tum</i> , <i>Linn.?</i>	89	89	ii.
— <i>suffrutico'sum</i> , <i>Linn.?</i>	89	89	ii.
— TETRAN'DRUM, <i>Curtis.</i>	218	78	ii.
— TRIGYNUM, <i>Vill.</i>	226	90	ii.
— TRIVIA'LE, <i>Link</i>	222	83	ii.
— — var. <i>holosteo'ides</i> , <i>Fries</i>	84	84	ii.
— — var. <i>pentan'drum</i> , <i>Syme</i>	84	84	ii.
— <i>visco'sum</i> , "Linn.," <i>Smith</i>	222	83	ii.
— — "Linn.," <i>Fries</i>	221	82	ii.
— <i>vulga're</i> , <i>Hartm.</i>	222	83	ii.
— <i>vulga'tum</i> , <i>Benth.</i>	218-222	84	ii.
— — "Linn.," <i>Smith</i>	221	82	ii.
— — "Linn.," <i>Fries</i>	222	83	ii.
CERATOPHYLLUM			
— <i>apicula'tum</i> , <i>Cham.</i>	124	viii.	
— AQUATICUM, <i>Wats.</i> 1276 & 1277	123	viii.	
— <i>demer'sum</i> , <i>Benth.</i> 1276 & 1277	123	viii.	
— — <i>Linn.</i>	1276	123	viii.
— <i>platyacan'thum</i> , <i>Cham.</i> ...	.....	124	viii.
— <i>submer'sum</i> , <i>Linn.</i>	1277	123	viii.
<i>Cerisier Mérisier</i> (Fr.)	120	iii.	
CET'ERACH			
— OFFICINA'RUM, <i>Desv.</i> 1883	139	xii.	
— — var. <i>crena'tum</i> , <i>Milde</i> 1883	140	xii.	
CHÆROPHYLLUM			
— ANTHRIS'CUS, <i>Lam.</i> ...	622	166	iv.
— [aromat'icum, <i>Linn.</i>] (ex- cluded)	180	iv.	

CHÆROPHYLLUM

	PLATE	PAGE	VOL.
— [an'reum, <i>Linn.</i>] (excluded)	180	iv.	
— <i>Cerefo'tum</i> , plate 623, should read <i>C. sati'vum</i> , <i>Lam.</i>			
— SATI'VUM, <i>Lam.</i>	623	167	iv.
— SYLVES'TRE, <i>Linn.</i> ...	624	168	iv.
— <i>temulen'tum</i> , <i>Sm.</i>	625	169	iv.
— TEM'ULUM, <i>Linn.</i>	625	169	iv.
CHAMÆMEL'LUM			
— <i>inodo'rum</i> , <i>De Vis.</i> ...	717 & 718	46	v.
CHAMÆPLIUM			
— <i>officina'le</i> , <i>Wall.</i>	96	143	i.
— <i>polycero'tinum</i> , <i>Wall.</i>	97	144	i.
CHAMAGRO'STIS			
— MIN'IMA, <i>Borkh.</i>	1689	7	xi.
CHAMIT'IA			
— <i>reticula'ta</i> , <i>Kerner</i>	1379	260	viii.
Chamomile, Common	724	54	v.
— — Corn.....	721 & 722	52	v.
— — Ox-eye	723	53	v.
— — Wild	719	48	v.
CHAMOMIL'LA			
— <i>no'bilis</i> , <i>Godr.</i>	724	53	v.
<i>Chauvre cultivé</i> (Fr.).....	132	viii.	
<i>Chapeau d'Evêque</i> (Fr.)	74	i.	
CHA'RA			
— <i>acicula'ris</i> , <i>Wallm.</i>	1916	207	xii.
— <i>aculeola'ta</i> , <i>Kütz.</i>	210	xii.	
— ALOPECUROI'DEA, "Delile"	1909	193	xii.
— — var. <i>Montagn'ei</i> and <i>Wallroth'ii</i> , <i>A. Br.</i>	194	xii.	
— <i>alopecuroides</i> , <i>Wallm.</i>	1909	193	xii.
— <i>alta'ica</i> , <i>A. Br.</i>	1912	199	xii.
— <i>annula'ta</i> , <i>Wallm.</i>	1920	214	xii.
— ASP'ERA, <i>Willd.</i>	1919	210	xii.
— — var. <i>dasyacan'tha</i> , <i>A. Br.</i>	212	xii.	
— <i>atrov'rens</i> , <i>Lowe</i>	1914	203	xii.
— <i>baltica</i> , "Fries"	1917	207	xii.
— — <i>Hartm.</i>	1917	207	xii.
— — var. <i>aff'uis</i> , <i>Groves</i>	1917	208	xii.
— <i>Barbier'ii</i> , <i>Bals.</i>	1902	182	xii.
— <i>Bor'veri</i> , <i>Babing.</i>	1908	189	xii.
— BRAUN'II, <i>Gmelin</i>	1911	197	xii.
— <i>brevican'tis</i> , <i>Bertol.</i>	1902	182	xii.
— <i>Brongniartia'na</i> , <i>Wedd.</i> ...	1899	175	xii.
— <i>canes'cens</i> , <i>H. & J. Groves</i>	1912	199	xii.
— — <i>Loisel.</i>	1919	211	xii.
— <i>capilla'cea</i> , <i>Thuill.</i>	1920	214	xii.
— <i>capita'ta</i> , "Nees ab Esenb." 1890	177	xii.	
— <i>ceratophylla</i> , <i>Wallr.</i>	1913	201	xii.
— <i>coarcta'ta</i> , <i>Wallm.</i>	1914	204	xii.
— <i>colla'bens</i> , <i>Agardh</i>	1914	203	xii.
— <i>commuta'ta</i> , <i>Rupr.</i>	1899	175	xii.
— <i>condensa'ta</i> , <i>Wallm.</i>	1912	199	xii.
— <i>conni'vens</i> , <i>Salzm.</i>	1921	215	xii.
— — var. <i>Duria'ti</i> , <i>Kralik</i>	1921	215	xii.
— <i>contra'ria</i> , <i>A. Braun.</i>	1915	204	xii.

	PLATE	PAGE	VOL.
CHA'RA			
— <i>contra'ria</i> , var. <i>gymmo-phylla</i> , A. Br.	205	xii.	
— var. <i>juba'ta</i> , Müll.	205	xii.	
— " <i>coralli'na</i> , Wallm."	1919	211 xii.	
— <i>corona'ta</i> , Bischoff	1911	197 xii.	
— <i>Cortia'na</i> , Bertolini	1911	197 xii.	
— <i>crassicaulis</i> (Schreber), Kütz.	1914	203 xii.	
— CRINI'TA, Wallr.	1912	198 xii.	
— <i>crispa</i> , Wallm.	1914	204 xii.	
— <i>cur'ta</i> , (Note) Kütz.	1919	211 xii.	
— <i>delicat'ula</i> , Desv.	1920	214 xii.	
— <i>decip'iens</i> , Desv.	1914	203 xii.	
— " <i>diffu'sa</i> , Wallm."	1920	214 xii.	
— <i>claus'tica</i> , Amici	1890	177 xii.	
— <i>cquisetifo'lia</i> , (Nolte) Kütz.	1919	211 xii.	
— <i>cquiseti'na</i> , Kütz.	1916	207 xii.	
— <i>cremosper'ma</i> , Rupr.	1911	197 xii.	
— <i>evol'da</i> , Allen	1912	199 xii.	
— <i>ex'ilis</i> , Barbieri	1903	183 xii.	
— <i>fallax</i> , Agardh	1919	{211, 212} xii.	
— <i>fascicula'ta</i> , Amici	1907	188 xii.	
— <i>fir'ma</i> , Agardh	1917	207 xii.	
— <i>flea'lis</i> , Amici	1911	197 xii.	
— Linn.	1899	175 xii.	
— Reichenb.	1902	182 xii.	
— Sm.	1900	178 xii.	
— Thuill.	1901	181 xii.	
— [— var. <i>mar'i'na</i> , Wahl., (excluded)	191	xii.	
— [— var. <i>nidi'fica</i> , Hartm.] (excluded)	191	xii.	
— [— var. <i>prolif'era</i> , Wallr.] (excluded)	191	xii.	
— var. <i>stella'ta</i> , Wallr.	1902	182 xii.	
— FCE'TIDA, A. Braun.	1914 & 1915	202 xii.	
— var. <i>contra'ria</i> , Coss. & Germ.	1915	204 xii.	
— var. <i>crassicaulis</i> , Schleich.	204	xii.	
— var. <i>hispid'ula</i> , Coss. & Germ.	1915	204 xii.	
— var. <i>melanopyre'na</i> , A. Br.	205	xii.	
— var. <i>monilifor'mis</i> , A. Br.	1915	204 xii.	
— var. <i>subhis'pida</i> , A. Br.	205	xii.	
— <i>foliolo'ta</i> , Hartm.	1920	214 xii.	
— FRAGIF'ERA, Durieu ...	1922	217 xii.	
— FRAG'ILIS, Desv.	1920 & 1921	213 xii.	
— var. <i>conni'vens</i> , N. E. Br.	1921	215 xii.	
— var. <i>Sturrock'ii</i> , Groves	215	xii.	
— <i>fulcra'ta</i> , Ganterer	1920	214 xii.	
— <i>funicula'ris</i> , Thuill.	1914	203 xii.	
— <i>furca'ta</i> , Amici.	1902	182 xii.	

	PLATE	PAGE	VOL.
CHA'RA			
— " <i>jurecula'ta</i> , Reich."	1899	175 xii.	
— <i>galio'des</i> , Agardh	1919	211 xii.	
— <i>globularis</i> , Thuill.	1920	214 xii.	
— <i>glomerata</i> , Desv.	1905	186 xii.	
— <i>glomerulif'era</i> , Rupr.	1905	186 xii.	
— <i>grac'ilis</i> , Sm.	1903	183 xii.	
— <i>Hedwig'ii</i> , Agardh	1920	214 xii.	
— <i>hir'ta</i> , Meyen.	1919	211 xii.	
— <i>his'pida</i> , Linn.	1919	211 xii.	
— HISPIDA, Oeder. ...	1916-1918	206 xii.	
— var. <i>bal'tica</i> , Hartm.	1917	207 xii.	
— var. <i>erin'ita</i> , Wallr. ...	1912	199 xii.	
— <i>dasyacan'tha</i> , A. Br.	1918	208 xii.	
— <i>pseudoc'rinita</i> , A. Br.	1918	208 xii.	
— <i>hor'rida</i> , Wallm.	1916	207 xii.	
— <i>interme'dia</i> , A. Br.	210	xii.	
— <i>intertext'a</i> , Desv.	1919	211 xii.	
— Tenore	1918	208 xii.	
— <i>intrica'ta</i> , Agardh	1909	193 xii.	
— Roth	1907	188 xii.	
— var. <i>robustior</i> , Baker	1908	189 xii.	
— <i>juba'ta</i> , A. Br.	205	xii.	
— <i>Karel'ni</i> , Lessing	1912	199 xii.	
— <i>latifolia</i> , Willd.	1913	201 xii.	
— <i>Liljella'dii</i> , Wallm.	1917	208 xii.	
— <i>longibractea'ta</i> , Kütz.	1914	203 xii.	
— Wallm.	1914	204 xii.	
— <i>longifur'ca</i> , Rupr.	1902	182 xii.	
— <i>monta'na</i> , Pers.	1914	203 xii.	
— <i>mucrona'ta</i> , A. Braun	1902	182 xii.	
— <i>nidi'fica</i> , Borrer	1908	189 xii.	
— [— Roth] (excluded) ...	191	xii.	
— Sm.	1906	186 xii.	
— <i>Noltea'na</i> , A. Braun.	1917	208 xii.	
— <i>obtu'sa</i> , Desv.	1910	195 xii.	
— <i>opa'ca</i> , Agardh	1900	178 xii.	
— <i>papilla'ta</i> , Wallr.	1914	203 xii.	
— <i>papillo'sa</i> , Kütz.	210	xii.	
— <i>papulo'sa</i> , Wallr.	1909	193 xii.	
— <i>peduncula'ta</i> , Kütz.	1918	208 xii.	
— <i>pilif'era</i> , Agardh.	1920	214 xii.	
— <i>polyacan'tha</i> , A. Braun ...	1918	208 xii.	
— <i>polysper'ma</i> , A. Braun.	1907	188 xii.	
— Kütz.	1914	203 xii.	
— <i>Pouzol'sii</i> , A. Braun.	1909	193 xii.	
— <i>prolif'era</i> , Babing.	1905	186 xii.	
— A. Braun.	1908	189 xii.	
— <i>pulchel'la</i> , Wallr.	1920	214 xii.	
— <i>pusill'a</i> , Kütz.	1912	199 xii.	
— <i>refract'a</i> , Kütz.	1914	203 xii.	
— <i>rudis</i> , A. Braun	1916	207 xii.	
— <i>seminu'da</i> , Kütz.	1914	203 xii.	
— <i>Smith'ii</i> , Babing.	1906	186 xii.	
— <i>sphagno'des</i> , Wallm.	1914	204 xii.	
— <i>spino'sa</i> , Rupr.	1916	207 xii.	
— <i>Stal'ii</i> , Visiani	1911	197 xii.	
— STELLIG'ERA, Bauer ...	1910	195 xii.	
— [Stenhammaria'na, Wallm.] (excluded)	191	xii.	

	PLATE	PAGE	VOL.
CHA'RA			
— <i>stric'ta</i> , Kütz.	1914	203	xii.
— <i>subhis'pida</i> , A. Braun	1914	204	xii.
— <i>subspin'osa</i> , Rupr.....	1916	207	xii.
— <i>syncar'pa</i> , vars. A. Braun	1900	178	xii.
— A. Braun, etc.	177	xii.	
— Reichenb.....	177	xii.	
— Thuill.	1900	178	xii.
— var. <i>capitata</i> , Gant... ..	177	xii.	
— var. <i>Smithii</i> , Coss. & Germ.	1900	178	xii.
— <i>tenuisp'na</i> , A. Braun	1919	211	xii.
— <i>tenuis'sima</i> , A. Br.	211	xii.	
— Desv.....	1904	184	xii.
— TOMENTO'SA, Linn. ...	1913	200	xii.
— <i>translu'cens</i> , Persoon	1901	181	xii.
— Reichenb	1910	195	xii.
— <i>tricho'des</i> , Kütz.	1920	214	xii.
— <i>ulvo'des</i> , Bertol.	1910	195	xii.
— <i>verruco'sa</i> , Itzigsohn.	1920	214	xii.
— <i>virga'ta</i> , Kütz.	1920	214	xii.
— "vir'idis, Hartm."	1920	214	xii.
— <i>vulga'ris</i> , Linn.	1914	203	xii.
— var. <i>elonga'ta</i> , Wallr.	1910	195	xii.
— <i>Wallroth'ii</i> , Rupr.....	1909	193	xii.
Chara, Bearded	1912	198	xii.
— Braun's	1911	197	xii.
— Bristly	1916-1918	206	xii.
— Fetid	1914 & 1915	202	xii.
— Foxtail	1909	193	xii.
— Fragile	1920 & 1921	213	xii.
— Rough.....	1919	210	xii.
— Star-bearing	1910	195	xii.
— Strawberry.....	1922	217	xii.
— Tomentose	1913	200	xii.
<i>Chardon à fleurs menues</i> (Fr.)	6	v.	
— <i>crépu</i> (Fr.)	9	v.	
— <i>penché</i> (Fr.)	7	v.	
Charlock	83	124	i.
— Jointed	81	121	i.
— Sea	82	123	i.
— White	81	121	i.
— Wild	81	121	i.
<i>Charme commun</i> (Fr.)	177	viii.	
CHAROP'SIS			
— <i>Braun'ii</i> , Kütz.....	1911	197	xii.
<i>Chatarie commune</i> (Fr.)	39	vii.	
Cheddar Pink.....	193	48	ii.
Cheese-Rennet	648	215	iv.
CHEIRANTHUS			
— CHE'IRI, Linn.	106	154	i.
— <i>fruticulo'sus</i> , Linn.	106	154	i.
— <i>incanus</i> , Linn.	105	152	i.
— <i>sinuatus</i> , Linn.	104	152	i.
<i>Chéidoine Eclairé</i> (Fr.)	100	i.	
CHELIDONIUM			
— <i>corniculatum</i> , Linn.	65	96	i.
— <i>Glauc'ium</i> , Linn.	66	97	i.
— <i>hyb'ridum</i> , Linn.	64	95	i.

	PLATE	PAGE	VOL.
CHELIDONIUM			
— <i>laciniatum</i> , Mill.	67B	99	i.
— MA'JUS, Linn.	67A	99	i.
— — Mill.	67	99	i.
— var. <i>laciniatum</i> , <i>Syme</i>	67B	99	i.
— var. <i>vulga'ris</i> , <i>Syme</i>	67A	99	i.
<i>Chêne à fruits pédonculés</i> (Fr.)... ..	146	viii.	
— <i>sessiles</i> (Fr.)	157	viii.	
CHENOPODI'NA			
— <i>marit'ima</i> , Moq.-Tand. ...	1179	3	viii.
CHENOPO'DIUM			
— <i>acutifol'ium</i> , Sm.....	1186	11	viii.
— AL'BUM, Auct.	1188-1190	13	viii.
— — Linn. Herb.	1188	13	viii.
— var. Benth.	1191	15	viii.
— var. <i>can'dicans</i> , <i>Syme</i>	1188	13	viii.
— var. <i>commu'ne</i> , Moq.-Tand.	1188	13	viii.
— var. <i>paganum</i> , <i>Syme</i>	1190	14	viii.
— var. <i>vir'ide</i> , Moq.-Tand.	1189	14	viii.
— var. <i>virides'cens</i> , Moq.-Tand.	1190	14	viii.
— [ambrosioi'des, Linn.] (excluded)	38	viii.	
— <i>angulosum</i> , Lam.....	1193	17	viii.
BONUS-HENRICUS , Linn.	1199	24	viii.
— <i>botryo'des</i> , Bab.	1197	22	viii.
— Sm.	1195	21	viii.
— [Bo'trys, Linn.] (excluded)	38	viii.	
— <i>can'dicans</i> , Lam.	1188	13	viii.
— <i>chry'so-melanosper'mum</i> , Bab.	19	viii.	
— <i>crassifol'ium</i> , Hornm.	23	viii.	
— <i>cynosu'm</i> , Chev.	1185	11	viii.
— <i>deltoid'eum</i> , Linn.	19	viii.	
— eu-ru'brum, <i>Syme</i> 1196 & 1197	22	viii.	
— FICIFOLIUM, Sm.	1191	15	viii.
— <i>foetidum</i> , Linn.	1187	12	viii.
— <i>fruticosum</i> , Linn.	1178	2	viii.
— GLAU'CUM, Linn.....	1198	23	viii.
— HYB'RIDUM, Linn.	1193	17	viii.
— <i>interme'dium</i> , Mert. & Koch. 1194	19	viii.	
— var. <i>melanosper'mum</i> , Sehur.	19	viii.	
— <i>leiosper'mum</i> , DC. ...	1188-1190	13	viii.
— <i>marit'imum</i> , Linn.	1179	3	viii.
— <i>melanosper'mum</i> , Wallr. ...	19	viii.	
— [multif'idum, Linn.] (excluded).....	38	viii.	
— MURA'LE, Linn.	1192	16	viii.
— <i>ol'idum</i> , Curt.	1187	12	viii.
— [opulifol'ium, Schrad.] (excluded).....	38	viii.	
— <i>paganum</i> , Reich.	1190	14	viii.
— POLYSPERMUM, Linn.	1185 & 1186	10	viii.
— Sm.	1185	11	viii.

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
CHENOPO'DIUM				Chickweed, Wood	228	93	ii.
— polysper'mum, var. acuti-				<i>Chicorée sauvage</i> (Fr.)	123	v.	
fo'lium, <i>Syme</i>	1186	11	viii.	<i>Chieudent ductyle</i> (Fr.).....	9	xi.	
— — var. <i>cymosum</i> , Moq.-				Childing Pink	196	52	ii.
Tand.	1185	11	viii.	Chives, Garden	1537	216	ix.
— — var. <i>spica'tum</i> , Moq.-				Greater	1538	216	ix.
Tand	1186	11	viii.	CHILOCHLO'A			
— <i>rhombofo'lium</i> , Mühl.	1194	19	viii.	— <i>arena'ria</i> , P. de B.	1709	34	xi.
— RUBRUM, <i>Linn.</i> ... 1195-1197				— <i>Böh'meri</i> , P. de B.	1708	33	xi.
Sm.	1196 & 1197	22	viii.	CHIRO'NIA			
— — var. <i>botryoi'des</i> , Auct. 1197				— <i>Centaur'rium</i> , Curt.	909	67	vi.
var. <i>pseudobotryoi'des</i> ,				— <i>littora'lis</i> , Sm. ....908, 908 (<i>bis</i>)	66	vi.	
<i>Wats.</i>	1197	22	viii.	— <i>pulchel'la</i> , Swartz 910, 910 (<i>bis</i>)	68	vi.	
— <i>sero'tinum</i> , Huds.	1191	15	viii.	CHLO'RA			
— [— <i>Linn.</i>] (excluded) ...	38	viii.		— PERFOLIA'TA, <i>Linn.</i> ...	913	72	vi.
— <i>stramo'iifo'lium</i> , Chev. ... 1193				<i>Chlore perfoliée</i> (Fr.)	72	vi.	
— UR'VICUM, <i>Linn.</i>	1194	17	viii.	CHLO'RI'S			
— — Mert. & Koch	1194	19	viii.	— [compres'sa, <i>Nees</i>](excluded).....	203	xi.	
— — Sm.	1194	19	viii.	<i>Choin noirâtre</i> (Fr.)	43	x.	
— — var. <i>interme'dium</i> ,				<i>Chou à feuilles rudes</i> (Fr.)	136	i.	
<i>Koch</i>	1194	19	viii.	— <i>des champs</i> (Fr.)	135	i.	
— <i>vir'ide</i> , Curt.....	1191	15	viii.	— <i>Navet</i> (Fr.).....	134	i.	
— — <i>Linn.</i>	1189	14	viii.	— <i>potager</i> (Fr.)	130	i.	
— VULVA'RIA, <i>Linn.</i>	1187	12	viii.	<i>Christdom</i> (Ger.)	220	ii.	
CHERLE'RIA				<i>Chrysanthème des blés</i> (Fr.)	40	v.	
— <i>sedoi'des</i> , <i>Linn.</i>	240	108	ii.	— — <i>grande Marguerite</i>			
<i>Cherlérie gazonnante</i> (Fr.)	109	ii.		(Fr.).....	42	v.	
Cherry, Bird	413	124	iii.	— — <i>inodore</i> (Fr.).....	47	v.	
Dwarf	412	123	iii.	— — <i>Matricaire</i> (Fr.)	43	v.	
Wild	411	120	iii.	CHRYSANTHEMUM			
Chervil, Common	622	166	iv.	— CHAMOMIL'LA, <i>E. Mey.</i> 719	48	v.	
Garden	623	167	iv.	— INODO'RUM, <i>C. H. Schultz</i>			
Rough	625	169	iv.	717 & 718	46	v.	
Wild	624	168	iv.	— — var. <i>marit'imum</i> , <i>Pers.</i> 718	46	v.	
Chestnut, Sweet	1290	159	viii.	— LEUCANTHEMUM, <i>Linn.</i>			
<i>Chèvrefeuille des bois</i> (Fr.)	207	iv.		714	41	v.	
<i>huies</i> (Fr.) ...	208	iv.		— [macrophyll'um, W. & K.]			
<i>jardins</i> (Fr.)	206	iv.		(excluded)	216	v.	
Chickweed, Berry-bearing	198	55	ii.	— PARTHEN'IUM, <i>Pers.</i> ...	715	43	v.
Broad-leaved Alpine	224	88	ii.	— SEG'ETUM, <i>Linn.</i>	713	40	v.
Mouse-				— TANACE'TUM, <i>Syme</i> ...	716	44	v.
ear	221	88	ii.	CHRYSOCO'MA			
Common	229	95	ii.	— <i>Linosy'ris</i> , <i>Linn.</i>	777	112	v.
Curtis's Mouse-ear	219	80	ii.	<i>Chrysocome à feuilles de Lin</i> (Fr.).....	112	v.	
Dark Green Mouse-				CHRYSOSPLE'NIUM			
ear	218	79	ii.	— ALTERNIFO'LIUM, <i>Linn.</i>			
Field	225	89	ii.	564	85	iv.	
Hairy Alpine.....	223	86	ii.	— OPPOSITIFO'LIUM, <i>Linn.</i>			
-leaved Willow-herb	505	21	iv.	563	84	iv.	
Little Mouse-ear ...	220	81	ii.	CHRYSU'RUS			
Narrow-leaved				— <i>china'tus</i> , P. de B.	1777	134	xi.
Mouse-ear	222	84	ii.	<i>Cicely, Sweet</i>	626	170	iv.
Sand	251	126	ii.	CICEN'DIA			
Three-styled Alpine	226	91	ii.	— <i>Candol'lii</i> , <i>Griseb.</i>	911	70	vi.
Umbelliferous				— FILIFOR'MIS, <i>Delarb.</i> ...	912	71	vi.
Jagged	216	76	ii.	— Least	911	70	vi.
Upright	217	77	ii.	— PUSIL'LA, <i>Griseb.</i>	911	70	vi.
Water	227	92	ii.	— Slender	912	71	vi.
.....	259	137	ii.				
Winter-green	1139	142	vii.				

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
CICERBITA				Clary, Meadow	1058	45	vii.
— <i>alpina</i> , Wallr.	809	152	v.	— Small-flowered	1057	44	vii.
— <i>muralis</i> , Wallr.	808	150	v.	— Wild English	1056	43	vii.
CICHO'RIMUM				CLAYTONIA			
— IN'TYBUS , Linn.	786	122	v.	— PERFOLIA'TA , Don.....	260	137	ii.
CICUTA				— Perfoliate	260	138	ii.
— VIRO'SA , Linn.	571	97	iv.	Cleavers	658	226	iv.
<i>Cicutaire rénêuse</i> (Fr.)		97	iv.	CLE'MATIS			
<i>Ciquê commune ou tachêe</i> (Fr.)		174	iv.	— VITAL'BA , Linn.	I.	2	i.
CINERARIA				<i>Clématite blanche</i> (Fr.)		3	i.
— <i>campes'tris</i> , Retz.	760	89	v.	<i>Clinopode</i> (Fr.)		32	vii.
— <i>integri'folia</i> , With.	760	89	v.	CLINOPO'DIUM			
— <i>palus'tris</i> , Linn.	759	89	v.	— <i>vulga're</i> , Linn.	1047	31	vii.
Cinquefoil, Alpine Yellow	429	145	iii.	Cloudberry	440	158	iii.
— Creeping	432	149	iii.	Clove Pink	194	49	ii.
— Hoary	435	152	iii.	Clover, Alsike	361	54	iii.
— Marsh	437	153	iii.	— Cow	348	41	iii.
— Shrubby	436	152	iii.	— Crinsson	352	45	iii.
— Spring	428	145	iii.	— Dodder	929	93	vi.
— Strawberry-flowered	434	151	iii.	— Dutch	362	55	iii.
CIRCÆA				— Meadow	348	41	iii.
— ALP'NA , Linn.	512	29	iv.	— Red.....	347	39	iii.
— <i>interme'dia</i> , Ehrh.		29	iv.	— White.....	362	55	iii.
— LUTETIA'NA , Linn.....	511	28	iv.	— Yellow	337	25	iii.
<i>Circêe commune</i> (Fr.)		29	iv.	Clubmoss, Common	1833	16	xii.
<i>Circêe des Alpes</i> (Fr.)		30	iv.	— Fir.....	1830	12	xii.
<i>Cirse à feuilles variables</i> (Fr.) ..		16	v.	— Interrupted	1832	15	xii.
— <i>des marais</i> (Fr.)		13	v.	— Lesser Alpine	1829	10	xii.
— <i>des prés, ou à Angleterre</i>				— Marsh	1831	14	xii.
(Fr.)		15	v.	— Savin-leaved	1834	17	xii.
— <i>laineux</i> (Fr.)		12	v.	Club-rush, Bristle-like	1594	60	x.
— <i>lanceolé</i> (Fr.)		11	v.	— Chocolate-headed ...	1589	55	x.
— <i>nain</i> (Fr.)		17	v.	— Floating	1592	58	x.
— <i>tubérent</i> (Fr.)		14	v.	— Least	1591	56	x.
CIRSIIUM				— Link's	1587	53	x.
— <i>acaule</i> , All. ....692 & 692 (<i>bis</i>)	16	v.		— Many-stemmed	1588	54	x.
— <i>An'glicum</i> , Lam.	690	14	v.	— Marsh	1586	52	x.
— <i>arven'se</i> , Scop. ....693 & 694	17	v.		— Round-headed	1595	62	x.
— <i>bulbo'sum</i> , DC.	689	13	v.	— Savi's	1593	59	x.
— <i>eroph'orum</i> , Scop.	687	11	v.	— Scaly-stemmed	1590	56	x.
— <i>heterophyll'um</i> , All.	691	15	v.	— Sea	1601	69	x.
— <i>lanceola'tum</i> , Koch	686	10	v.	— Slender	1585	51	x.
— <i>nemora'le</i> , Reich.		11	v.	— Wood	1602	70	x.
— <i>palus'tre</i> , Scop.	688	12	v.	Cluster Pine	1381	271	viii.
— <i>seto'sum</i> , M. Bieb.....	694	18	v.	CNICUS			
<i>Cistenblumiger Steinbrech</i> (Ger.)		73	iv.	— <i>acaule's</i> , Willd....692 & 692 (<i>bis</i>)	16	v.	
CISTUS				— <i>arven'sis</i> , Hoffm. ....693 & 694	17	v.	
— <i>gutta'tus</i> , Linn.	165	7	ii.	— <i>eroph'orus</i> , Willd.	687	11	v.
— <i>Helian'themum</i> , Linn.	168	10	ii.	— <i>Forste'ri</i> , Sm.	695	19	v.
— [<i>ledifo'lius</i> , Linn.] (<i>ex-</i>				— <i>heterophyll'us</i> , Willd.	691	15	v.
<i>cluded</i>)		235	ii.	— <i>lanceola'tus</i> , Willd.	686	10	v.
— <i>marifo'lius</i> , Smith	167	9	ii.	— <i>palus'tris</i> , Willd.	688	12	v.
— <i>polifo'lius</i> , Linn.	169	11	ii.	— <i>prateu'sis</i> , Willd.	690	14	v.
— <i>tomento'sus</i> , Scop.....	163	10	ii.	— <i>tubero'sus</i> , Willd.	689	13	v.
<i>Clasie marisque</i> (Fr.)		45	x.	CNI'DIUM			
CLA'DIUM				— <i>Sila'us</i> , Spreng	604	139	iv.
— <i>German'icum</i> , Schrad.....	1580	44	x.	COCHLEA'RIA			
— MARIS'CUS , R. Br.	1580	44	x.	— <i>alpina</i> , Watson.....	131	186	i.
<i>Clandestine écaillêuse</i> (Fr.)		190	vi.				

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
COCHLEA'RIA				CONY'ZA			
— AN'GLICA, <i>Linn.</i>	133	187	i.	— <i>squarro'sa</i> , <i>Linn.</i>	767	99	v.
— ARMORA'CIA, <i>Linn.</i> ...	129	183	i.	Coral Peony	50	69	i.
— <i>coron'opus</i> , <i>Linn.</i>	160	221	i.	— -Root, Common	1487	133	ix.
— da'nica, <i>Linn.</i>	132	186	i.	— Spurge	1250	105	viii.
— <i>Dra'ba</i> , <i>Linn.</i>	158	218	i.	<i>Coralline de Haller</i> (Fr.) .....	.....	133	ix.
— <i>groenlan'dica</i> , <i>Sm.</i>	131	186	i.	CORALLORRHIZA			
— officina'lis, <i>Linn.</i>	130	185	i.	— INNA'TA, <i>Br.</i>	1487	132	ix.
— — var. α , <i>Hook. & Arn.</i>	130	185	i.	Coralwort, Bulbiferous	107	157	i.
— — var. <i>alpi'na</i> , <i>Bab.</i>	131	186	i.	Cord-grass, Many-spiked	1688	6	xi.
— — var. γ , <i>Hook. & Arn.</i>	132	186	i.	— — Twin-spiked	1687	5	xi.
— POLYMOR'PHA, <i>Syme</i>	130-132	184	i.	COREOP'SIS			
Cock's-foot-grass, Rough	1778	137	xi.	— <i>Br'dens</i> , <i>Linn.</i>	763	93	v.
CÆLOGLOSSUM				Coriander, Common	632	179	iv.
— <i>vir'ide</i> , <i>Hartm.</i>	1462	105	ix.	<i>Coriandre cultivé</i> (Fr.) .....	.....	179	iv.
COL'CHICUM				CORIAN'DRUM			
— AUTUMNA'LE, <i>Linn.</i>	1544 & 1545	225	ix.	— SATYVUM, <i>Linn.</i>	632	178	iv.
<i>Colchique d'automne</i> (Fr.).....	.....	225	ix.	Corn Bedstraw, Hispid-fruited	657	225	iv.
Coleseed	88	134	i.	— — Rough	659	227	iv.
— Wild	89	135	i.	— Chamomile	721 & 722	52	v.
Colewort, Sea	87	130	i.	— Cockle	215	74	ii.
COLLO'MIA				— Crowfoot	38	46	i.
— [<i>grandifl'ora</i> , <i>Dougl.</i>] (excluded)	.....	83	vi.	— Gromwell	1102	97	vii.
Coltsfoot, Common.....	780	116	v.	— Horsetail	1889	152	xii.
— Sweet-scented	781	118	v.	— Marigold	713	40	v.
— White.....	782	119	v.	— Mint	1038-1040	21	vii.
Columbine, Common.....	46	61	i.	— Mustard	83	124	i.
<i>Comaret des marais</i> (Fr.).....	.....	153	iii.	— Parsley	577	105	iv.
COM'ARUM				— Poppy	58	88	i.
— <i>palus'tre</i> , <i>Linn.</i>	437	153	iii.	— Rose	58	88	i.
Comfrey, Common	1115 & 1116	116	vii.	— Snapdragon	954	132	vi.
— Tuberous	1117	117	vii.	— Sow-thistle	813	155	v.
CONFER'VA				— Spurr y	252	128	ii.
— [<i>nidif'ica</i> , <i>Müller</i>] (excluded)	.....	191	xii.	— — var. β	253	128	ii.
CONIUM				— Woundwort	1072	60	vii.
— MACULA'TUM, <i>Linn.</i> ...	629	173	iv.	Cornel, Dwarf.....	634	186	iv.
CONOPO'DIUM				Corn-flower	709	34	v.
— <i>denud'atum</i> , <i>Koch.</i>	584	113	iv.	<i>Cornifle submergé</i> (Fr.).....	.....	124	viii.
CONRIN'GIA				Cornish Blad-ler-seed	630	176	iv.
— <i>orienta'lis</i> , <i>Reich.</i>	101	148	i.	— Heath	892	42	vi.
— <i>thalit'na</i> , <i>Reich.</i>	115	163	i.	— Moneywort	1499	148	vi.
<i>Consoude officinale</i> (Fr.) .....	.....	116	vii.	<i>Cornouillier</i> (Fr.) .....	.....	186	iv.
— <i>tubéreuse</i> (Fr.) .....	.....	117	vii.	<i>Cornouiller sanguin</i> (Fr.) .....	.....	187	iv.
CONVALLARIA				CORNUS			
— <i>bifo'lia</i> , <i>Linn.</i>	1510	175	ix.	— SANGUINE'A, <i>Linn.</i>	635	186	iv.
— MAIA'LIS, <i>Linn.</i>	1514	180	ix.	— SUE'CICA, <i>Linn.</i>	634	186	iv.
— <i>multifo'ra</i> , <i>Linn.</i>	1513	177	ix.	CORONARIA			
— <i>Polygonu'tum</i> , <i>Linn.</i>	1512	178	ix.	— <i>Flos-cucu'li</i> , <i>Braun</i>	212	71	ii.
— <i>verticilla'ta</i> , <i>Linn.</i>	1511	176	ix.	CORONIL'LA			
CONVOLVULUS				— va'ria, <i>Linn.</i> (excluded) ...	.....	113	iii.
— ARVEN'SIS, <i>Linn.</i>	923	85	vi.	CORO'NOPUS			
— SE'PIUM, <i>Linn.</i>	924	86	vi.	— <i>did'yma</i> , <i>Sm.</i>	159	220	i.
— SOLDANEL'LA, <i>Linn.</i>	925	87	v.	— <i>Ruell'i</i> , <i>Gaert.</i>	160	221	i.
Coarvolvulus	923-925	85-88	vi.	CORRIGIOLA			
				— LITTORA'LIS, <i>Linn.</i> ...	1170	177	vii.
				CORVISAR'TIA			
				— <i>Hele'nium</i> , <i>Mérat</i>	766	97	v.
				CORYD'ALIS			
				— CLAVICULA'TA, <i>DC.</i> ...	70	103	i.

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
CORYD'ALIS				Crauberry, Marsh	876	21	vi.
— <i>digitata</i> , Pers.	68	101	i.	Crane's-bill, Bloody	293	192	ii.
— LU'TEA, DC.	69	102	i.	— Blue Meadow	297	196	ii.
— SOL'IDA, Hook.	68	101	i.	— Dusky	294	193	ii.
Corydalis	69	103	i.	— Jagged-leaved	302	201	ii.
— Solid-rooted	68	102	i.	— Knotty	295	194	ii.
— à <i>vrilles</i> (Fr.)		104	i.	— Long-stalked	303	202	ii.
— <i>jaune</i> (Fr.)		103	i.	— Mountain	298	197	ii.
— <i>tubereuse</i> (Fr.)		102	i.	— Round-leaved	301	200	ii.
CORYLUS				— Shining	304	203	ii.
— AVELL'ANA, Linn.	1292	170	viii.	— Small-flowered	300	199	ii.
<i>Corynephore blanchâtre</i> (Fr.) ...	62		xi.	— Soft	299	198	ii.
CORYNEPH'ORUS				— Wood	296	195	ii.
— CANES'CENS, P. de B.	1729	62	xi.	<i>Cranson</i> (Fr.)		182	i.
COTONEAS'TER				— <i>de Bretagne</i> (Fr.)		183	i.
— VULGAR'IS, Lindl.	477	233	iii.	— <i>officinal</i> (Fr.)		185	i.
— Common	477	234	iii.	CRATÆGUS			
<i>Cotonnier commun</i> (Fr.)	{ 231		iii.	— <i>A'ria</i> , Linn. (in part)	482	243	iii.
— <i>en Alêne</i> (Fr.)	68		v.	— Linn. (in part)	483	244	iii.
— <i>en Alêne</i> (Fr.)		72	v.	— var. <i>a. Scan'dieu</i> , Linn.			
Cotton-grass, Alpine	1603	71	x.	— var. <i>β. Sue'cica</i> , Linn.	484	245	iii.
— Common, var. <i>α</i> ...	1605	74	x.	— var. <i>γ</i> , Linn.	485	247	iii.
— var. <i>γ</i> ...	1606	74	x.	— monog'yna, Jacq.	480	237	iii.
— Downy-stalked ...	1608	76	x.	— OXYACAN'THA, Linn.	479 & 480	236	iii.
— Hare's-tail	1604	72	x.	— Jacq.	479	236	iii.
— Slender	1607	75	x.	— var. <i>β. monog'yna</i> , Bab.	480	237	iii.
Cotton-weed, Seaside	725	55	v.	— oxyacanthoï'des, Thuill. ...	479	236	iii.
COTYLE'DON				— <i>torminalis</i> , Linn.	481	241	iii.
— lu'tea, Huds. (excluded)	63		iv.	Creeping Cinquefoil	332	149	iii.
— UMBILICUS, Linn.	539	62	iv.	— Crowfoot	34	41	i.
<i>Cotyledon Umbilic</i> (Fr.)		63	iv.	— Jenny	1144	149	vii.
Couch-grass, Common	1810	178	xi.	— Tormentil	431	148	iii.
— Decumbent Sea ...	1812	183	xi.	<i>Crépide à feuilles de Pissenlit</i> (Fr.)		159	v.
— Erect Sea	1811	181	xi.	— <i>de Sisymbre</i> (Fr.)		162	v.
— Sand	1813	184	xi.	— <i>bis-annuelle</i> (Fr.)		162	v.
— Wood	1809	177	xi.	— <i>fétide</i> (Fr.)		158	v.
<i>Coudrier noisetier</i> (Fr.)		171	viii.	— <i>hérissé</i> (Fr.)		160	v.
Cow Clover	348	41	iii.	— <i>verte</i> (Fr.)		161	v.
— Cress	156	217	i.	CREPIS			
— Parsley	624	168	iv.	— BIEN'NIS, Linn.	819	161	v.
— Parsnip, Common	613	154	iv.	— FŒ'TIDA, Linn.	815	157	v.
Cowslip	1130	134	vii.	— <i>hieracioides</i> , Willd.	826	162	v.
— Oxlip	1133	137	vii.	— PALUDO'SA, Mönch.	821	163	v.
Cow-wheat, Common	1001-1003	186	vi.	— [pu'l'chra, Linn.] (ex- cluded)		217	v.
— Crested	1000	184	vi.	— SETO'SA, Hall. <i>fil.</i>	817	159	v.
— Field	1001	184	vi.	— SUCCISIFO'LIA, Tausch.	820	162	v.
— Wood	1005	187	vi.	— TARAXACIFO'LIA, Thuill.	816	158	v.
Crab-apple	489	255	iii.	— <i>tictorum</i> , Sm.	818	160	v.
CRAC'CA				— VIRENS, Linn.	818	160	v.
— <i>ma'jor</i> , Frank.	385	87	iii.	Cress, Alpine Rock	113	165	i.
— <i>mi'nor</i> , Riv.	382	84	iii.	— American	124	176	i.
Crack Willow	1306	207	viii.	— Amphibious Yellow	128	182	i.
CRAMBE				— Annual Yellow	127	181	i.
— MARITIMA, Linn.	80	119	i.				
<i>Crambé</i> (Fr.)		118	i.				
— <i>maritime</i> (Fr.)		119	i.				
<i>Cran de Bretagne</i> (Fr.)		183	i.				
Cranberry, American (excluded species)		54	vi.				

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
Cress, Bitter	108	158	i.	Cross-leaved Heath	888 & 889	38, 39	vi.
— Bristol Rock	114	166	i.	Crowberry	1251	94	viii.
— Common Water	125	178	i.	Crowfoot, Bandot's Water ...	22 & 23	26	i.
— Common Wall	115	164	i.	— Bulbous-rooted	35	42	i.
— Cornfield Penny.....	144	202	i.	— Celandine	39	49	i.
— Cow	156	217	i.	— Celery-leaved	27	32	i.
— Creeping Yellow.....	126	180	i.	— Corn	38	46	i.
— Early Winter	124	176	i.	— Creeping	34	41	i.
— Field Penny	144	202	i.	— Floating Water	16	19	i.
— Fringed Rock	117	167	i.	— Golden-haired	32	37	i.
— Garden.....	155	152	i.	— Hairy	36	44	i.
— Green Alpine Penny.....	148	207	i.	— Ivy-leaved Water.....	26	30	i.
— Hairy Rock	116	167	i.	— Lenormand's Water... ..	25	29	i.
— Hairy Wall.....	116	166	i.	— Rigid-leaved Water... ..	15	17	i.
— Lesser Wart	159	221	i.	— River	16	19	i.
— Long-styled Alpine Penny	147	206	i.	— Small-flowered	37	45	i.
— Marsh Yellow	127	181	i.	— Three-lobed Water	24	28	i.
— Pendulous-podded Wall	118	169	i.	— Upright Meadow	33	39	i.
— Perfoliate-leaved Bastard	145	204	i.	— Water.....	21	24	i.
— Perfoliate Penny	145	204	i.	— Wood	32	37	i.
— Shepherd's	150	209	i.	— Wood Anemone	12	13	i.
— Short-styled Alpine Penny	146	205	i.	Crow Garlic	1534	211	ix.
— Smooth Tower Wall	119	170	i.	CRUCIANELLA			
— Swine's.....	160	222	i.	— <i>stylo'sa</i> , DC. (excluded)	233	iv.	
— <i>Thalium's</i> Wall.....	115	164	i.	CRYP'SIS			
— Tower Wall.....	118	169	i.	— [<i>aculea'ta</i> , Ait.] (excluded)	203	xi.	
— Wart	160	222	i.	CRYPTOGRAMME			
— Winter	120	171	i.	— CRIS'PA, R. Brown.....	1844	44	xii.
Cresson (Fr.)	176	176	i.	CTENOP'TERIS			
— <i>amphibia</i> (Fr.)	182	182	i.	— <i>vulgaris</i> , Newm.	1842	38	xii.
— <i>d'Amérique</i> (Fr.)	176	176	i.	Cuckoo Flower	{109 213	159 72	i. ii.
— <i>de fontaine</i> (Fr.)	178	178	i.	Cuckoo-pint, Common	1392	14	ix.
— <i>des marais</i> (Fr.)	181	181	i.	— Italian	1393	16	ix.
— <i>officinal</i> (Fr.).....	178	178	i.	<i>Cucubale porte-baies</i> (Fr.)	55	ii.	
— <i>sauvage</i> (Fr.).....	180	180	i.	CUCUBALUS			
Crested Cow-wheat	1000	184	vi.	— <i>bac'cifer</i> , Gärtm.	198	54	ii.
— Dog's tail-grass	1776	134	xi.	— BACCIF'ERUS, Linn. ...	198	54	ii.
— Hair-grass	1746	89	xi.	— <i>Be'hen</i> , Linn.....	199	56	ii.
— Shield-fern	1853	70	xii.	— <i>ital'icus</i> , Linn.	208	65	ii.
<i>Critlme maritime</i> (Fr.).....	143	143	iv.	— <i>Oti'tes</i> , Linn.....	206	63	ii.
CRITH'MUM				Cudweed, Common	736	68	v.
— MARITIMUM, Linn. ...	606	142	iv.	— Dwarf.....	745	76	v.
CRO'CUS				— Highland	744	75	v.
— AUREUS, Sibth.....	1498	150	ix.	— Jersey.....	742	74	v.
— [<i>autunna'tis</i> , Sm.] (excluded) ...	155	ix.		— Marsh	741	73	v.
— BIFLO'RUS, Mill.	1497	149	ix.	— Narrow-leaved	740	72	v.
— Golden	1498	151	ix.	— Red-tipped	737	69	v.
— <i>lu'teus</i> , Lam.	151	ix.		— Slender	739	71	v.
— <i>min'imus</i> , Hook. & Arn. ...	1497	149	ix.	— Spathulate	738	70	v.
— <i>multif'idus</i> , Lam.	1500	154	ix.	— Upright.....	743	75	v.
— Naked-flowering	1500	154	ix.	Curled Dock	1218	50	viii.
— NUDIFLO'RUS, Sm. ...	1500	154	ix.	— Grainless	1219	51	viii.
— <i>pra'cox</i> , Haw.	1497	149	ix.	— Mint	1028	12	vii.
— Purple	1419	154	ix.	— Pondweed	1413	44	ix.
— <i>reticulat'us</i> , Sm.	1497	149	ix.	Currant, Black	523	45	iv.
— [<i>sati'vus</i> , Linn.] (excluded)	155	ix.		— Cultivated Red	520	42	iv.
— Scotch	1497	150	ix.	— Tasteless Mountain ...	519	41	iv.
— <i>specio'sus</i> , Wils.	1500	154	ix.	— Wild Red	521 & 522	45	iv.
— VER'NUS, All.....	1499	153	ix.				
Cross-leaved Bedstraw	646	213	iv.				

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.	
CUSCUTA				CYNOSURUS				
— [<i>corymbosa</i> , Ruiz & Pav.] (excluded)		93	vi.	— ECHINATUS, Linn.....	1777	134	xi.	
— <i>densiflora</i> , Soy.-Villm.....		926	89	— <i>Cypergrasähnliche Segge</i> (Ger.)	164		x.	
— EPILINUM, <i>Weihe</i>		926	89	CYPERUS				
— EPITHYMIUM, <i>Murr.</i> ...		928	91	— FUSCUS, Linn.	1577	41	x.	
— EUROPÆA, <i>Murr.</i>		927	90	— LONGUS, Linn.....	1578	41	x.	
— ——— Linn.....		927	90	— Brown	1577	41	x.	
— ——— var. <i>epithyrium</i> , Linn.		928	91	Cyphel, Mossy	240	109	ii.	
— ——— var. <i>nefrens</i> , Fr.		90	vi.	Cypress Spurge	1262	108	viii.	
— ——— Smith, Eng. Bot.....		928	91	<i>Cypressen Kraut</i> (Ger.).....		55	v.	
— [Hassi'aca, <i>Pfeiff.</i>] (excluded) ...		93	vi.	— <i>Wolfsmilch</i> (Ger.).....		108	viii.	
— <i>major</i> , DC.		927	90	CYPRIPEDIUM				
— <i>minor</i> , DC.		928	91	— CAL'CEOLUS, Linn.....	1490	136	ix.	
— [<i>racemosa</i> , Engelm.] (excluded)		93	vi.	CYSTOPTERIS				
— [<i>sua'colens</i> , Ser.] (excluded) ...		93	vi.	— <i>Alli'oni</i> , Newm.....	1868	106	xii.	
— TRIFOLIUM, <i>Bab.</i>		929	92	— <i>alpi'na</i> , <i>Desv.</i>	1866 & 1867	103	xii.	
<i>Cuscute à grandes fleurs</i> (Fr.) ...		91	vi.	— ——— Link	1866	104	xii.	
— ——— à <i>petites fleurs</i> (Fr.).....		92	vi.	— <i>denta'ta</i> part), <i>Bab.</i>	1867	104	xii.	
— ——— <i>étriangle lin</i> (Fr.)		89	vi.	— <i>Dickie'd'na</i> , R. Sim.....	1867	104	xii.	
— ——— <i>Trèfle</i> (Fr.)		93	vi.	— <i>eu-frag'ilis</i> , <i>Syme.</i> ... 1864 & 1865		101	xii.	
CUSCUTINA				— FRAG'ILIS, <i>Beruh.</i> 1864-1867		101	xii.	
— [<i>sua'colens</i> , <i>Pfeiff.</i>] (excluded)		93	vi.	— ——— var. <i>denta'ta</i> , <i>Hook.</i>		1865	102	xii.
Cut-grass, European		1686	3	— ——— var. <i>Dickie'na</i> , <i>Milde</i>		1864 & 1865	101	xii.
CYATH'EA				— ——— var. <i>Dickie'na</i> , <i>Moore</i>		1867	104	xii.
— <i>denta'ta</i> , <i>Smith</i>		1865	102	— MONTA'NA, <i>Beruh.</i>	1868	106	xii.	
— <i>frag'ilis</i> , <i>Sm.</i>		1864	102	— <i>myrrhidijo'lia</i> , <i>Newm.</i>	1868	106	xii.	
— ——— var. <i>alpi'na</i> , <i>Bab.</i> ...		1866	104	— <i>reg'ia</i> , <i>Presl</i>	1866	104	xii.	
— <i>inci'sa</i> , <i>Sm.</i>		1866	104	CYT'ISUS				
— <i>monta'na</i> , <i>Sm.</i>		1868	106	— <i>scopa'rrius</i> , <i>Link</i>	329	11	iii.	
— <i>reg'ia</i> , <i>Forst.</i>		1866	104	DABOECIA				
CYCLAMEN				— <i>polijo'lia</i> , <i>Don</i>	885	33	vi.	
— <i>Europe'um</i> , <i>Sm.</i>	1136-1138	140	vii.	<i>Dach Hauslach</i> (Ger.)		61	iv.	
— [—— Linn.] (excluded) ...		156	vii.	<i>Dactyle aggloméré</i> (Fr.).....		137	xi.	
— <i>ficari'efo'lium</i> , <i>Reich.</i>	1138	140	vii.	DACTYLIS				
— <i>heder'efo'lium</i> , <i>Reich.</i> 1136, 1137		140	vii.	— <i>cyunosuroi'des</i> , Linn. (<i>ex</i>				
— HEDERIFO'LIUM, <i>Willd.</i>		1136-1138	140	— ——— parte)	1687	4	xi.	
— ——— var. <i>ficariifo'lium</i> ,				— <i>filifo'r'mis</i> , <i>Röl.</i>	1691	10	xi.	
— ——— <i>Syme.</i>	1138	140	vii.	— GLOMERA'TA, Linn. ...	1778	136	xi.	
— Ivy-leaved	1136-1138	141	vii.	— <i>hispan'ica</i> , Linn.		137	xi.	
— <i>Neapolita'num</i> , <i>Ten.</i> 1136-1138		140	vii.	— <i>stric'ta</i> , <i>Soland.</i>	1687	4	xi.	
<i>Cyclamen à feuilles de lierre</i> (Fr.)		141	vii.	Daffodil, Common	1501	159	ix.	
CYNODON				— ——— Short-crowned	1502	161	ix.	
— DAC'TYLON, <i>Pers.</i>	1690	8	xi.	Daisy	772	105	v.	
<i>Cynoglosse de montagne</i> (Fr.) ...		120	vii.	Damask Violets	103	151	i.	
— ——— <i>officinale</i> (Fr.)		119	vii.	DAMASO'NIUM				
CYNOGLOSSUM				— <i>stella'tum</i> , <i>Pers.</i>	1442	74	ix.	
— OFFICINA'LE, Linn. ...	1118	118	vii.	Dame's Violet.....	103	151	i.	
— ——— var. <i>subgla'brum</i> ,				Dandelion	802	144	v.	
— ——— <i>Syme.</i>		118	vii.	Danewort.....	638	201	iv.	
— MONTA'NUM, <i>Lam.</i>	1119	119	vii.	DANTHONIA				
— <i>sylva'ticum</i> , <i>Hänke</i>	1119	119	vii.	— <i>decum'bens</i> , DC.	1745	87	xi.	
<i>Cynosu're à crête</i> (Fr.)		134	xi.	— <i>strigo'sa</i> , P. de B.....	1740	77	xi.	
— ——— <i>herissé</i> (Fr.)		135	xi.	<i>Danthorne décombante</i> (Fr.).....		87	xi.	
CYNOSURUS				DAPHNE				
— <i>carruleus</i> , Linn.....	1710	36	xi.	— LAURE'OLA, Linn.	1247	86	viii.	
— CRISTA'TUS, Linn.	1776	133	xi.	— MEZETREUM, Linn.	1246	84	viii.	

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
<i>Daphné bois gentil</i> (Fr.)		85	viii.	DIAN'THUS			
— <i>lauréole</i> (Fr.)		87	viii.	— <i>PLUMARIUS</i> , Linn.....	195	50	ii.
Darnel, Common	1816 & 1817	188	xi.	— <i>PROLIFER</i> , Linn.	196	51	ii.
DATURA				<i>DICH'ODON</i>			
— <i>STRAMO'NIUM</i> , Linn....	935	103	vi.	— <i>cerastoides</i> , Reich.	226	90	ii.
— — var. <i>Tat'ula</i> , Syme ...		103	vi.	<i>DICHOS'TYLIS</i>			
— <i>Tat'ula</i> , Linn.		103	vi.	— <i>glu'itans</i> , Beauv.	1592	57	x.
DAUCUS				<i>Diehlblättriges Samkraut</i> (Ger.)		45	ix.
— <i>CARO'TA</i> , Linn. ...	615 & 616	156	iv.	<i>Diehlblättrige Salzmüere</i> (Ger.)... ..		107	ii.
— <i>Caro'ta</i> , Sm.	615	157	iv.	<i>Diekweuzelige Wallweurz</i> (Ger.)		117	vii.
— — var. <i>gum'mifer</i> , Syme	616	157	iv.	DIERVIL'LA			
— <i>gum'mifer</i> , Lam.	616	157	iv.	— [canalen'sis, Willd.] (ex-			
— <i>marit'imus</i> , With.	616	157	iv.	cluded)		210	iv.
<i>Dauphinelle</i> (Fr.)		63	i.	<i>Digitale rougeâtre</i> (Fr.)		127	vi.
— <i>des clamps</i> (Fr.) ...		64	i.	DIGITA'LIS			
<i>Daval'sche Segge</i> (Ger.).....		80	x.	— <i>PURPUREA</i> , Linn.	952	127	vi.
Deadly Nightshade.....	930-934	{ 96, } 100}	vi.	DIGITARIA			
Dead-nettle, Cut-leaved	1083	72	vii.	— [cilia'ris, P. de B.] (ex-			
— Henbit	1081	70	vii.	cluded)		198	xi.
— Intermediate	1082	71	vii.	— <i>glabra</i> , R. & S.....	1691	10	xi.
— Red	1084	73	vii.	— <i>HUMIFUSA</i> , Pers.	1691	10	xi.
— Spotted	1085	74	vii.	— [sanguina'lis, P. de B.] (excluded)		198	xi.
— White	1086	75	vii.	DIGRAPHIS			
DELPHINIUM				— <i>ARUNDINACEA</i> , Trin. 1697	19	xi.	
— <i>AJA'CIS</i> , Reich.	47A	62	i.	DIO'TIS			
— <i>CONSOL'IDA</i> , Linn.	47B	63	i.	— <i>candidis'sima</i> , Desf.	725	55	v.
— <i>consol'ida</i> , Auct. Angl.	47A	62	i.	— <i>MARITIMA</i> , Cass.	725	55	v.
— <i>consol'ida</i> , var. <i>pubes'cens</i> ,				<i>Diplotaxe à feuilles menues</i> (Fr.).....		140	i.
Lowe	47A	62	i.	— <i>des murs</i> (Fr.)		141	i.
<i>Deltablumige Nelke</i> (Ger.)		47	ii.	DIPLOTAX'IS			
DENTARIA				— <i>muralis</i> , DC.....	94	140	i.
— <i>bulbif'era</i> , Auct. Plur.	107	156	i.	— <i>tenuifolia</i> , DC.	93	139	i.
Deptford Pink	191	46	ii.	— <i>cr'minea</i> , DC.	95	142	i.
DESCAMP'SIA				DIP'SACUS			
— <i>alp'na</i> , R. & S.....	1731	65	xi.	— <i>FULLONUM</i> , Mill.	675	247	iv.
— <i>cespito'sa</i> , P. de B.....	1730	204 (64)	xi.	— <i>PILOSUS</i> , Linn.	676	248	iv.
— <i>dis'color</i> , Crep.	1733	68	xi.	— <i>SYLVES'TRIS</i> , Linn.....	674	245	iv.
— <i>flezu'osa</i> , Trin.	1732	67	xi.	— <i>sylvestris</i> , var Benth.	675	247	iv.
— <i>Thuillie'ri</i> , Gren. & Godr....	1733	68	xi.	DISCHA'SIUM			
<i>Deschampsie flezueuse</i> (Fr.)		67	xi.	— <i>parallelogramm</i> , A. Braun		60	xii.
<i>Deutsche Lonitzere</i> (Ger.).....		207	iv.	— <i>patentis'simum</i> , A. Braun		60	xii.
— <i>Mispel</i> (Ger.)		235	iii.	<i>Distelartige Flockenblume</i> (Ger.)		37	v.
<i>Deutsches Schimmelkraut</i> (Ger.)		68	v.	Dock, Bloody-veined.....		1211	42 viii.
<i>Deutsche Schneide</i> (Ger.)		45	x.	— Broad-leaved		1215	47 viii.
<i>Deutscher Ziest</i> (Ger.)		57	vii.	— Curled		1218	50 viii.
Devale	934	102	vi.	— Fiddle		1214	45 viii.
Devil's-bit Scabious	677	250	iv.	— Golden		1212	43 viii.
Dewberry.....	456	197	iii.	— Grainless Curled.....		1219	51 viii.
DEYEU'XIA				— Great Water		1220	52 viii.
— <i>neglecta</i> , Kunth ...	1725 & 1726	55	xi.	— Hartman's		1217	49 viii.
DIAN'THUS				— Meadow		1216	48 viii.
— <i>ARME'RIA</i> , Linn.....	191	45	ii.	— Sharp		1210	41 viii.
— <i>CÆSIUS</i> , Linn.	193	48	ii.	— Yellow Marsh		1213	44 viii.
— <i>CARYOPHYLLUS</i> , Linn. 194		49	ii.	Dodder, Clover		929	93 vi.
— <i>DELTOIDES</i> , Linn.....	192	46	ii.	— Flax		926	89 vi.
— — var. <i>glau'cus</i> , Syme... ..		46	ii.	— Great.....		927	91 vi.
— <i>glau'cus</i> , Linn.		46	ii.	— Lesser		928	92 vi.
				— Thyme		928	92 vi.

	PLATE	PAGE	VOL.
Dog-rose, Columnar-styled	475	231	iii.
— Common.....	474	226	iii.
Dog Violet, Dillenius's.....	175	22	ii.
— Gerarde's	173	20	ii.
— Haller's	177	23	ii.
— Reichenbach's	174	21	ii.
— Sand.....	174	(bis)	236
— Smith's	176	22	ii.
Dog's-Mercury, Annual 1269 & 1270	117	viii.	
— Perennial	1268	115	viii.
— -tail-grass, Crested	1774	134	xi.
— Rough	1777	135	xi.
— -tooth-grass, Creeping ...	1690	9	xi.
Dogwood, Common	635	137	iv.
<i>Doldenblüthige Schwänenblume</i> (Ger.)	76	ix	
— Spurre (Ger.)	76	ii.	
<i>Doldiges Habichtskraut</i> (Ger.)... ..	204	v.	
<i>Doppelsame</i> (Ger.)	140	i.	
<i>Dorine à feuilles alternes</i> (Fr.)	85	iv.	
— opposées (Fr.)	84	iv.	
<i>Dornige Hauhechel</i> (Ger.).....	16	iii.	
DORONICUM			
— PARDALIAN'CHES, Linn.	761	91	v.
— PLANTAGIN'EUM, Linn. 762	92	v.	
<i>Doronic à feuilles de Plantain</i> (Fr.).....	92	v.	
— en cœur (Fr.)	91	v.	
<i>Dostenblättriger Schotenweiderich</i> (Ger.)	21	iv.	
DRA'BA			
— AIZOIDE'S, Linn.	138	194	i.
— brachycarpa, Jord. (Fig. 2)	134	190	i.
— confusa, Ehrh.	193	i.	
— eu-verna, Syme... (Fig. 1)	134	189	i.
— hir'ta, Sm.	137	193	i.
— INCA'NA, Linn.	136	192	i.
— infla'ta, Watson ... (Fig. 3)	134	191	i.
— MURA'LIS, Linn.	135	191	i.
— præ'cox, Reich. ... (Fig. 2)	134	190	i.
— RUPES'TRIS, R. Brown	137	193	i.
— VER'NA, Linn.	134	189	i.
— Reich..... (Fig. 1)	134	189	i.
— — — — — β, Koch..... (Fig. 2)	134	190	i.
— — — — — β, Hook. & Arn. (Fig. 3)	134	191	i.
<i>Drave</i> (Fr.)	188	i.	
— blanchâtre (Fr.)	193	i.	
— des murs (Fr.)	192	i.	
— des rochers (Fr.)	194	i.	
— printanière (Fr.).....	189	i.	
<i>Dreiblättriger Biber</i> (Ger.)	79	vi.	
— Ehrenpreis (Ger.)	154	vi.	
— Wollgras (Ger.)... ..	76	x.	
<i>Dreifarbige Veilchen</i> (Ger.)	25	ii.	
<i>Dreifingeriger Steinbrech</i> (Ger.)	75	iv.	
<i>Dreifürchige Wasserlinse</i> (Ger.)	17	ix.	
<i>Drehörniges Labkraut</i>	227	iv.	
<i>Dreinerige Sandkraut</i> (Ger.)	101	ii.	

	PLATE	PAGE	VOL.
<i>Dreispaltige Binse</i> (Ger.).....	14	x.	
<i>Dreitheiliger Wasser-dost</i> (Ger.)	95	x.	
<i>Drooping Ash</i>	59	vi.	
— Star of Bethlehem ...	1523	195	ix.
<i>Dropwort</i>	416	129	iii.
— Callous-fruited Water-	594	126	iv.
— Common Water-	593	125	iv.
— Fine-leaved Water- ...	598	131	iv.
— Hemlock Water-	597	129	iv.
— Parsley Water-	596	128	iv.
— River Water-	599	132	iv.
— Sulphurwort Water-...	595	127	iv.
DRO'SERA			
— ANG'LICA, Huels.	183	32	ii.
— INTERME'DIA, Heyn. ...	184	33	ii.
— longifo'lia, "Linn.," Auct. Plur.	183	32	ii.
— — — "Linn.," Smith	184	33	ii.
— obor'da, Mert.	32	ii.	
— ROTUNDIFO'LIA, Linn. 182	30	ii.	
— rotundifo'lio-ang'lica, Syme	33	ii.	
<i>Drusenhaarige Fetthenne</i> (Ger.)	51	iv.	
<i>Dryade à huit pétales</i> (Fr.)	202	iii.	
DRY'AS			
— depres'sa, Bab.	201	iii.	
— OCTOPET'ALA, Linn. ...	460	201	iii.
— — — var. depres'sa, Syme	201	iii.	
DRYOP'TERIS			
— abbrevia'ta, Newm.	61	xii.	
— affi'nis, Newm.	59	xii.	
— Bor'reri, Newm.	60	xii.	
— Fl'ix-mus, Schott.....	1850	57	xii.
<i>Duckling Vetch</i>	404	109	iii.
<i>Duckweed, Gibbous</i>	1396	23	ix.
— Greater	1397	24	ix.
— Ivy-leaved	1394	17	ix.
— Lesser	1395	22	ix.
— Rootless	1398	25	ix.
<i>Dunkelgrüner Schotenweiderich</i> (Ger.)	18	iv.	
<i>Dünnblättriger Lein</i> (Ger.)	184	ii.	
<i>Durchsichertes Hartheu, or Jo-</i> <i>hannis Kraut</i> (Ger.)	149	ii.	
<i>Durchwachsender Bitterling</i> (Ger.) ...	72	vi.	
<i>Durchwachsendes Samkraut</i> (Ger.) ...	43	ix.	
<i>Dutch Clover</i>	362	55	iii.
— Rush.....	1894	162	xii.
<i>Dural's Simse</i> (Ger.).....	65	x.	
<i>Dwale</i>	934	102	vi.
<i>Dwarf Adder's-tongue</i>	1836	22	xii.
— Birch	1297	188	viii.
— Cherry	412	123	iii.
— Cornel	634	186	iv.
— Cudweed	745	76	v.
— Elder	638	201	iv.
— Furze	325	7	iii.
— Grasswrack	1431	62	ix.
— Mallow.....	282	169	ii.
— Meadow-grass.....	1759	111	xi.

	PLATE	PAGE	VOL.
Dwarf Spurge.....	1266	112	viii.
— Thistle.....	692	17	v.
— Willow.....	1356-1362	248	viii.
Dyers' Green Weed	328	10	iii.
— Weed	144	5	ii.
— Woad	161	223	i.
Early Hair-grass	1735	72	xi.
— Purple Orchis	1455	98	ix.
— Sand-grass	1689	8	xi.
— Spider Orchis, var. <i>a</i>	1469	112	ix.
— Winter Cress	124	176	i.
Earth-ut, Common	584	114	iv.
— Great	583	113	iv.
Earth-Smoke, Common.....	76	111	i.
— Rampant	74	108	i.
<i>Ebenstraussige Vogelmilch</i> (Ger.)	196		ix.
<i>Eberesche</i> (Ger.).....	248		iii.
ECHINOCHLOA			
— CRUS-GALLI, <i>P. de B.</i> 1692	12		xi.
ECHINOPHORA			
— SPINOSA, <i>Linn.</i>	628	172	iv.
ECHINOSPERMUM			
— <i>deflexum</i> , <i>Lehm.</i> (excluded) ...	122		vii.
— <i>Lap'pula</i> , <i>Lehm.</i> (excluded) ...	121		vii.
ECHIUM			
— <i>Italicum</i> , <i>Auct. Angl.</i>	89		vii.
— PLANTAGINEUM, <i>Linn.</i>	1096		vii.
— <i>violaceum</i> , <i>Koch</i>	1096		vii.
— VULGARE, <i>Linn.</i>	1095		vii.
<i>Edelminze</i> (Ger.)	16, 20		vii.
<i>Edle Garbe</i> (Ger.)	58		v.
<i>Eglantine</i>	468		iii.
<i>Egopode des goutteux</i> (Fr.)	109		iv.
<i>Eibläutriger Frauenjuchs</i> (Ger.)	136		vi.
<i>Eichhornschwanz-Schwengel</i> (Ger.).....	143		xi.
<i>Eichtrose</i> (Ger.)	69		i.
<i>Einbälziges Ried</i> (Ger.).....	53		x.
<i>Einblättriges Zweiblatt</i> (Ger.) ...	121		ix.
<i>Einblütiges Perlgras</i> (Ger.).....	94		xi.
— <i>Wintergrün</i> (Ger.)	52		vi.
<i>Einfache Ingelskolbe</i> (Ger.)	7		ix.
<i>Eingeschnittene Taubnersel</i> (Ger.).....	72		vii.
<i>Eingewachsene Korallenwurz</i> (Ger.)...	133		ix.
<i>Einjähriger Knaul</i> (Ger.)	182		vii.
— <i>Ziest</i> (Ger.)	61		vii.
<i>Einjähriges Bingelkraut</i> (Ger.)	117		viii.
— <i>Rispengras</i> (Ger.)... ..	112		xi.
<i>Einknollige Ragwurz</i> (Ger.).....	110		ix.
<i>Eisenhut</i> (Ger.)	65		i.
ELATINE			
— HEXANDRA, <i>DC.</i>	262	141	ii.
— HYDROPPER, <i>Linn.</i>	263	142	ii.
— var. <i>β</i> , <i>Linn.</i>	262	141	ii.
— <i>paludosa</i> , <i>Seub.</i>	262	141	ii.
— <i>Schkür'na</i> , <i>Drev. & Hayne</i> ..	263	142	ii.
— <i>tripetala</i> , <i>Sm.</i>	263	141	ii.
<i>Élatine à six étamines</i> (Fr.) ...	141		ii.

	PLATE	PAGE	VOL.
<i>Élatine Poivre d'eau</i> (Fr.).....	142		ii.
Elder, Common	637	200	iv.
— Dwarf	638	201	iv.
Elecampane	766	98	v.
ELEOCHARIS.			
See HELEOCHARIS.			
ELEOGITON.			
See HELEOGITON.			
ELEUSINE			
— [In'dica, <i>Gärtn.</i>] (excluded)	203		xi.
<i>Eller</i> (Ger.).....	179		viii.
Elm, Broad-leaved.....	12-7		viii.
— Common, var. <i>a</i>	1285		viii.
— Common, var. <i>γ</i>	1286		viii.
ELODIA			
— CANADENSIS, <i>Mich.</i> ...	1446	81	ix.
ELODES			
— <i>palustris</i> , <i>Spach</i>	276	159	ii.
<i>Elsbeere</i> (Ger.)	242		iii.
<i>Élyme d'Europe</i> (Fr.)	191		xi.
EL'YMUS			
— ARENAREUS, <i>L.</i>	1819	190	xi.
— <i>caninus</i> , <i>L.</i>	1809	176	xi.
— <i>Europeus</i> , <i>L.</i>	1820	192	xi.
— [<i>geniculatus</i> , <i>Curt.</i>] (excluded) ..	202		xi.
ELYNA			
— <i>caricina</i> , <i>Mert. & Koch</i> ...	1609	77	x.
EMPETRUM			
— NIGRUM, <i>Linn.</i>	1251	93	viii.
Enehanter's Nightshade. Alpine	512	30	iv.
— Common	511	29	iv.
ENDYMION			
— <i>non-scriptus</i> , <i>Gäreke</i>	1528	200	ix.
— <i>nutans</i> , <i>Du Mort</i>	1528	200	ix.
ENGELMANNIA			
— [<i>suaevcolens</i> , <i>Pfeiff.</i>] (excluded)...	93		vi.
<i>Englische Kratzdistel</i> (Ger.).....	15		v.
<i>Englischer Sonnentau</i> (Fr.).....	33		ii.
<i>Englisches Habichtskraut</i> (Ger.)	181		v.
— <i>Raygras</i> (Ger.).....	186		xi.
<i>Engriefeleger Weissdom</i> (Ger.)... ..	238		iii.
ENODIUM			
— <i>atro-virens</i> , <i>Dum.</i>	90		xi.
— <i>cæruleum</i> , <i>Dum.</i>	1747		xi.
— <i>Gaud.</i>	1747		xi.
<i>Entferntührige Segge</i> (Ger.).....	97, 150		x.
<i>Epervière à feuilles de Préanthe</i> (Fr.).....	211		v.
— <i>d'Orange</i> (Fr.)	167		v.
— <i>des murs</i> (Fr.)	192		v.
— <i>embrassante</i> (Fr.)	179		v.
— <i>en Ombeile</i> (Fr.)	204		v.
— <i>Piloselle</i> (Fr.)	166		v.
— <i>velue</i> (Fr.)	184		v.
<i>Epheu Sommerwurz</i> (Ger.)	199		vi.
<i>Epheublättrige Wahlenbergie</i> (Ger) ...	19		vi.
<i>Epheublättriger Ehrenpreis</i> (Ger.).....	150		vi.
— <i>Frauenjuchs</i> (Ger.)... ..	134		vi.

	PLATE	PAGE	VOL.
<i>Épiaire annuelle</i> (Fr.)		61	vii.
— <i>d'Allemagne</i> (Ger.)		57	vii.
— <i>des bois</i> (Fr.)		60	vii.
— <i>des champs</i> (Fr.)	55, 60		vii.
— <i>des marais</i> (Fr.)		57	vii.
<i>Épilobe à feuilles de Romarin</i> (Fr.)		7	iv.
— <i>à petites fleurs</i> (Fr.)		12	iv.
— <i>de montagne</i> (Fr.)		13	iv.
— <i>des marais</i> (Fr.)		19	iv.
— <i>en épi</i> (Fr.)		10	iv.
— <i>hérissé</i> (Fr.)		11	iv.
— <i>obscur</i> (Fr.)		18	iv.
— <i>Rose</i> (Fr.)		15	iv.
— <i>tétragone</i> (Fr.)		17	iv.

EPILOBIUM

— <i>adnatum</i> , Griseb.	502	16	iv.
— ALPINUM, Linn.	507	22	iv.
— — Koeh.	506	21	iv.
— — var. Hook. & Arn.	506	21	iv.
— ALSINIFOLIUM, Vill. ...	505	19	iv.
— ANAGALLIDIFOLIUM, Lam.	506	21	iv.
— <i>angustifolium</i> , Leight.	496	8	iv.
— ANGUSTIFOLIUM, Linn. 495 & 496		7	iv.
— — Lam.	494	7	iv.
— — var. α , Hook. & Arn.	496	8	iv.
— — var. β , Hook. & Arn.	495	8	iv.
— — var. brachycarpum, Syme.	496	8	iv.
— — var. macrocarpum, Syme.	495	8	iv.
— <i>angustissimum</i> , Bertol.	494	7	iv.
— <i>brachycarpum</i> , Leight.	496	8	iv.
— <i>collinum</i> , Gmel.		13	iv.
— <i>Dodonæi</i> , Vill.	494	7	iv.
— HIRSUTUM, Linn.	497	10	iv.
— <i>Lam'yi</i> , F. Schultz — LANCEOLATUM, Seb. & Maur.	500	14	iv.
— <i>ligulatum</i> , Baker		19	iv.
— <i>macrocarpum</i> , Steph.	495	8	iv.
— MONTANUM, Linn.	499	12	iv.
— OBSCURUM, Schreb.	503	17	iv.
— <i>origanifolium</i> , Lam.	505	19	iv.
— PALUSTRE, Linn.	504	18	iv.
— PARVIFLORUM, Schreb. — <i>rivulare</i> , Wahl.	498	11	iv.
		12	iv.
— ROSEUM, Schreb.	501	15	iv.
— <i>roseum</i> , var. Benth.	500	14	iv.
— ROSMARINIFOLIUM, Häncke	494	7	iv.
— <i>spicatum</i> , Lam.	495 & 496	7, 8	iv.
— — β . <i>latum</i> , Ser.	496	8	iv.
— <i>sylvaicum</i> , Boreau	499	13	iv.
— TETRAGONUM, Linn. ...	502	16	iv.
— — var. Benth.	503	17	iv.
— <i>virgatum</i> , Gr. & Godr.	503	17	iv.

EPIMEIDIUM

	PLATE	PAGE	VOL.
— ALPINUM, Linn.	52	73	i.
<i>Épine vinette</i> (Fr.)		72	i.
EPIPACTIS			
— <i>atrorubens</i> , Schultes.	1481	125	ix.
— <i>ensifolia</i> , Sw.	1484	128	ix.
— <i>grandiflora</i> , Sw.	1485	129	ix.
— HELLEBORINE, Crantz. 1479-1481		123	ix.
— — var. <i>rubiginosa</i> , Crantz	1481	125	ix.
— — var. <i>varians</i> , Reich. ...	1479	123	ix.
— — var. <i>viridans</i> , Cr. ...	1480	124	ix.
— <i>latifolia</i> , All.	1480	124	ix.
— — Benth.	1479-1481	123	ix.
— — var. α , Hook. & Arn.	1480	124	ix.
— — var. β , Sm.	1481	125	ix.
— <i>longifolia</i> , Schmidt	1482	126	ix.
— <i>meadia</i> , Fries.	1479	123	ix.
	1481	125	ix.
— — var. <i>purpurata</i> , Syme		123	ix.
— — var. <i>viridis</i> , Syme ...		123	ix.
— <i>oralis</i> , Bab.	1481	125	ix.
— <i>pal lens</i> , Willd.	1485	129	ix.
— PALUSTRIS, Crantz.	1482	126	ix.
— <i>purpurata</i> , Sm.		123	ix.
— <i>rubiginosa</i> , Koch	1481	125	ix.
— <i>rubra</i> , Swartz	1483	127	ix.
— <i>viridiflora</i> , Hoffm.	1479	123	ix.
— <i>xiphophylla</i> , Sw.	1484	128	ix.
<i>Épipactis à larges feuilles</i> (Fr.)		125	ix.
— — <i>blanc de neige</i> (Fr.) ...		129	ix.
— — <i>blanc-jaunâtre</i> (Fr.) ...		130	ix.
— — <i>des marais</i> (Fr.)		127	ix.
— — <i>rouge</i> (Fr.)		128	ix.

EPIPOGIUM.

— See EPIPOGUM.			
Epipogium, Leafless	1486	131	ix.
<i>Épipogon sans feuilles</i> (Fr.)		131	ix.
EPIPOGUM			
— APHYLLUM, Sc.	1486	131	ix.
— <i>Gmel'ni</i> , Rich.	1486	131	ix.
EQUISETUM			
— <i>amphibolium</i> , Retz	1890	154	xii.
— ARVENSE, Linn.	1889	152	xii.
— — var. <i>alpes'tre</i> , Wahl.		153	xii.
— — var. <i>campestre</i> , Schultz		153	xii.
— — var. <i>serotinum</i> , F. W. Mey.		153	xii.
— <i>Drummond'i</i> , Hook.	1890	154	xii.
— <i>ebur'neum</i> , Schreb.	1888	150	xii.
— <i>Ehrhar'ti</i> , Meyer	1890	154	xii.
— <i>elongatum</i> , Hook.	1896	166	xii.
— <i>eu-hyemale</i> , Syme	1894	162	xii.
— <i>fluxiat'ile</i> , Linn.	1893	159	xii.
		160	xii.
— — Sm.	1888	150	xii.
— <i>hyemale</i> , A. Braun	1894	162	xii.

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
EQUISE'TUM				<i>Erdnauss</i> (Ger.)	106	iii.	
— <i>HYEMA'LE</i> , Linn. 1894 & 1895	161	xii.			114	iv.	
— <i>Newm.</i>	1894	162	xii.	ERICA			
— var. <i>Mackai'i</i> , Newm.	1896	166	xii.	— <i>cærv'lea</i> , Willd.	886	34	vi.
— var. <i>Moor'ei</i> , Hook. & Arn.	1895	164	xii.	— <i>car'nea</i> , var. Benth.	892	42	vi.
— var. <i>Schleicheri</i> , Milde	1895	164	xii.	— <i>CILIA'RI</i> , Linn.	887	36	vi.
— <i>limo'sum</i> , Linn.	1893	160	xii.	— <i>CINEREA</i> , Linn.	891	40	vi.
— <i>LIMO'SUM</i> , Smith.	1893	159	xii.	— <i>Dabo'e'ci</i> , Sm.	885	33	vi.
— var. <i>Linnæa'dum</i> , Döll.	1893	160	xii.	— <i>Dabo'e'cii</i> , Linn.	885	33	vi.
— var. <i>verticillatum</i> , Doll.	1893	160	xii.	— <i>eu-Tet'ralix</i> , Syme	889	37	vi.
— <i>Mackai'i</i> , Newm.	1896	166	xii.	— <i>HIBER'NICA</i> , Syme	892	42	vi.
— <i>MAXIMUM</i> , Lam.	1888	150	xii.	— <i>Mackai'na</i> , Bab.	890	38	vi.
— var. <i>sero'tinum</i> , A. Br.	1895	164	xii.	— <i>Mackai'i</i> , Hook.	890	38	vi.
— <i>Moor'ei</i> , Newm.	1895	164	xii.	— <i>mediterra'nea</i> , Bab.	892	42	vi.
— <i>palea'ceum</i> , "Schleicher, e.p."	1895	164	xii.	— <i>β. liber'nica</i> , Hook.	892	42	vi.
— <i>PALUS'TRE</i> , Linn.	1892	157	xii.	— <i>Tetral'ici-cilia'ris</i> , Syme	888	39	vi.
— var. <i>alpi'num</i> , Hook.	1892	158	xii.	— <i>TET'RALIX</i> , Linn.	888 & 889	37	vi.
— var. <i>nu'dum</i> , Newm.	1892	158	xii.	— Sm.	889	37	vi.
— var. <i>polysta'chyum</i> , Vill.	1892	158	xii.	— var. Benth.	890	38	vi.
— var. <i>subnu'dum</i> , Long.	1892	158	xii.	— <i>VA'GANS</i> , Linn.	893	41	vi.
— <i>Cat.</i>	1892	158	xii.	— <i>vulga'ris</i> , Linn.	894	43	vi.
— <i>PRATEN'SE</i> , Ehrh.	1890	154	xii.	— <i>Wats'ni</i> , Benth.	888	39	vi.
— <i>ramo'sum</i> , Benth.	1896	166	xii.	ERIG'ERON			
— [— <i>Schleicher</i>] (excluded).	1896	166	xii.	— <i>A'CRIS</i> , Linn.	774	108	v.
— <i>SYLVATICUM</i> , Linn.	1891	156	xii.	— <i>alpi'num</i> , Sm.	775	109	v.
— var. <i>ni'nus</i> , Wahl.	1890	154	xii.	— <i>ALPINUS</i> , Linn.	775	109	v.
— <i>Telmete'za</i> , Ehrh.	1888	150	xii.	— <i>CANADEN'SIS</i> , Linn.	773	107	v.
— <i>TRACHY'ODON</i> , A. Braun	1896	166	xii.	— <i>sero'tinus</i> , Reich.	109	v.	
— <i>Rubenh.</i>	1895	164	xii.	— <i>uniflorum</i> , Linn.	110	v.	
— <i>umbro'sum</i> , Meyer	1890	154	xii.	— <i>uniflorum</i> , Sm.	775	109	v.
— <i>VARIEGATUM</i> , Schleich.	1897 & 1898	168	xii.	ERINOS'MA			
— var. <i>arena'rimum</i> , Newm.	1897	169	xii.	— <i>ver'num</i> , Herb.	1506	165	ix.
— var. <i>ma'jus</i> , Syme	1897	169	xii.	ERIOCAU'LO			
— var. <i>pseu'do-elonga'tum</i> , Milde	1897	171	xii.	— <i>decangula're</i> , With.	1546	2	x.
— var. <i>trachy'odon</i> , Hook.	1896	166	xii.	— <i>pellu'cidum</i> , Mich.	1546	2	x.
— var. <i>Wilso'ni</i> , Newm.	1898	169	xii.	— <i>SEPTANGULA'RE</i> , With.	1546	2	x.
<i>Érable commun</i> (Fr.)	233	ii.		ERIOPHORUM			
— <i>Sycamore</i> (Fr.)	231	ii.		— <i>ALPINUM</i> , Linn.	1603	70	x.
ERAGROS'TIS				— <i>ANGUSTIFOLIUM</i> , Roth.	1605 & 1606	73	x.
— [Pœoi'des, P. de B.] (excluded)	201	xi.		— Sm.	1605	73	x.
ERANTHIS				— var. <i>ela'tius</i> , Koch	1605	73	x.
— <i>HYEMALIS</i> , Salisb.	43	55	i.	— var. <i>mi'nus</i> , Bab.	1606	73	x.
<i>Eranthis d'hiver</i> (Fr.)	56	i.		— [capita'tum, Host.] (excluded)	174	x.	
<i>Erdbeck Klee</i> (Ger.)	59	iii.		— <i>GRAC'LE</i> , Koch	1607	74	x.
<i>Erdbeerblättriger Gänserich</i> (Ger.)	144	iii.		— Sm.	1606	73	x.
				— <i>LATIFOLIUM</i> , Hoppe	1608	75	x.
				— <i>polysta'chium</i> , Linn.	1605 & 1606	73	x.
				— Sm.	1608	75	x.
				— <i>pubes'cens</i> , Sm.	1608	75	x.
				— [Scheuch'zeri, Hoppe] (excluded)	174	x.	
				— <i>trique'trum</i> , Hoppe	1607	74	x.
				— <i>VAGINA'TUM</i> , Linn.	1604	71	x.
				<i>Érodie à feuilles de Ciguë</i> (Fr.)	207	ii.	
				— <i>maritime</i> (Fr.)	209	ii.	
				— <i>musquée</i> (Fr.)	208	ii.	
				ERO'DIUM			
				— <i>CICUTA'RIMUM</i> , L'Herit.	307	206	ii.

	PLATE	PAGE	VOL.
ERODIUM			
— <i>cicutarium</i> , var. <i>chaerophyllum</i> , DC.		206	ii.
— — var. <i>vulgatum</i> , Syme	307	206	ii.
— <i>commixtum</i> , Jord.		207	ii.
— MARITIMUM, Sm.		309	209
— MOSCHATUM, L'Herit.		308	208
— <i>pilosum</i> , Jord.		207	ii.
EROPHILA			
— <i>glabrescens</i> , Jord.		189	i.
— <i>hirtella</i> , Jord.		189	i.
— <i>majuscula</i> , Jord.	134	189	i.
— <i>stenocarpa</i> , Jord.		189	i.
— <i>vulgaris</i> , DC. (Fig. 1)	134	189	i.
<i>Ers hérissé</i> (Fr.)		84	iii.
ERUCAS'TRUM			
— <i>incanum</i> , Koch.	86	129	i.
ERVUM			
— <i>gracile</i> , DC.	384	86	iii.
— <i>hirsutum</i> , Linn.	382	84	iii.
— <i>tetraspermum</i> , Linn.	383	85	iii.
ERYNGIUM			
— CAMPES'TRE, Linn. ...	570	95	iv.
— MARITIMUM, Linn. ...	569	94	iv.
<i>Eryngo</i> , Field.	570	96	iv.
ERYSIMUM			
— <i>Alliaria</i> , Linn.	100	146	i.
— <i>Barbarea</i> , Linn.	120	171	i.
— CHEIRANTHODES, Linn.	102	149	i.
— <i>officinale</i> , Linn.	96	143	i.
— ORIEN'TALE, R. Brown.	101	148	i.
— <i>perfoliatum</i> , Crantz.	101	148	i.
— <i>præcox</i> , Sm.	124	175	i.
ERYTHRÆA			
— <i>angustifolia</i> , Wallr.		908, 908 (bis)	66 vi.
— CENTAURIUM, Pers. ...	909	66	vi.
— <i>chloodes</i> , Gr. & Godr.		908, 908 (bis)	66 vi.
— LATIFOLIA, Sm.	907	65	vi.
— <i>linearifolia</i> , Griseb. 908, 908 (bis)		66	vi.
— LITTORALIS, Fries 908, 908 (bis)		66	vi.
— PULCHELLA, Fries 910, 910 (bis)		68	vi.
— <i>ramosissima</i> , Pers. 910, 910 (bis)		68	vi.
<i>Erythræe à grandes feuilles</i> (Fr.)		66	vi.
— <i>centaurée</i> (Fr.)		68	vi.
— <i>élégante</i> (Fr.)		69	vi.
<i>Escls Distel</i> (Ger.)		3	v.
<i>Éthuse petite Ciqué</i> (Fr.)		133	iv.
EUFRA'GIA			
— <i>viscosa</i> , Benth.	994	176	vi.
<i>Eufraise officinale</i> (Fr.)		172	vi.
EUON'YMUS			
— EUROPE'US, Linn.	317	224	ii.

	PLATE	PAGE	VOL.
EUON'YMUS			
— europe'us, var. <i>macrophyllus</i> , Schleich.	225		ii.
<i>Eupatoire à feuilles de Chanvre</i> (Fr.)	121		v.
EUPATORIUM			
— CANNABINUM, Linn.	785	121	v.
<i>Euphorbe à larges feuilles</i> (Fr.)		101	viii.
— à petites fleurs (Fr.) ...		102	viii.
— <i>corail</i> (Fr.)		105	viii.
— <i>de Portland</i> (Fr.)		111	viii.
— <i>des bois</i> (Fr.)		106	viii.
— <i>des sables</i> (Fr.)		99	viii.
— <i>des vignes</i> (Fr.)		111	viii.
— <i>épure</i> (Fr.)		113	viii.
— <i>ésule</i> (Fr.)		107	viii.
— <i>fluet</i> (Fr.)		112	viii.
— <i>maritime</i> (Fr.)		109	viii.
— <i>petit Cyprès</i> (Fr.)		108	viii.
— <i>poilu</i> (Fr.)		104	viii.
— <i>réveille-matin</i> (Fr.) ...		100	viii.
EUPHORBIA			
— AMYGDALOIDES, Linn.	1260	105	viii.
— [<i>Chara'cias</i> , Linn.] (excluded)		117	viii.
— CORALLOIDES, Linn.	1259	104	viii.
— CYPARIS'SIAS, Linn. ...	1262	107	viii.
— [<i>dulcis</i> , Linn.] (excluded)		117	viii.
— <i>Esula</i> , Bor.	1261	107	viii.
— ESULA, Linn.	1261	106	viii.
— var. <i>pseudocyparis'sias</i> , Syme		107	viii.
— EXIG'UA, Linn.	1266	111	viii.
— HELIOSCOPIA, Linn.	1254	99	viii.
— HIBER'NA, Linn.	1257	102	viii.
— LATHYRIS, Linn.	1267	113	viii.
— <i>palustris</i> , Bab.	1258	103	viii.
— PARALIAS, Linn.	1263	109	viii.
— PEP'LIS, Linn.	1253	98	viii.
— [<i>peploides</i> , Gouan] (excluded)		117	viii.
— PEP'LUS, Linn.	1265	111	viii.
— PILO'SA, Linn.	1258	103	viii.
— var. α , Hook.	1259	104	viii.
— PLATYPHYLLA, Linn.	1255	100	viii.
— var. β , Hook. & Arn.	1256	101	viii.
— PORTLANDICA, Linn.	1264	110	viii.
— <i>procera</i> , var. <i>trichocarpa</i> , Koch	1259	104	viii.
— <i>Pseudocyparis'sias</i> , Jord.		107	viii.
— <i>retusa</i> , DC.		112	viii.
— <i>rubra</i> , DC.		112	viii.
— [<i>salicifolia</i> , Hist.] (excluded)		117	viii.
— <i>sectalis</i> , var. Benth.	1264	110	viii.
— STRIC'TA, Koch	1256	101	viii.
— Sm.	1255	100	viii.
— <i>sylvatica</i> , Jacq.	1260	105	viii.
EUPHRA'SIA			
— <i>gracilis</i> , Fries	992	171	vi.

	PLATE	PAGE	VOL.
EUPHRA'SIA			
— <i>Odontites</i> , Linn.	993	174	vi.
— — Koch	993	174	vi.
— OFFICINA'LIS, Linn.	991 & 992	171	vi.
— — Fries.....	991	171	vi.
— — var. <i>gracilis</i> , Syme...	992	171	vi.
— — <i>serotina</i> , Lam.	993	174	vi.
Euphrasia	991 & 992	171	vi.
EUP'TERIS			
— <i>aquil'na</i> , Newm.	1886	145	xii.
Europäischer Gaspardorn (Ger.)	5	0	iii.
— — Haselwurz (Ger.)	90	viii.	
— — Liebenstern (Ger.)	142	vii.	
— — Sanikel (Ger.)	93	iv.	
Europäisches Pfaffenköppchen (Ger.)...	225	ii.	
Evening Primrose, Common ...	508	24	iv.
— — Sweet-seented	509	26	iv.
Evergreen Alkanet	1113	112	vii.
Everlasting, Mountain, var. <i>α</i> ...	747	79	v.
— — var. <i>β</i> ...	748	79	v.
— — Orpine	526	49	iv.
— — Pea, Broad-leaved	403	108	iii.
— — Narrow-leaved	402	107	iii.
— — Pearly	746	77	v.
EX'ACUM			
— <i>filifor'me</i> , Sm.	912	71	vi.
Eyebright, Common	991 & 992	171	iv.
— — Germander	986	165	vi.
Fadenblättriges Samkraut (Ger.)	54	ix.	
Fadenförmige Bins (Ger.)	27	x.	
— — Segge (Ger.)	161	x.	
Fadenförmiger Dünnschwanz (Ger.)...	189	xi.	
— — Klee (Ger.)	64	iii.	
FAGOPY'RUM			
— <i>esculentum</i> , Münch.....	1226	59	viii.
FA'GUS			
— <i>Castanea</i> , Linn.	1290	159	viii.
— SYLVATICA, Linn.	1291	164	viii.
FALCAT'ULA			
— <i>Fulso-trifo'lium</i> , Brot.	345	34	iii.
Färber Ginst (Ger.)	10	iii.	
— — Hunds-Kamille (Ger.) ...	53	v.	
— — Scharte (Ger.)	29	v.	
— — Waid (Ger.)	223	i.	
— — -Wau (Ger.)	5	ii.	
Faulbaum Pulverholz (Ger.).....	229	ii.	
Faux Aizoon (Fr.)	195	i.	
FE'DIA			
— <i>Auricula</i> , Gaud.	671	241	iv.
— <i>carinata</i> , Stev.	670	241	iv.
— <i>dentata</i> , Vahl	672	243	iv.
— <i>crisocarpa</i> , Reich.	673	244	iv.
— <i>ditorta</i> , Vahl	669	240	iv.
Freigenblättriger Gänsefuß (Ger.)	16	viii.	
Feindlicher Haftdolde (Ger.) ...	163	iv.	
Feines Hasenöhren (Ger.).....	122	iv.	

	PLATE	PAGE	VOL.
<i>Feld Ahorn</i> (Ger.)	233	ii.	
— <i>Baldgreis</i> (Ger.)	90	v.	
— <i>Beifuss</i> (Ger.)	65	v.	
— <i>Calaminthe</i> (Ger.)	33	vii.	
— <i>Ehrenpreis</i> (Ger.).....	156	vi.	
— <i>Genziane</i> (Ger.).....	77, 78	vi.	
— <i>Hauhechel</i> (Ger.)	18	iii.	
— <i>Kratzdistel</i> (Ger.).....	19	v.	
— <i>Löwenmaul</i> (Ger.).....	132	vi.	
— <i>Männertreu</i> (Ger.).....	96	iv.	
— <i>Pfefferkraut</i> (Ger.)	217	i.	
— <i>Pfennikraut</i> (Ger.)	203	i.	
— <i>Quendel</i> (Ger.)	26	vii.	
— <i>Rittersporn</i> (Ger.)	64	i.	
— <i>Rose</i> (Ger.)	232	iii.	
— <i>Saudistel</i> (Ger.)	155	v.	
— <i>Sinau</i> (Ger.)	137	iii.	
— <i>Sperk</i> , or <i>Spark</i> (Ger.).....	128	ii.	
— <i>Ulme</i> (Ger.)	142	viii.	
— <i>Wachtelweizen</i> (Ger.)	184	vi.	
— <i>Ziest</i> (Ger.)	55, 60	vii.	
<i>Feldminze</i> (Ger.)	23	vii.	
<i>Feldulme</i> (Ger.).....	139	viii.	
<i>Felsen Brombeere</i> (Ger.)	160	iii.	
— <i>Gänseric</i> (Ger.).....	151	iii.	
— <i>Labkraut</i> (Ger.).....	219	iv.	
— <i>Sagine</i> (Ger.)	122	ii.	
— <i>Segge</i> (Ger.)	82	x.	
Felwort.....	914-919	76	vi.
<i>Fenchelsamige Pferdesaat</i> (Ger.)	131	iv.	
Fennel, Common	601	131	iv.
— —leaved Pondweed	1422	54	ix.
— — Marsh Hog's	610	150	iv.
— — Sea Hog's	609	149	iv.
<i>Fenouil officinal</i> (Fr.)	134	iv.	
Fenugreek	345	35	iii.
Fern, Alpine Bladder	1867	104	xii.
— Alpine Holly	1859	90	xii.
— Beech	1847	50	xii.
— Bennett's Shield	1856	80	xii.
— Bracken	1886	145	xii.
— Brake.....	1886	145	xii.
— Bristle	1839	35	xii.
— Brittle Bladder	1865	102	xii.
— Broad Shield	1857	82	iii.
— Common Scale	1883	139	xii.
— Crested Shield	1853	70	xii.
— Female Buckler	1848	52	xii.
— Flexile Lady	115	xii.	
— Flowering	1838	32	xii.
— Hard Holly	1860	92	xii.
— Hart's-tongue	1884	141	xii.
— Hay-scented	1858	87	xii.
— Hurd	1885	143	xii.
— Lady	1869	108	xii.
— — Alpine	1870	113	xii.
— — Dwarf Alpine.....	1871	112	xii.
— Limestone	1846	48	xii.
— Lloyd's Shield	1854	73	xii.
— Male	1850	57	xii.

	PLATE	PAGE	VOL.
Fern, Male Shield.....	1850	57	xii.
— Marsh	1848	52	xii.
— Mountain	1849	54	xii.
— Bladder	1868	106	xii.
— Narrow Shield	1855	76	xii.
— Oak	1845	46	xii.
— Parsley	1844	44	xi.
— Remote Shield	1852	67	xii.
— Rigid Shield.....	1851	65	xii.
— Royal	1838	32	xii.
— Smith's	1846	48	xii.
— Soft Holly.....	1861	95	xii.
— Tunbridge Filmy	1840	35	xii.
— Wilson's Filmy	1841	36	xii.
Fescue-grass, Ambiguous	1780	140	xi.
— Barren	1782	143	xi.
— Creeping	1786	148	xi.
— Hard	1785	147	xi.
— Meadow ...1791 & 1792	154	xi.	
— Mouse-tail	1781	142	xi.
— Sheep's ... 1783 & 1784	144	xi.	
— Single-glumed ... 1779	139	vi.	
— Tall	1789 & 1790	151	xi.
— Wood ... 1787 & 1788	149	xi.	
FESTU'CA			
— ambig'ua, <i>Le Gall</i>	1780	140	xi.
— arena'ria, <i>Osbeck</i>	1786	147	xi.
— arundin'cea, <i>Auct.</i> 1789 & 1790	150	xi.	
— Schreb.	1790	151	xi.
— bromo'i'des, <i>Crep.</i>	1779	138	xi.
— Sm.	1782	142	xi.
— var. <i>a</i> , <i>Hook. & Arn.</i>	1782	142	xi.
— var. <i>β</i> , <i>Hook. & Arn.</i>	1781	141	xi.
— <i>cæru'lea</i> , <i>DC.</i>	1747	90	xi.
— <i>caesia</i> , <i>Sm.</i>	147	xi.	
— <i>calama'ria</i> , <i>Sm.</i> ... 1787 & 1788	148	xi.	
— <i>crista'tu</i> , <i>Poll.</i>	1746	88	xi.
— <i>decid'ua</i> , <i>Sm.</i>	1788	149	xi.
— <i>decum'bens</i> , <i>Linn.</i>	1745	87	xi.
— <i>distans</i> , <i>Kunth.</i>	1755	104	xi.
— <i>durius'cula</i> , <i>Reich.</i>	144	xi.	
— <i>Linn.</i>	1785	145	xi.
— ELA'TIOR, <i>Linn.</i> 1789 & 1790	150	xi.	
— <i>elut'ior</i> , <i>Koch.</i>	1791	153	xi.
— <i>Sm.</i>	1789	151	xi.
— var. <i>arundinacea</i> , <i>Syme.</i>	1790	151	xi.
— <i>flut'itans</i> , <i>Linn.</i>	1752 & 1753	96	xi.
— <i>gigant'e'a</i> , <i>Sm.</i>	1793	155	xi.
— <i>Vill.</i>	1793 & 1794	155	xi.
— <i>glau'ca</i> , <i>Lam.</i>	144	xi.	
— <i>lolia'cea</i> , <i>Huds.</i>	1792	153	xi.
— MYU'ROS, <i>Linn.</i> ... 1780-1782	139	xi.	
— <i>Poll.</i>	1781	141	xi.
— var. <i>ambig'ua</i> , <i>Hook.</i> <i>fil.</i>	1780	140	xi.
— OVI'NA, <i>Linn.</i> ... 1783 & 1784	143	xi.	
— <i>Hook. fil.</i>	1783 & 1784	143	xi.
— <i>Sibth.</i>	1783	144	xi.

FESTU'CA

	PLATE	PAGE	VOL.
— <i>ovina</i> , var. <i>a</i> . <i>Hook. & Arn.</i>	1783, 1784 & 1786	143, 147	xi.
— var. <i>durius'cula</i> , <i>Hook. & Arn.</i>	1785	145	xi.
— var. <i>glau'ca</i> , <i>Koch</i>	144	xi.	
— var. <i>ma'jor</i> , <i>Syme</i>	144	xi.	
— var. <i>ru'bra</i> , <i>Hook. & Arn.</i>	1786	147	xi.
— <i>tenuifo'lia</i> , <i>Syme</i> (<i>ovina</i> <i>vivipara</i> , on plate)	1784	144	xi.
— <i>pinna'ta</i> , <i>Huds.</i>	1808	175	xi.
— PRATEN'SIS, <i>Hook.</i> 1791 & 1792	152	xi.	
— <i>Huds.</i>	1791	153	xi.
— var. <i>lolia'cea</i> , <i>Syme</i>	1792	153	xi.
— <i>procum'bens</i> , <i>Kunth</i>	1757	107	xi.
— <i>Pseu'do-myuro's</i> , <i>Soy-Will.</i>	1781	141	xi.
— <i>Pseu'do-myuro's</i> , var. <i>Lloyd</i>	1780	140	xi.
— <i>rig'ida</i> , <i>Kunth</i>	1758	108	xi.
— <i>rottbillio'i'des</i> , <i>Kunth</i>	1759	110	xi.
— <i>ru'bra</i> , <i>Gren. & Godr.</i>	1785	145	xi.
— R'UBRA, <i>Linn.</i> ... 1785 & 1786	145	xi.	
— <i>Sm.</i>	1786	147	xi.
— var. <i>a</i> , <i>Bab.</i>	1785	145	xi.
— var. <i>arena'ria</i> , <i>Hook.</i> & <i>Arn.</i>	1786	147	xi.
— <i>sabulie'ola</i> , <i>L. Duf.</i>	1786	147	xi.
— <i>sciroi'i'des</i> , <i>Roth</i>	1782	142	xi.
— <i>sylva'tica</i> , <i>Huds.</i>	1807	173	xi.
— SYLVATICA, <i>Vill.</i> 1787 & 1788	148	xi.	
— var. <i>decid'ua</i> , <i>Syme</i>	1788	149	xi.
— <i>tenuifo'liu</i> , <i>Sibth.</i>	1784	144	xi.
— <i>thalasi'ca</i> , <i>Kunth.</i>	1754	102	xi.
— <i>trifo'lia</i> , <i>Sm.</i>	1794	156	xi.
— UNIGLU'MIS, <i>Sol.</i>	1779	138	xi.
— var. <i>β</i> , <i>Bromf.</i>	1780	140	xi.
<i>Fétuque des brebis</i> (Fr.)	145	xi.	
— <i>du bois</i> (Fr.)	150	xi.	
— <i>dure</i> (Fr.)	147	xi.	
— <i>élancée</i> (Fr.)	156	xi.	
— <i>élevée</i> (Fr.)	151	xi.	
— <i>fausse queue de rat</i> (Fr.)	142	xi.	
— <i>queue d'écureuil</i> (Fr.)	143	xi.	
— <i>rouge</i> (Fr.)	148	xi.	
— <i>uniglume</i> (Fr.)	139	xi.	
<i>Feuer-Lilie</i> (Ger.)	187	ix.	
<i>Feverfew</i> , <i>Common</i>	715	43	v.
FICA'RIA			
— <i>ambig'ua</i> , <i>Bureau</i>	39	48	i.
— <i>calthæfo'lia</i> , <i>Reich.</i>	48	i.	
— <i>ranunculo'i'des</i> , <i>Mönch.</i>	39	47	i.
— <i>Reich.</i>	39	48	i.
<i>Ficaire renonculeuse</i> (Fr.)	49	i.	
<i>Fiddle Dock</i>	1214	45	viii.
<i>Fig-leaved Goosefoot</i>	1191	16	viii.
<i>Figwort</i>	39	49	i.
— <i>Balm-leaved</i>	950	125	vi.
— <i>Knotty-rooted</i>	949	124	vi.
— <i>Yellow</i>	951	126	vi.

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
FILA'GO				<i>Fluthende Simse</i> (Ger.).....	58	x.	
— <i>APICULA'TA</i> , <i>G.E.Sm.</i>	737	68	v.	FLUVA'LIS			
— <i>canes'cens</i> , <i>Jord.</i>	736	67	v.	— <i>flex'ilis</i> , <i>Pers.</i>	1432	63	ix.
— <i>GAL'LICA</i> , <i>Linn.</i>	740	71	v.	Fly Honeysuckle, Upright	643	208	iv.
— <i>GERMAN'ICA</i> , <i>Linn.</i>	736	67	v.	— <i>Orchis</i>	1471	115	ix.
— — <i>var. a.</i> , <i>Hook. & Arn.</i> ...	736	67	v.	FÆNIC'ULUM			
— — <i>var. a. lutes'cens</i> , <i>Gr.</i>				— <i>officina'le</i> , <i>All.</i>	601	133	iv.
— — <i>& Godr.</i>	737	68	v.	— <i>VULGAR'É</i> , <i>Gärt.</i>	601	133	iv.
— — <i>var. β.</i> , <i>Hook. & Arn.</i>	737	68	v.	<i>Föhre</i> (Ger.)	265	viii.	
— — <i>var. β. canes'cens</i> , <i>Gr.</i>				Fool's Parsley, Common	600	133	iv.
— — <i>& Godr.</i>	736	67	v.	Forget-me-not, Alpine	1106	103	vii.
— — <i>var. spathula'ta</i> , <i>DC.</i>	738	69	v.	— — — — — Creeping Water	1105	102	vii.
— — <i>Jussia'i</i> , <i>Coss. & Germ.</i> ...	738	69	v.	— — — — — Dwarf	1109	107	vii.
— — <i>lutes'cens</i> , <i>Jord.</i>	737	68	v.	— — — — — Field	1108	106	vii.
— — <i>MIN'IMA</i> , <i>Fries</i>	739	70	v.	— — — — — Great Water.....	1104	100	vii.
— — <i>monta'na</i> , <i>DC.</i>	739	70	v.	— — — — — Tufted Water ...	1103	93	vii.
— — <i>SPATHULA'TA</i> , <i>Presl</i> ...	738	69	v.	— — — — — Wood	1107	104	vii.
Filmy Fern, Tunbridge	1840	35	xii.	— — — — — Yellow and Blue	1110	108	vii.
— — — — — <i>Wilson's</i>	1841	36	xii.	<i>Forster's Marbel</i> (Ger.)	5	x.	
<i>Filzfrüchtige Segge</i> (Ger.).....	131	x.		Foxglove, or Folks-glove	952	127	vi.
<i>Filzige Rose</i> (Ger.).....	209	iii.		Fox-tail Chara	1909	193	xii.
Fir Clubmoss	1830	12	xii.	— — — — — -grass, Alpine	1704	30	xi.
— — — — — <i>Scotch</i>	1380	265	viii.	— — — — — Bent-stemmed ...	1701	26	xi.
<i>Flachs Seide</i> (Ger.)	89	vi.		— — — — — Meadow	1703	28	xi.
<i>Flachsstengeliges Samkraut</i> (Ger.).....	46	ix.		— — — — — Orange-anthered	1700	24	xi.
<i>Flatterige Binse</i> (Ger.).....	21	x.		— — — — — Slender.....	1699	23	xi.
Flax, Common	292	185	ii.	— — — — — Tuberous	1702	27	xi.
— — — — — <i>Dodder</i>	926	80	vi.	FRAGARIA			
— — — — — <i>Narrow-leaved</i>	291	184	ii.	— <i>ELA'TIOR</i> , <i>Ehrh.</i>	439	156	iii.
— — — — — <i>Perennial</i>	290	183	ii.	— <i>mag'na</i> , <i>Thuill.</i>	439	156	iii.
— — — — — <i>Purging</i>	289	181	ii.	— <i>moscha'ta</i> , <i>Duch.</i>	439	156	iii.
— — — — — <i>Seed</i>	288	180	ii.	— <i>ster'ilis</i> , <i>Linn.</i>	427	143	iii.
Fleabane, Alpine	775	110	v.	— <i>VES'CA</i> , <i>Linn.</i>	438	154	iii.
— — — — — <i>Blue</i>	574	109	v.	Fragile Chara	1920 & 1921	213	xii.
— — — — — <i>Canadian</i>	773	108	v.	<i>Fragon piquant</i> (Fr.).....	185	ix.	
— — — — — <i>Greater</i>	770	103	v.	Fragrant Agrimony	418	131	iii.
— — — — — <i>Lesser</i>	771	104	v.	— — — — — <i>Orchis</i>	1460	103	ix.
Flea Sedge	1612	81	x.	<i>Fraisier commun</i> (Fr.)	155	iii.	
Fleawort, Field	760	90	v.	— — — — — <i>élevé</i> (Fr.)	156	iii.	
— — — — — <i>Marsh</i>	759	89	v.	FRANG'ULA			
<i>Fleischfarbiges Knabenkraut</i> (Ger.) ...	100	ix.		— <i>Al'nus</i> , <i>Miller</i>	319	228	ii.
<i>Fléole des Alpes</i> (Fr.).....	31	xi.		FRANKENIA			
— — — — — <i>des prés</i> (Fr.)	33	xi.		— [pulverulent'a, <i>Linn.</i>] (ex-			
<i>Fliegenähnliche Frauenthräne</i> (Ger.)...	115	ix.		— — — — — cluded)	43	ii.	
<i>Fliegenartige Höswurz</i> (Ger.) ...	103	ix.		— <i>LÆ'VIS</i> , <i>Linn.</i>	190	42	ii.
Flix Weed	98	145	i.	<i>Frankéie Lisse</i> (Fr.).....	43	ii.	
<i>Flohsamige Segge</i> (Ger.)	81	x.		<i>Französisches Schimmelkraut</i> (Ger.)...	72	v.	
<i>Floure odorante</i> (Fr.).....	18	xi.		<i>Frauenschloh</i> (Ger.)	136	ix.	
Flowering Fern	1838	32	xii.	FRAXINUS			
— — — — — <i>Rush</i>	1443	76	ix.	— <i>EXCEL'SIOR</i> , <i>Linn.</i>	902	56	vi.
— — — — — <i>Willow</i>	933	99	vi.	— — — — — <i>heterophylla</i> , <i>Willd.</i>	903	56	vi.
Fluellin, Round-leaved.....	957	136	vi.	<i>Fremder Ehrenpreis</i> (Ger.)	157	vi.	
— — — — — <i>Sharp-leaved</i>	956	135	vi.	French Sorrel	1222	54	viii.
<i>Flug- or Wind-Hafer</i> (Ger.) ...	80	xi.		— — — — — <i>Willow, Rosemary-leaved</i>	494	7	iv.
<i>Fluss-Ampfer</i> (Ger.)	52	viii.		— — — — — <i>Wild</i>	495 & 496	10	iv.
<i>Flûteau étoilé</i> (Fr.)	75	ix.		<i>Frêne élevé</i> (Fr.).....	57	vi.	
— — — — — <i>nageant</i> (Fr.)	74	ix.		FRITILLA'RIA			
— — — — — <i>Plantain d'eau</i> (Fr.) ...	71	ix.		— <i>MELEAGRIS</i> , <i>Linn.</i> ...	1519	188	ix.
— — — — — <i>renonele</i> (Fr.)	73	ix.		<i>Fritillaire mélegre</i> (Fr.)	189	ix.	
<i>Fluthende Schwaden</i> (Ger.)	98	xi.					

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
Fritillary, Common	1519	189	ix.	Fumitory, Rampant	74	108	i.
Frog-Bit	1444	79	ix.	— Small-flowered	77	114	i.
— Orchis	1462	105	ix.	— Solid Bulbous	68	102	i.
<i>Froscheppich</i> (Ger.)	32	i.		— Yellow	69	103	i.
<i>Frühlings-Alsine</i> (Ger.).....	110	ii.		<i>Fünfmännige Weide</i> (Ger.)	203	viii.	
— <i>Braunwurz</i> (Ger.)	126	vi.		<i>Fünfmänniges Hornkraut</i> (Ger.)	81	ii.	
— <i>Ekrenpreis</i> (Ger.).....	155	vi.		Furze, Common	323	5	iii.
— <i>Geuziane</i> (Ger.)	74	vi.		— Dwarf	325	7	iii.
— <i>Knotenblume</i> (Ger.)... ..	166	ix.		— Needle.....	326	8	iii.
— <i>Safran</i> (Fr.)	154	ix.		— Planchon's	324	7	iii.
— <i>Wasserstern</i> (Ger.)	119	viii.		<i>Fusain d'Europe</i> (Fr.)	225	ii.	
<i>Frühzeitige Segge</i> (Ger.)	130	x.		<i>Gaertn</i> (Ger.)	248	iii.	
<i>Frühzeitiger Hafer</i> (Ger.).....	72	xi.		GA'GĒA			
<i>Fuchsbraune Segge</i> (Ger.).....	92	x.		— <i>LU'TEA</i> , <i>Ker</i>	1522	193	ix.
Fuller's Herb	197	53	ii.	<i>Gagée grisâtre</i> (Fr.)	194	ix.	
FUMARIA				<i>Gaillet à trots cornes</i> (Fr.).....	227	iv.	
— <i>agra'ria</i> , <i>Mitt.</i>	73	107	i.	— <i>blanc</i> (Fr.)	218	iv.	
— <i>Bastar'di</i> , <i>Boreau</i>	73	107	i.	— <i>boréal</i> (Fr.)	213	iv.	
— <i>Bore'i</i> , <i>Jord.</i>	72	106	i.	— <i>croisette</i> (Fr.).....	214	iv.	
— <i>bulbo'sa</i> γ , <i>Linn.</i>	68	101	i.	— <i>de Piémont</i> (Fr.)	220	iv.	
— <i>calyc'e'na</i> , <i>Bab.</i>	75	109	i.	— <i>des Anglais</i> (Fr.)	224	iv.	
— CAPREOLA'TA , <i>Linn.</i> 71-74	104	i.		— <i>des marais</i> (Fr.)	222	iv.	
— Leighton	74	108	i.	— <i>des rochers</i> (Fr.)	219	iv.	
— β . <i>Leight'o'ni</i> , <i>Bab.</i> ...	72	106	i.	— <i>dressé</i> (Fr.).....	217	iv.	
— γ . <i>me'dia</i> , <i>Bab.</i>	73	107	i.	— <i>fangeux</i> (Fr.).....	223	iv.	
— <i>clavicula'ta</i> , <i>Linn.</i>	70	103	i.	— <i>Gratoron</i> (Fr.)	226	iv.	
— <i>confu'sa</i> , <i>Jord.</i>	73	107	i.	— <i>jaune</i> (Fr.)	215	iv.	
— <i>densiflo'ra</i> , <i>DC.</i>	75	109	i.	— <i>sauvage</i> (Fr.).....	221	iv.	
— <i>leucan'tha</i> , <i>Viv.</i>	78	114	i.	GALAN'THUS			
— <i>lu'tea</i> , <i>Linn.</i>	69	102	i.	— <i>NIVALIS</i> , <i>Linn.</i>	1507	167	ix.
— <i>me'dia</i> , <i>Bast.</i>	73	107	i.	GALATEL'LA			
— <i>Loisel.</i>	111	i.		— <i>Linosy'ris</i> , <i>Reich.</i> fil.	777	112	v.
— MICRAN'THA , <i>Lag.</i>	75	109	i.	GALEOB'DOLON			
— <i>mura'lis</i> , <i>Boreau</i>	72	106	i.	— <i>lu'teum</i> , <i>Huds.</i>	1087	76	vii.
— <i>Sonder.</i>	74	108	i.	— <i>Reich.</i>	77	vii.	
— <i>officina'lis</i> , <i>Benth.</i>	72-78	115	i.	— <i>mont'num</i> , <i>Reich.</i>	1087	77	vii.
— OFFICINA'LIS , <i>Linn.</i> ...	76	110	i.	<i>Galéope des champs</i> (Fr.)	63	vii.	
— <i>pallidiflo'ra</i> , <i>Jord.</i>	71	105	i.	— <i>douteuse</i> (Fr.)	65	vii.	
— <i>var. a. Jorda'ni</i> , <i>Bab.</i> ..	71	105	i.	— <i>tétrahite</i> (Fr.)	67	vii.	
— <i>var. β. Bore'i</i> , <i>Bab.</i> ...	72	106	i.	GALEOP'SIS			
— <i>parviflo'ra</i> , <i>Lamarek</i>	78	114	i.	— <i>angustifolia</i> , <i>Ehrh.</i>	1074	62	vii.
— <i>sol'ida</i> , <i>Sm.</i>	68	101	i.	— <i>Reich.</i>	62	vii.	
— <i>specio'sa</i> , <i>Lloyd</i>	71	105	i.	— <i>var. canes'cens</i> , <i>Syme</i>	63	vii.	
— TENUISEC'TA , <i>Syme</i> 77 & 78	113	i.		— <i>arvat'ica</i> , <i>Jord.</i>	63	vii.	
— <i>Vaillan'tii</i> , <i>Lois.</i>	77	113	i.	— <i>bif'ida</i> , <i>Bönn.</i>	1079	67	vii.
— <i>partly B. b. (E. B. S.)</i> ..	78	114	i.	— <i>canes'cens</i> , <i>Schultz</i>	63	vii.	
— <i>Wirtge'ni</i> , <i>Koch</i>	111	i.		— <i>cannabi'na</i> , <i>Willd.</i>	1077	65	vii.
<i>Fumeterre à pélicelles recourbés</i>				— <i>du'bia</i> , <i>Leers.</i>	1076	64	vii.
(Fr.).....	108	i.		— <i>eu-Tet'rahit</i> , <i>Syme</i> 1078 & 1079	66	vii.	
— <i>à petites fleurs</i> (Fr.)	115	i.		— <i>Galeob'dolon</i> , <i>Linn.</i>	1087	76	vii.
— <i>de Vaillant</i> (Fr.)	114	i.		— <i>interme'dia</i> , <i>Vill.</i>	1075	63	vii.
— <i>officinale</i> (Fr.)	111	i.		— <i>Lad'anum</i> , <i>Auct. Angl.</i> ...	1074	62	vii.
Fumitory, Bastard's Rampant ...	73	107	i.	— <i>Guss.</i>	1075	63	vii.
— Boreau's Rampant ...	72	106	i.	— LAD'ANUM , <i>Linn.</i> 1074 & 1075	62	vii.	
— Climbing White	70	104	i.	— OCHROLEU'CA , <i>Lam.</i>	1076	64	vii.
— Close-flowered	75	110	i.	— <i>specio'sa</i> , <i>Mill.</i>	1077	65	vii.
— Common	76	111	i.				
— Lamarek's Small-flowered	78	115	i.				
— Le Vaillant's	77	114	i.				

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
GALEOP'SIS				GALIAM			
— <i>Tetrahit</i> , Auct. plur.				— [saccharatum, <i>All.</i>] (ex-			
— — Koch.....	1078 & 1079	66	vii.	cluded).....	232	iv.	
— — <i>Tetrahit</i> , <i>Linn.</i> 1077-1079	1078	66	vii.	— SAXATILE, <i>Linn.</i>	651	219	iv.
— — var. <i>bifida</i> , <i>Syme</i> ...	1079	67	vii.	— [spuriatum, <i>Linn.</i>] (ex-			
— — var. <i>grandijlo'ra</i> ,				cluded).....	232	iv.	
— Benth.....	1077	65	vii.	— — var. <i>Vaillan'tii</i> , <i>Bab.</i>	657	224	iv.
— versicolor, <i>Curt.</i>	1077	65	vii.	— SYLVES'TRE, <i>Poll.</i>	652	219	iv.
— villosa, <i>Huds.</i>	1076	64	vii.	— — Vill.....	220	iv.	
Galingale.....	1578	42	x.	— — var. <i>montanum</i> , <i>Vill.</i>	652	220	iv.
GALINSO'GA				— — var. <i>nitidulum</i> , <i>Thuill.</i>	652	220	iv.
— PARVIFLO'RA, <i>Car.</i> ...	765	96	v.	— — var. <i>TRICOR'NE</i> , <i>With.</i>	659	226	iv.
— Small-flowered.....	765	96	v.	— ULIGINOSUM, <i>Linn.</i> ...	655	222	iv.
GALIAM				— — var. <i>Benth.</i>	654	222	iv.
— ANGLICUM, <i>Huds.</i>	656	223	iv.	— VAILLAN'TII, <i>DC.</i>	657	224	iv.
— APARINE, <i>Linn.</i>	658	225	iv.	— [<i>zerrucosum</i> , <i>Sm.</i>] (ex-			
— — var. <i>a</i> , <i>Koch.</i>	658	225	iv.	cluded).....	232	iv.	
— — var. <i>Vaillan'tii</i> , <i>Koch</i>	657	224	iv.	— VERUM, <i>Linn.</i>	648	214	iv.
— <i>aristatum</i> , <i>Sm.</i>	649	217	iv.	— — var. <i>lu'teum</i> , <i>Syme</i> ...	648	214	iv.
— BOREALE, <i>Linn.</i>	646	212	iv.	— — var. <i>ochroleucum</i> ,			
— <i>cine'reum</i> , <i>Sm.</i>	648 (bis)	215	iv.	<i>Syme.</i>	214	iv.	
— <i>commutatium</i> , <i>Bab.</i> ?	220	iv.		— <i>Withering'ii</i> , <i>Sm.</i>	654	222	iv.
— [commutatium, <i>Jord.</i>] (ex-				<i>Gants de notre Dame</i> (Fr.).....	61	i.	
cluded).....	232	iv.		<i>Gänzkraut</i> (Ger.).....	163	i.	
— <i>crucifolia</i> , <i>Scop.</i>	647	213	iv.	<i>Garance étrangère</i> (Fr.).....	212	iv.	
— CRUCIATUM, <i>With.</i>	647	213	iv.	<i>Garbe</i> (Ger.).....	57	v.	
— <i>decolorans</i> , <i>Gr. & Godr.</i>	202	iv.		<i>Garlic, Crow</i>	1534	211	ix.
— DIFFUSUM, <i>Hook.</i> 648 (bis)	215	iv.		— Field.....	1535 & 1536	214	ix.
— <i>elatium</i> , <i>Thuill.</i>	650	218	iv.	— Hedge Mustard.....	100	147	i.
— — var. <i>Bakeri</i> , <i>Syme</i> ...	218	iv.		— Round-headed.....	1533	209	ix.
— — var. <i>insubricum</i> ,				— Triquetrous.....	1539	218	ix.
<i>Gaul.</i>	218	iv.		<i>Garten Taubenkropf</i> (Ger.).....	62	ii.	
— <i>elongatum</i> , <i>Presl</i>	653	221	iv.	— <i>Wolfsmilch</i> (Ger.).....	99,111	viii.	
— <i>erectum</i> , <i>Huds.</i> 649 & 649 (bis)	217	iv.		<i>Gartenkresse</i> (Ger.).....	215	i.	
— — var. <i>aristatum</i> , <i>Bab.</i>				<i>Gartenmohn</i> (Ger.).....	84	i.	
648 (bis)	215	iv.		GASTRIDTUM			
— — var. <i>aristatum</i> , <i>Bab.</i>				— <i>australe</i> , <i>P. de B.</i>	1711	37	xi.
649 (bis)	217	iv.		— LENDIG'ERUM, <i>Gaud.</i>	1711	37	xi.
— <i>Hercynicum</i> , <i>Weig.</i>	651	219	iv.	<i>Gauchheilblättriger Schotenweide-</i>			
— <i>le'ce</i> , <i>Thuill.</i>	652	220	iv.	<i>rich</i> (Ger.).....	22	iv.	
— <i>lu'cidum</i> , <i>Koch</i>	649	217	iv.	<i>Gauklerblume</i> (Ger.).....	146	vi.	
— MOLLUGO, <i>Linn.</i>				<i>Gean.</i>	411	120	iii.
649, 649 (bis) & 650	216	iv.		<i>Gebaute Esparsette</i> (Ger.).....	82	iii.	
— <i>Huds.</i>	650	218	iv.	<i>Gebauter Koriander</i> (Ger.).....	179	iv.	
— <i>montanum</i> , <i>Vill.</i>	652	220	iv.	— <i>Leindotter</i> (Ger.).....	200	i.	
— PALUSTRE, <i>Linn.</i> 653 & 654	221	iv.		<i>Gebirgs-Ampfer</i> (Ger.).....	53	viii.	
— <i>Presl</i>	222	iv.		— <i>Bartschia</i> (Ger.).....	177	vi.	
— <i>Sm. Eng. Bot.</i>	653	221	iv.	— <i>Ehrenpreis</i> (Ger.).....	159	vi.	
— — var. <i>elongatum</i> , <i>Syme</i>	653	221	iv.	— <i>Fetthenne</i> (Ger.).....	51	iv.	
— — var. <i>Withering'ii</i> ,				— <i>Hezenkraut</i> (Ger.).....	30	iv.	
<i>Syme.</i>	654	222	iv.	— <i>Johannisbeere</i> (Ger.) ...	41	iv.	
— <i>Paristen'se</i> , var. <i>anglicum</i> ,				— <i>Milchlattich</i> (Ger.).....	152	v.	
<i>Linn.</i>	656	223	iv.	— <i>Rispengras</i> (Ger.).....	115	xi.	
— — var. <i>leiocarpum</i> ,				— <i>Sinai</i> (Ger.).....	141	iii.	
<i>Tausch.</i>	656	223	iv.	— <i>Wollgras</i> (Ger.).....	71	x.	
— — var. <i>nudum</i> , <i>Gr. &</i>				<i>Gebirgslische</i> (Ger.).....	31	xi.	
<i>Godr.</i>	656	223	iv.	<i>Gebräuchliche Boretsch</i> (Ger.) ...	113	vii.	
— <i>pustillum</i> , <i>Sm.</i>	652	219	iv.	— <i>Brunnenkresse</i> (Ger.)...	178	i.	
				— <i>Calaminthe</i> (Ger.).....	36	vii.	
				— <i>Engelbeurz</i> (Ger.).....	147	iv.	

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
Gebräuchliche Hundzunge (Ger.)		119	vii.	Gemeine Feldkresse (Ger.).....	222	i.	
— Klette (Ger.)		24	v.	— Flockenblume (Ger.) ...	31	v.	
— Löffelkraut (Ger.)		185	i.	— Genswurz (Ger.).....	91	v.	
— Melisse (Ger.) ...		38	vii.	— Genziane (Ger.)	74	vi.	
— Neunkraft (Ger.)		120	v.	— Goldrute (Ger.).....	114	v.	
— Ochsenzunge (Ger.).....		110	vii.	— Grasnelle (Ger.).....	158	vii.	
— Richblume (Ger.)		144	v.	— Hain or Weiss Buche (Ger.)	177	viii.	
— Wallcurz (Ger.)		116	vii.	— Hasel (Ger.)	171	viii.	
Gebräuchlicher Augentrost (Ger.)		172	vi.	— Heide (Ger.)	44	vi.	
— Baldrian (Ger.)		237	iv.	— Heidelbeere (Ger.)	25	vi.	
— Ehrenpreis (Ger.)		164	vi.	— Krebs (Ger.)	3	v.	
— Eibisch (Ger.) ...		163	ii.	— Kreuzblume (Ger.)	37	ii.	
— Fenchel (Ger.) ...		134	iv.	— Lichtnelke (Ger.).....	67	ii.	
— Haarstrang (Ger.).....		149	iv.	— Lonitzere (Ger.)	208	iv.	
— Himmelschlüssel (Ger.)		134	vii.	— Maiblume (Ger.).....	181	ix.	
— Steinklee (Ger.)	30, 32	iii.		— Mariendistel (Ger.).....	5	v.	
— Steinsame (Ger.)		96	vii.	— Meerkohl (Ger.)	119	i.	
Gebräuchliches Eisenkraut (Ger.).....		202	vi.	— Möhre (Ger.)	158	iv.	
— Lungenkraut (Ger.) ...		93	vii.	— Nachtriote (Fr.)	151	i.	
— Seifenkraut (Ger.).....		53	ii.	— Narzisse (Ger.)	159	ix.	
Gefüngerte Segge (Ger.)		123	x.	— Nelkemourz (Ger.)	198	iii.	
Gefüngertes Hundszahn (Ger.) ...		9	xi.	— Osterluzei (Ger.).....	92	viii.	
Gefleckte Taubnessel (Ger.)		74	vii.	— Pastinake (Ger.).....	152	iv.	
Geflechter Aron (Ger.)		14	ix.	— Pechnelke (Ger.).....	72	ii.	
— Hachelkopf (Ger.).....		130	v.	— Petersilie (Ger.)	104	iv.	
— Schierling (Ger.)		174	iv.	— Pflaume (Ger.)	118	iii.	
Geflecktes Knabenkraut (Ger.)... ..		102	ix.	— Pimpernuss (Ger.)	235	ii.	
Gegenblättriger Steinbrech (Ger.)		65	iv.	— Rainkohl (Ger.)	126	v.	
Gegenblättriges Milzkraut (Ger.)		84	iv.	— Schachblume (Ger.).....	189	ix.	
Geglättete Segge (Ger.)		147	x.	— Schaumkraut (Ger.) ...	159	i.	
Gegliederte Binse (Ger.)		32	x.	— Schlinge or Schneeball (Ger.)	203	iv.	
Gehornete Schöllkraut (Ger.).....		98	i.	— Schmeercurz (Ger.) ...	171	ix.	
Gehörnter Sauerklee (Ger.)		214	ii.	— Schöllkraut (Ger.)	100	i.	
Geißblatt (Ger.).....		206	iv.	— Schuppenwurz (Ger.)... ..	190	vi.	
Gekieltes Rapünzchen (Ger.) ...		241	iv.	— Segge (Ger.).....	116	x.	
Gekrümelte Binse (Ger.).....		20	x.	— Sellerie (Fr.)	99	iv.	
Geknieter Fuchsschwanz (Ger.)		26	xi.	— Stiegwurz (Ger.)	142	ix.	
Gelappte Melde (Ger.)		36	viii.	— Stechapfel (Ger.).....	104	vi.	
Gelblättriger Augentrost (Ger.)		176	vi.	— Stechpalme (Ger.)	220	ii.	
Gelblumiger Günsel (Ger.)		80	vii.	— Sumpfwurz (Ger.)	127	ix.	
Gelbe Hornmohn (Ger.)		98	i.	— Vogelwicke (Ger.)	88	iii.	
— Segge (Ger.).....		160	x.	— Wachholder (Ger.).....	274	viii.	
— Teichrose (Ger.)		79	i.	— Wegwarte (Ger.).....	123	v.	
— Wicke (Ger.)		94	iii.	— Wolfsmilch (Ger.)	107	viii.	
Gelber Goldstern (Ger.).....		194	ix.	— Zwergmispel (Ger.).....	234	iii.	
— Wau (Ger.)		3	ii.	Gemeiner Amaranth (Ger.)	185	vii.	
Gelblich Weisses Daun (Ger.) ...		65	vii.	— Andorn (Ger.)	51	vii.	
Gelblichwasses Ruhrkraut (Ger.)		74	v.	— Apfelbaum (Ger.)	256	iii.	
Gellnelke (Ger.)		154	i.	— Beifuss (Ger.)	63	v.	
Gemeine Bachbunzel (Ger.)		5	iv.	— Birnbaum (Ger.)	252	iii.	
— Bärenklau (Ger.)		154	iv.	— Dawn (Ger.)	67	vii.	
— Bärentraube (Ger.).....		28	vi.	— Dost (Ger.).....	30	vii.	
— Birke (Ger.).....		183	viii.	— Ephau (Ger.).....	182	iv.	
— Brunelle (Ger.)		47	vii.	— Frauenflachs (Ger.) ...	142	vi.	
— Eberwurz (Ger.)		22	v.	— Friedlos (Ger.)	145	vii.	
— Eibe (Ger.)		278	viii.	— Froschbiss (Ger.)	79	ix.	
— Erdbeere (Ger.)		155	iii.	— Froschlöffel (Ger.).....	71	ix.	
— Erdrauch (Ger.)		111	i.	— Gagel (Ger.)	190	viii.	
— Erle (Ger.)		179	viii.				

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
<i>Gemeiner Gamander</i> (Ger.)		84	vii.	<i>Gemeines Seegras</i> (Ger.)	61	ix.	
<i>Gänsefuss</i> (Ger.)		15	viii.	— <i>Springkraut</i> (Ger.)	217	ii.	
<i>Gänserich</i> (Ger.)		150	iii.	— <i>Straussgras</i> (Ger.)	50	xi.	
<i>Gersch</i> , or <i>Giersch</i> (Ger.)		109	iv.	— <i>Vogelkraut</i> (Ger.)	95	ii.	
<i>Hafer</i> (Ger.)		74	xi.	— <i>Vogelnest</i> (Ger.)	122	ix.	
<i>Hanf</i> (Ger.)		132	viii.	— <i>Zittergras</i> (Ger.)	131	xi.	
<i>Hartriegel</i> (Ger.)		60	vi.	<i>Gemüse-Lauch</i> (Ger.)	214	ix.	
<i>Hirtentäschel</i> (Ger.)		212	i.	<i>Genäuelte Glockenblume</i> (Ger.)	8	vi.	
<i>Hopfen</i> (Ger.)		134	viii.	<i>Genäulter Ampfer</i> (Ger.)	41	viii.	
<i>Hornklee</i> (Ger.)		66	iii.	<i>Genäultes Hornkraut</i> (Ger.)	83	ii.	
<i>Huflattich</i> (Ger.)		116	v.	<i>Genêt Anglais</i> (Fr.)	8	iii.	
<i>Kalmus</i> (Ger.)		11	ix.	— <i>des teinturiers</i> (Fr.)	10	iii.	
<i>Kellerhals</i> (Ger.)		85	viii.	— <i>velu</i> (Fr.)	9	iii.	
<i>Kerbel</i> (Ger.)		167	iv.	<i>Genévrier commun</i> (Fr.)	274	viii.	
<i>Knöterich</i> (Ger.)		75	viii.	GENISTA			
<i>Kreuzdom</i> (Ger.)		227	ii.	— <i>ANGLICA</i> , <i>Linn.</i>	326	8	iii.
<i>Kümmel</i> (Ger.)		111	iv.	— <i>PILO'SA</i> , <i>Linn.</i>	327	9	iii.
<i>Marbel</i> (Ger.)	9, 10	x.		— <i>scop'ria</i> , <i>Lam.</i>	329	11	iii.
<i>Natterkopf</i> (Ger.)		89	vii.	— <i>TINCTORIA</i> , <i>Linn.</i>	328	9	iii.
<i>Odermennig</i> (Ger.)		130	iii.	— var. <i>glabra</i> , <i>Syme</i>	328	9	iii.
<i>Sandhalm</i> (Ger.)		52	xi.	— var. <i>humifusa</i> , <i>Syme</i>		10	iii.
<i>Sauerklee</i> (Ger.)		211	ii.	<i>Gentian</i> , Autumnal	917	76	vi.
<i>Schambling</i> (Ger.)		147	vi.	— Calathian Violet	914	74	vi.
<i>Schildträger</i> (Ger.)		48	vii.	— Field	919	78	vi.
<i>Spargel</i> (Ger.)		183	ix.	— German	918	77	vi.
<i>Steinpeterelein</i> , or <i>Biber-</i> <i>nelle</i> (Ger.)		116	iv.	— Small Alpine	916	75	vi.
<i>Strandling</i> (Ger.)		177	vii.	— Spring	915	74	vi.
<i>Taunredel</i> (Ger.)		34	iv.	GENTIANA			
<i>Teufelszwirn</i> (Ger.)		99	vi.	— [<i>Acaulis</i> , <i>Linn.</i>] (ex-			
<i>Wasserhelm</i> (Ger.)		127	vii.	cluded)	81	vi.	
<i>Wassernabel</i> (Ger.)		90	iv.	— <i>AMARELLA</i> , <i>Linn.</i>	917 & 918	75	vi.
<i>Weiderich</i> (Ger.)		3	iv.	— <i>CAMPESTRIS</i> , <i>Linn.</i>	919	77	vi.
<i>Wiesenkopf</i> (Ger.)		132	iii.	— eu-Amarel'la, <i>Syme</i>	917	76	vi.
<i>Weissdom</i> (Ger.)		237	iii.	— German'ica, <i>Willd.</i>	918	76	vi.
<i>Windhalm</i> (Ger.)		44	xi.	— <i>NIVALIS</i> , <i>Linn.</i>	916	75	vi.
<i>Wolfstrapp</i> (Ger.)		3	vii.	— <i>PNEUMONANTHE</i> ,			
<i>Wundklee</i> (Ger.)		20	iii.	<i>Linn.</i>	914	73	vi.
<i>Gemeines Beinheil</i> (Ger.)		222	ix.	— <i>VERNA</i> , <i>Linn.</i>	915	74	vi.
<i>Bisamkraut</i> (Ger.)		198	iv.	<i>Gentiane amarelle</i> (Fr.)		76	vi.
<i>Fettkraut</i> (Ger.)		123	vii.	— à feuilles étroites (Fr.)		74	vi.
<i>Flattergras</i> (Ger.)		61	xi.	— d'Allemagne (Fr.)		77	vi.
<i>Flöhkraut</i> (Ger.)		104	v.	— des champs (Fr.)		78	vi.
<i>Habichtskraut</i> (Ger.)	166, 198	v.		— printanière (Fr.)		74	vi.
<i>Herzgespann</i> (Ger.)		68	vii.	<i>Geöhrte Weide</i> (Ger.)		233	viii.
<i>Hexenkraut</i> (Ger.)		29	iv.	<i>Geöhrtes Rapünzchen</i> (Ger.)		242	iv.
<i>Hornkraut</i> (Ger.)		84	ii.	GERANIUM			
<i>Kammgras</i> (Ger.)		134	xi.	— <i>COLUMBINUM</i> , <i>Linn.</i>	303	201	ii.
<i>Katzenkraut</i> (Ger.)		39	vii.	— <i>DISSECTUM</i> , <i>Linn.</i>	302	200	ii.
<i>Knabenkraut</i> (Ger.)		97	ix.	— <i>Laucastrien'se</i> , <i>With.</i>	293 B	191	ii.
<i>Knaulgras</i> (Ger.)		137	xi.	— <i>LU'CIDUM</i> , <i>Linn.</i>	304	202	ii.
<i>Labkraut</i> (Ger.)		218	iv.	— <i>minutiflorum</i> , <i>Jord.</i>	306	204	ii.
<i>Ohlblatt</i> (Ger.)		54	vi.	— <i>modestum</i> , <i>Jord.</i>		204	ii.
<i>Pfeilkraut</i> (Ger.)		69	ix.	— <i>MOL'LE</i> , <i>Linn.</i>	299	197	ii.
<i>Rapünzchen</i> (Ger.)		240	iv.	— <i>NODO'SUM</i> , <i>Linn.</i>	295	193	ii.
<i>Rispengras</i> (Ger.)		130	xi.	— <i>PHOE'UM</i> , <i>Linn.</i>	294	192	ii.
<i>Rohr</i> (Ger.)		59	xi.	— <i>PRATEN'SE</i> , <i>Linn.</i>	297	195	ii.
<i>Ruchgras</i> (Ger.)		18	xi.	— <i>prostratum</i> , <i>Cor.</i>		191	ii.
<i>Salzkraut</i> (Ger.)		5	viii.	— <i>purpureum</i> , <i>Vill.</i>	306	204	ii.
<i>Schneeglöckchen</i> (Ger.)		167	ix.	— <i>PUSILLUM</i> , <i>Linn.</i>	300	198	ii.

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
GERANIUM				GEUM			
— PYRENA'ICUM, <i>Linn.</i>	298	196	ii.	— <i>urba'no-riua'le</i> , Meyer	458	199	iii.
— <i>Ra'ii</i> , <i>Lindl.</i> ?	204		ii.	— <i>URBA'NUM</i> , <i>Linn.</i>	457	197	iii.
— ROBERTIA'NUM, <i>Linn.</i>				<i>Gewöhnliche Meerrettig</i> (Ger.) ...	183		i.
— ———— <i>Jord.</i>	305 & 306	203	ii.	<i>Gewöhnlicher Lein</i> (Ger.)	185		ii.
— ———— var. <i>β. marit'imum</i> .				<i>Gezählter Leindotter</i> (Ger.)	200		i.
— ———— <i>Bab.</i> ?	204		ii.	<i>Gezähltes Rapünzchen</i> (Ger.) ...	243		iv.
— ———— var. <i>modestum</i> , <i>Syme</i>	204		ii.	<i>Gezahnfrüchtiger Schneckenklée</i>			
— ———— var. <i>purpu'reum</i> , <i>Syme</i>	306	204	ii.	(Ger.)	27		iii.
— ROTUNDIFOLIUM,				<i>Gift Lattich</i> (Ger.).....	146		v.
— ———— <i>Linn.</i>	301	199	ii.	<i>Giftahnenfuss</i> (Ger.)	32		i.
— ———— <i>Fries</i>	300	198	ii.	<i>Giftiger Wütherig</i> (Ger.)	97		iv.
— SANGUINEUM, <i>Linn.</i>	293	191	ii.	<i>Gilbkraut</i> (Ger.).....	100		i.
— ———— var. <i>prostratum</i> , <i>Syme</i>	191		ii.	GILTA			
— [stria'tum, <i>Linn.</i>] (ex-				— [tri'color, <i>Benth.</i>] (excluded) ...	83		ii.
— ———— cluded).....	209		ii.	<i>Gilliflower</i>	106	154	i.
— SYLVATICUM, <i>Linn.</i>	296	194	ii.	— ———— <i>Queen's</i>	103	151	i.
— ———— <i>viscid'ulum</i> , <i>Fries</i>	301	199	ii.	<i>Gimauve hérissée</i> (Fr.)	163		ii.
<i>Geranium à feuilles rondes</i> (Fr.)	200		ii.	— ———— <i>officinale</i> (Fr.)	163		ii.
— ———— <i>brun</i> (Ger.)	193		ii.	<i>Gipsy Wort</i>	1019	2	vii.
— ———— <i>colombin</i> (Fr.)	202		ii.	<i>Giroflée</i> (Fr.)	149,154		i.
— ———— <i>découpé</i> (Fr.)	201		ii.	— ———— <i>violier</i> (Fr.)	154		i.
— ———— <i>des bois</i> (Fr.).....	195		ii.	GITHA'GO			
— ———— <i>des prés</i> (Fr.)	196		ii.	— <i>seg'etum</i> , <i>Desf.</i>	215	74	ii.
— ———— <i>des Pyrénées</i> (Fr.) ..	197		ii.	GLADIOLUS			
— ———— <i>fluet</i> (Fr.)	199		ii.	— <i>commu'nis</i> , <i>Hook. & Arn.</i>	1493	141	ix.
— ———— <i>herbe à Robert</i> (Fr.)...	205		ii.	— [— <i>Koch</i>] (excluded)	155		ix.
— ———— <i>luisant</i> (Fr.)	203		ii.	— <i>du'bins</i> , <i>Parl.</i>	142		ix.
— ———— <i>Mollet</i> (Fr.)	198		ii.	— [eu-commu'nis, <i>Syme</i>] (ex-			
— ———— <i>noueux</i> (Fr.)	194		ii.	— ———— cluded).....	155		ix.
— ———— <i>sanguin</i> (Fr.)	192		ii.	— ILLYRICUS, <i>Koch</i>	1493	141	ix.
<i>Gerard's Binse</i> (Ger.)	37		x.	— <i>imbricat'us</i> , <i>Bab.</i>	1493	141	ix.
<i>Germander Ehrenpreis</i> (Ger.) ..	105		vi.	— <i>Lesser</i>	1493	142	ix.
— ———— <i>'cut-leaved</i>	1091	82	vii.	<i>Glaücul commun</i> (Fr.).....	142		ix.
— ———— <i>Speedwell</i>	986	165	vi.	<i>Glanz-gras</i> (Ger.)	20		xi.
— ———— <i>Wall</i>	1094	84	vii.	<i>Glänzender Ehrenpreis</i> (Ger.) ...	151		vi.
— ———— <i>Water</i>	1092	83	vii.	— ———— <i>Kranichschubel</i> (Ger.) ...	203		ii.
— ———— <i>Wood</i>	1093	85	vii.	<i>Glänzendes Samkraut</i> (Ger.).....	37		ix.
<i>Germandrée aquatique</i> (Fr.).....	83		vii.	<i>Glatter Igelock</i> (Ger.)	124		viii.
— ———— <i>botride</i> (Fr.)	82		vii.	<i>Glaucière cornue</i> (Fr.)	97		i.
— ———— <i>des bois</i> (Fr.).....	86		vii.	— ———— <i>jaune</i> (Fr.).....	98		i.
— ———— <i>petite chène</i> (Fr.) ..	84		vii.	GLAUCIUM			
<i>Geruchlose Kamille</i> (Ger.)	47		v.	— CORNICULATUM, <i>Curt.</i>	65	96	i.
<i>Geschlängelte Schmiele</i> (Ger.) ...	67		xi.	— <i>fla'rum</i> , <i>Crantz</i>	66	97	i.
<i>Geschnäbelte Segge</i> (Ger.)	169		x.	— <i>hybridum</i> , <i>Lois.</i>	64	95	i.
<i>Gesse à larges feuilles</i> (Fr.)	103		iii.	— LU'TEUM, <i>Scop.</i>	66	97	i.
— ———— <i>des marais</i> (Fr.)	109		iii.	— <i>phœni'ceum</i> , <i>Crantz</i>	65	96	i.
— ———— <i>des prés</i> (Fr.)	105		iii.	— <i>viol'a'ceum</i> , <i>Juss.</i>	64	95	i.
— ———— <i>sans feuilles</i> (Fr.).....	102		iii.	GLAUX			
— ———— <i>sans vrilles</i> (Fr.)	103		iii.	— MARITIMA, <i>Linn.</i>	1150	154	vii.
— ———— <i>sauvage</i> (Fr.)	107		iii.	— ———— <i>maritime</i> (Fr.)	154		vii.
— ———— <i>tubéreuse</i> (Fr.).....	106		iii.	GLECHO'MA			
— ———— <i>velue</i> (Fr.).....	104		iii.	— <i>heder'a'cea</i> , <i>Linn.</i>	1055	40	vii.
<i>Gestreckter Gänserrich</i> (Ger.).....	148		iii.	— <i>hirsu'ta</i> , <i>Walds. & Kit.</i> ...		40	vii.
<i>Gestrecktes Samkraut</i> (Ger.).....	42		ix.	<i>Gléhome</i> (Fr.)	41		vii.
<i>Getupfiter Sonnengüsel</i>	8		ii.	<i>Gletscher-Segge</i> (Ger.)	119		x.
GEUM				<i>Globe Flower</i>	42	54	i.
— INTERMEDIUM, <i>Ehrh.</i>	458	199	iii.	GLY'CE			
— RIVA'LE, <i>Linn.</i>	459	200	iii.	— <i>marit'ima</i> , <i>Lindley</i>	140	197	i.

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
<i>Glycérie aquatique</i> (Fr.) .....	.....	98	xi.	Goat's-beard, Yellow, var. α	798	140	v.
— <i>écartée</i> (Fr.).....	.....	105	xi.	— var. β	799	140	v.
— <i>flottante</i> (Fr.) .....	.....	101	xi.	— var. γ	800	140	v.
— <i>irraie</i> (Fr.) .....	.....	111	xi.	Gold of Pleasure, Cultivated ...	141	200	i.
GLYCE'RIA				— Fetid	142	200	i.
— <i>airoi'des</i> , Reich.....	1750	94	xi.	Golden Dock	1212	43	viii.
— <i>aquat'ica</i> , Presl	1750	94	xi.	— Moss	532	55	iv.
— AQUAT'ICA, Sm.	1751	100	xi.	— Saxifrage, Alternate-			
— <i>Bor'leri</i> , Bab.	1756	105	xi.	— leaved	564	85	iv.
— <i>confer'ta</i> , Fr.	1756	105	xi.	— Opposite-			
— <i>distans</i> , Hook. fil....	1755 & 1756	103	xi.	— leaved	563	84	iv.
— Sm.	1755	104	xi.	— -rod, Common, var. α ...	778	114	v.
— eu-flu'tans, Syme.....	1752	97	xi.	— var. β ...	779	114	v.
— FLU'TANS, R. Br. 1752 & 1753	96	xi.		— Samphire	769	101	v.
— Fr.....	1752	97	xi.	— Willow	1311	213	viii.
— Towns.	1752	97	xi.	<i>Goldgelber Anpfer</i> (Ger.).....	.....	43	viii.
— var. <i>pedicella'ta</i> , Syme	97	xi.		<i>Goldilocks</i>	32	37	i.
— <i>lotia'cea</i> , Gren. & Godr. ...	1792	153	xi.	<i>Goldlack</i> (Ger.) .....	.....	154	i.
— Wats.	1759	110	xi.	<i>Goldnessel</i> (Ger.) .....	.....	77	vii.
— <i>marit'ima</i> , Wahl.	1754	102	xi.	<i>Goldweurz</i> (Ger.).....	.....	100	i.
— <i>pedicella'ta</i> , Towns.	97	xi.		<i>Goldylocks</i>	777	112	v.
— <i>plica'ta</i> , Fr.	1753	97	xi.	GOODYERA			
— var. <i>subspica'ta</i> , Parn.	98	xi.		— REPENS, Br.....	1475	118	ix.
— <i>procun'bens</i> , Sm.	1757	107	xi.	<i>Goodyère rampante</i> (Fr.) .....	.....	119	ix.
— <i>rig'ida</i> , Sm.	1758	108	xi.	<i>Gooseberry</i>	518	39	iv.
— <i>spectab'ilis</i> , M. & K.....	1751	100	xi.	<i>Goosefoot, Fig-leaved</i>	1191	16	viii.
<i>Gnaphale de Wahlenberg</i> (Fr.)... ..	75	v.		— Many-clustered	1195	21	viii.
— <i>des bois</i> (Fr.)	75	v.		— Many-seeded, var. α 1185	11	viii.	
— <i>des marais</i> (Fr.)	73	v.		— var. β 1186	12	viii.	
— <i>jaunâtre</i> (Fr.)	74	v.		— Maple-leaved	1193	18	viii.
— <i>perlée</i> (Fr.)	77	v.		— Nettle-leaved	1192	17	viii.
— <i>petite</i> (Fr.)	76	v.		— Oak-leaved	1198	24	viii.
— <i>piéd de chat</i> (Fr.).....	79	v.		— Red, var. α	1196	23	viii.
GNAPHALIUM				— var. β	1197	33	viii.
— <i>arven'se</i> , Willd.	739	70	v.	— Stinking	1187	13	viii.
— DIOICUM, Linn.... 747 & 748	78	v.		— Upright	1194	20	viii.
— var. <i>hyperbo'reum</i> ,				— White, var. α	1188	13	viii.
DC.	648	78	v.	— var. β	1189	14	viii.
— <i>Gal'licum</i> , Huds.	740	71	v.	— var. γ	1190	14	viii.
— <i>German'icum</i> , Sm.	736	67	v.	<i>Goosegrass</i>	658	226	iv.
— <i>hyperbo'reum</i> , Don	748	78	v.	<i>Gorse</i>	323	5	iii.
— LU'TEO-AL'BUM, Linn. 742	73	v.		<i>Gout commun</i> (Fr.) .....	.....	14	ix.
— MARGARITA'CEUM,				— <i>d'Italie</i> (Fr.) .....	.....	16	ix.
Linn.	746	77	v.	<i>Goutte de sang</i> (Fr.) .....	.....	14	i.
— <i>min'imium</i> , Sm.	739	70	v.	<i>Goutweed, Common</i>	580	109	iv.
— <i>monta'num</i> , Huds.	739	70	v.	<i>Graine de beurre</i> (Fr.) .....	.....	125	i.
— NORVE'GICUM, Gunn 744	75	v.		GRAMMICA			
— <i>pilula're</i> , Wahl.	73	v.		— [<i>aphyll'a</i> , Lour.] (excluded)	93	vi.	
— <i>rec'tum</i> , Sm.	743	74	v.	GRAMMITIS			
— SUP'NUM, Linn.	745	76	v.	— <i>Ce'terach</i> , Swartz	1883	139	xii.
— var. <i>fus'cum</i> , Scop. ...	745	76	v.	— <i>leptophyll'a</i> , Swartz &			
— SYLVAT'ICUM, Linn.... 743	74	v.		Willd.	1843	42	xii.
— Sm.	744	75	v.	<i>Grasartiges Samkraut</i> (Ger.) ...	.....	36	ix.
— var. α . <i>rec'tum</i> , Hook.				<i>Grass. Alpine Fox-tail</i>	1704	30	xi.
& Arn.....	743	74	v.	— Hair	1731	66	xi.
— var. β . <i>Norve'gium</i> ,				— Meadow	1762	115	xi.
Hook. & Arn.....	744	75	v.	— Timothy.....	1705	31	xi.
— ULIGINOSUM, Linn. ... 741	72	v.		— Ambiguous Fescue	1780	140	xi.
— Gr. & Godr.	73	v.		— Annual Beard	1713	41	xi.
— var. <i>pilula're</i> , Koch....	73	v.					

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
Grass, Annual Meadow	1760	111	xi.	Grass, Meadow Fescue... 1791 & 1792	154	xi.	
— Balfour's Meadow	1767	122	xi.	— Mountain Scurvy	131	186	i.
— Barren Brome.....	1799	164	xi.	— Mouse-tail Fescue	1781	142	xi.
— False Brome	1808	176	xi.	— Nodding Melic	1748	93	xi.
— Fescue	1782	143	xi.	— Northern Holy	1695	16	xi.
— Bent-stemmed Fox-tail	1701	26	xi.	— of Parnassus	565	86	iv.
— Blue Moor	1710	36	xi.	— Orange-anthered Fox-tail	1700	24	xi.
— Bog Hair	1733	69	xi.	— Ovate Hare's-tail	1712	39	xi.
— Borrer's Meadow	1756	107	xi.	— Pepper	1825	2	xii.
— Bristle-leaved Bent	1717	46	xi.	— Perennial Beard.....	1714	42	xi.
— Brown Bent	1718	47	xi.	— -poly, Hyssop-leaved.....	492	4	iv.
— Bulbous Meadow	1761	114	xi.	— Procumbent-Meadow.....	1757	108	xi.
— Cæsious Meadow	1765	119	xi.	— Purple Melic	1747	9	xi.
— Canary	1698	21	xi.	— Purple-stalked Timothy	1708	34	xi.
— Common Bent	1721	50	xi.	— Racemose Brome	1803	168	xi.
— Couch	1810	178	xi.	— Reed Meadow.....	1751	100	xi.
— Quaking	1774	131	xi.	— Reflexed Meadow	1755	105	xi.
— Rye	1814	186	xi.	— Ribbon	1697	20	xi.
— Scurvy	130	185	i.	— Rough Bristle	1694	14	xi.
— Timothy 1706 & 1707	32	xi.		— Brome.....	1795	158	xi.
— Confused Brome.....	1802	169	xii.	— Cock's-foot.....	1778	137	xi.
— Creeping Dog's-tooth ..	1690	9	xi.	— Dog's-tail	1777	135	xi.
— Fescue	1786	148	xi.	— Meadow	1773	130	xi.
— Sea Meadow ..	1754	103	xi.	— Rye Brome.....	1800 & 1801	166	xi.
— Soft.....	1743	84	xi.	— Sand Couch	1813	184	xi.
— Crested Dog's-tail	1776	134	xi.	— Lyme.....	1819	191	xi.
— Hair	1746	89	xi.	— Timothy	1709	35	xi.
— Decumbent Heath.....	1745	87	xi.	— Sea, Hard	1818	189	xi.
— Sea Couch... 1812	183	xi.		— Shave	1894	162	xii.
— Dense - flowered Silky				— Sheep's Fescue ... 1783 & 1784	144	xi.	
Bent	1716	45	xi.	— Silvery Hair	1734	71	xi.
— Downy Oat	1737	75	xi.	— Single-glumed Fescue ...	1779	139	xi.
— Dwarf Meadow	1759	111	xi.	— Slender Fox-tail	1699	23	xi.
— Early Hair	1735	72	xi.	— Small Quaking	1775	132	xi.
— Sand.....	1689	8	xi.	— Smooth Meadow... 1771 & 1772	128	xi.	
— Erect Sea Couch	1811	181	xi.	— Soft Brome..... 1804 & 1805	171	xi.	
— European Cut.....	1686	3	xi.	— Spreading Silky, Bent ...	1715	44	xi.
— False Oat	1742	83	xi.	— Straight-stemmed Meadow			
— Wood Brome	1807	174	xi.	.....	1763	116	xi.
— Field Brome	1806	172	xi.	— Sweet-scented Vernal ...	1696	18	xi.
— Flat-stemmed Meadow ...	1770	126	xi.	— Tall Brome	1793 & 1794	156	xi.
— Floating Meadow	1752	98	xi.	Fescue	1789 & 1790	151	xi.
— Folded-leaved Meadow... 1753	99	xi.		— Tuberous Fox-tail	1702	27	xi.
— Fox-tail Meadow	1703	28	xi.	— Tufted Hair	1730	65	xi.
— Glabrous Finger	1691	11	xi.	— Twin-spiked Cord	1687	5	xi.
— Oat..... 1738 & 1739	76	xi.		— Upright-annual Brome... 1797	162	xi.	
— Glaucous Meadow	1766	120	xi.	-perennial Brome 1796	160	xi.	
— Great Brome	1798	163	xi.	— Wavy Meadow	1764	117	xi.
— Green Bristle.....	1693	14	xi.	— Wood Couch	1809	177	xi.
— Grey Hair	1729	63	xi.	Fescue	1787 & 1788	149	xi.
— Hard Fescue	1785	147	xi.	— Meadow ... 1768 & 1769	124	xi.	
— Meadow	1758	109	xi.	— Melic.....	1749	94	xi.
— Heath Hair.....	1732	67	xi.	— Millet	1728	61	xi.
— Hoary Whitlow	136	193	i.	— Yellow Oat.....	1736	74	xi.
— Italian Rye	1815	187	xi.	<i>Grassblättriges Vogelkraut</i> (Ger.)	99	ii.	
— Loose Panic	1692	12	xi.	<i>Grassette à grandes fleurs</i> (Fr.)	124	vii.	
— Many-spiked Cord	1688	6	xi.	<i>commune</i> (Fr.)	123	vii.	
— Marl.....	347	39	iii.	<i>de Portugal</i> (Fr.)	125	vii.	
— Marsh Bent	1719 & 1720	48	xi.	<i>jaunâtre</i> (Fr.)	125	vii.	
— Mat	1814	198	xi.	Grasswreck, Common, var. <i>a</i> ...	1429	61	ix.

	PLATE	PAGE	VOL.
Grasswrack, Common, var. β ...	1430	61	ix.
—— Dwarf.....	1431	62	ix.
—— -leaved Pondweed	1415	46	ix.
<i>Graue Glockenheide</i> (Ger.)		41	vi.
—— <i>Pappel</i> (Ger.).....	195	viii.	
—— <i>Weide</i> (Ger.)	232	viii.	
<i>Graues Silbergras</i> (Ger.)	63	xi.	
<i>Graugrüne Nelke</i> (Ger.)	48	ii.	
<i>Greek Valerian</i>	922	82	vi.
<i>Green Hellebore</i>	44	57	i.
—— <i>Spleenwort</i>	1877	129	xii.
—— <i>Weed, Dyers'</i>	328	10	iii.
—— <i>Hairy</i>	327	9	iii.
—— -winged Meadow Orchis	1454	97	ix.
<i>Grémil des champs</i> (Fr.)	97	vii.	
—— <i>officinal</i> (Fr.).....	96	vii.	
—— <i>violet</i> (Fr.).....	95	vii.	
<i>Grenouillette</i> (Fr.).....	24	i.	
<i>Gromwell, Common</i>	1101	96	vii.
—— <i>Corn</i>	1102	97	vii.
—— <i>Purple</i>	1100	95	vii.
<i>Groseille à maquereau</i> (Fr.).....	39	iv.	
—— <i>cassia</i> (Fr.)	45	iv.	
—— <i>commune</i> (Fr.).....	42	iv.	
—— <i>des Alpes</i> (Fr.)	41	iv.	
<i>Grossamige Klette</i> (Ger.)	25	v.	
<i>Grossblumiges Vogelkraut</i> (Ger.)	97	ii.	
<i>Grossblüthiges Zymbellkraut</i> (Ger.).....	130	ix.	
<i>Grosse Käseblume</i> (Ger.)	42	v.	
—— <i>Strenze, or Astrünze</i> (Ger.)	92	iv.	
<i>Grosser Steinpeterlein</i> (Ger.) ..	116	iv.	
—— <i>Wegerich</i> (Ger.)	168	vii.	
<i>Grössere Klapper</i> (Ger.)	182	vi.	
<i>Grosses Löwenmaul</i> (Ger.)	131	vi.	
<i>Grösster Zirnet</i> (Ger.)	156	iv.	
<i>Ground Ivy</i>	1055	41	vii.
—— <i>Pine</i>	1090	80	vii.
<i>Groundsel, Common</i>	749	80	v.
—— <i>Mountain, var. α</i>	750	82	v.
—— <i>var. β</i>	751	82	v.
—— <i>Stinking</i>	752	82	v.
<i>Grüne Grundfeste</i> (Ger.)	161	v.	
—— <i>Kuckueksblume</i> (Ger.) ..	105	ix.	
—— <i>Nesswurz</i> (Ger.).....	57	i.	
<i>Grüner Fennich</i> (Ger.)	14	xi.	
<i>Guarelle</i> (Fr.).....	182	vii.	
<i>Guelder Rose, Common</i>	639	203	iv.
<i>Gui blanc</i> (Fr.)	190	iv.	
<i>Guter Heinrich</i> (Ger.)	25	viii.	
GYMNADE'NIA			
—— <i>AL'BIDA, Rich.</i>	1461	103	ix.
—— <i>CONOP'SEA, Br.</i>	1460	102	ix.
—— <i>vir'idis, Rich.</i>	1462	105	ix.
GYMNOCARPIUM			
—— <i>Dryop'teris, Newm.</i>	1845	46	xii.
—— <i>Phegop'teris, Newm.</i>	1847	50	xii.
—— <i>Robertia'num, Newm.</i>	1846	48	xii.
GYMNOGRAMMA			
—— <i>LEPTOPHYLLA, Desv.</i> 1843	42	xii.	

GYMNOGRAMME

	PLATE	PAGE	VOL.
—— <i>Ce'terach, Spreng.</i>	1883	139	xii.
<i>Haarblättrige Bäurwurz</i> (Ger.) ...	141	iv.	
<i>Haarförmiges Samkraut</i> (Ger.)	52	ix.	
<i>Haarhalmige Segge</i> (Ger.)	139	x.	
<i>Haariger Hundstlattich</i> (Ger.) ...	132	v.	
HABENARIA			
—— <i>al'bida, Br.</i>	1461	103	ix.
—— <i>bifolia, Bab.</i>	1464	106	ix.
—— <i>BIFO'LIA, Br.</i> ... 1463 & 1464		105	ix.
—— <i>chloran'tha, Bab.</i>	1463	107	ix.
—— <i>eu-bifolia, Syme</i>	1464	106	ix.
—— <i>VIR'IDIS, Br.</i>	1462	105	ix.
<i>Habichtskraut</i> (Ger.)	164-213	v.	
<i>Habichtskrautähnlicher Bitterich</i> (Ger.)	136	v.	
<i>Haferschlehe</i> (Ger.)	117	iii.	
<i>Hag-taper</i>	937	111	vi.
<i>Hahnenfuss, or Krähenfuss</i> (Ger.)	17	i.	
<i>Hahnenfussartiger Froschlöffel</i> (Ger.)	73	ix.	
<i>Hain-Ampfer</i> (Ger.)	42	viii.	
<i>Hain-Friedlos</i> (Ger.).....	150	vii.	
<i>Hain-Rispengras</i> (Ger.)	125	xi.	
<i>Hain-Vogelkraut</i> (Ger.).....	93	ii.	
<i>Hair-grass, Alpine</i>	1731	66	xi.
—— <i>Bog</i>	1733	69	xi.
—— <i>Crested</i>	1746	89	xi.
—— <i>Early</i>	1735	72	xi.
—— <i>Grey</i>	1735	63	xi.
—— <i>Heath</i>	1732	67	xi.
—— <i>Silvery</i>	1734	71	xi.
—— <i>Tufted</i>	1730	65	xi.
<i>Hakenförmiger Wasserstern</i> (Ger.) ...	121	viii.	
HALIANTHUS			
—— <i>peplo'ides, Fries</i>	239	106	ii.
HALIMUS			
—— <i>pedunculata, Wallr.</i>	1209	37	viii.
—— <i>portulaco'ides, Dumont</i> ...	1208	36	viii.
HALOS'CIAS			
—— <i>Scot'icum, Fries</i>	603	138	iv.
<i>Hammer Sedge</i>	1677	163	x.
<i>Hängende Segge</i> (Ger.).....	140	x.	
<i>Hard Rush</i>	1563	26	x.
<i>Hare-bell</i>	870	13	vi.
<i>Hare's-ear, Falcate-leaved</i>	592	123	iv.
—— <i>Mustard</i>	101	149	i.
—— <i>Narrow-leaved</i>	590	121	iv.
—— <i>Perfoliate</i>	589	120	iv.
—— <i>Slender</i>	591	122	iv.
—— <i>-foot Sedge</i>	1633	101	x.
—— <i>Trefoil</i>	354	47	iii.
—— <i>-tail Cotton-grass</i>	1604	72	x.
—— <i>-grass, Ovate</i>	1712	39	xi.
<i>Hart's-tongue Fern</i>	1858	87	xii.
<i>Hart-wort, Great</i>	614	156	iv.
<i>Hasenpfoten Segge</i> (Ger.).....	104	x.	

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
<i>Haufartiges Kunigundenkraut</i>				Heath, Cornish	892	42	vi.
(Ger.)		121	v.	— Cross-leaved	888 & 889	38	vi.
<i>Haus-Ampfer</i> (Ger.)		51	viii.	— Fine-leaved	891	41	vi.
Hautbois Strawberry	439	156	iii.	— Fringed-leaved	887	36	vi.
Hawk-bit, Autumnal, var. α ...	794	135	v.	— -grass, Decumbent	1745	87	xi.
— var. β ...	795	135	v.	— Grey	891	41	vi.
— Hairy	792	132	v.	— Hair-grass	1732	67	xi.
— Rough	793	133	v.	— Irish	893	43	vi.
Hawk's-beard, Bristly	817	160	v.	— Mackay's	890	39	vi.
— Large Rough ...	819	162	v.	— Rush	1576	39	x.
— Marsh	821	164	v.	— Sedge, Glaucous ... 1644-1646	118	x.	
— Scabious-leaved	820	162	v.	— Silvery	1654	129	x.
— Small Rough ...	816	159	v.	— St. Dabeoc's	885	34	vi.
— Smooth	818	161	v.	Heather	894	44	vi.
— Stinking	815	158	v.	<i>Hecken-Knöterich</i> (Ger.)		63	viii.
Hawkweed, Alpine	828	172	v.	<i>Heckensame</i> (Ger.)		5	iii.
— Amplexicaul-leaved	835	179	v.	HEDERA			
— Black-headed	832	176	v.	— <i>HELIX</i> , <i>Linn.</i>	633	181	iv.
— Broad-leaved	854	205	v.	<i>Hederich</i> (Ger.)	144, 148	i.	
— Cæsious	847	193	v.	Hedge Mustard	96	144	i.
— Cat's-car	842	187	v.	— Garlic	100	147	i.
— Compact	845	190	v.	— Parsley, Field	619	163	iv.
— Corymbose	855	207	v.	— Knotted	621	165	iv.
— English	836 & 837	181	v.	— Upright	620	164	iv.
— Globose-headed	829	173	v.	— Stonewort	578	107	iv.
— Gold-flowered, var. α	830	175	v.	— Woundwort	1070 & 1071	59-60	vii.
— var. β	831	175	v.	HEDYPSNOIS			
— Grey-headed	825	169	v.	— <i>autumnalis</i> , Sm.	794	134	v.
— Grey lingulate-leaved	833	177	v.	— <i>hirtum</i> , Sm.	792	131	v.
— Irish	838	182	v.	— <i>hispidum</i> , Sm.	793	133	v.
— Lingulate-leaved ...	834	178	v.	— <i>Taraxaci</i> , Sm.	795	134	v.
— Marygold-flowered	824	168	v.	HEDYS'ARUM			
— Mouse-ear	822	166	v.	— <i>Onobrychis</i> , Linn.	381	81	iii.
— Naked-headed	851	200	v.	<i>Heide Labkraut</i> (Ger.)	220, 221	iv.	
— Narrow-leaved	853	204	v.	— <i>Segge</i> (Ger.)	129	x.	
— Orange	823	167	v.	<i>Heidenblättriger Spierstaude</i> (Ger.) ...	126	iii.	
— Ox-tongue	796	136	v.	<i>Heidliches Tausendgüldenkraut</i>			
— Pale	840	185	v.	(Ger.)	69	vi.	
— Rough-leaved	858	211	v.	<i>Heilwurz Sesel</i> (Ger.)	138	iv.	
— Saffron	856	208	v.	HELEOCHARIS			
— Scaly-stalked	844	189	v.	— <i>acicul'ris</i> , Sm.	1585	50	x.
— Shaggy	839	184	v.	— <i>Bwothry'on</i> , Nees	1589	54	x.
— Silvery	843	188	v.	— <i>cæspitosa</i> , Reich.	1590	55	x.
— Slender	828	173	v.	— <i>fluitans</i> , Hook.	1592	57	x.
— Small-toothed	859	213	v.	— <i>multicaulis</i> , Sm.	1588	53	x.
— Spotted	849	196	v.	— <i>palustris</i> , R. Br. ... 1586 & 1587	51	x.	
— Stellately-downy ...	848	195	v.	— Koch	1586	51	x.
— Straight-branched... 857	210	v.	— <i>parvula</i> , Hook.	1591	56	x.	
— Three-toothed	852	202	v.	— <i>paucijl'ora</i> , Link	1589	54	x.
— Wall	846	192	v.	— <i>unigu'nis</i> , Reich.	1587	52	x.
— Wood	850	198	v.	— <i>Watsoni</i> , Bab.	52	x.	
— Woolly-headed	826	170	v.	HELEOGITON			
Hawthorn	479	237	iii.	— <i>fluitans</i> , Link	1592	57	x.
— Common	480	238	iii.	— <i>glau'cum</i> , Reich.	1597	64	x.
Hazel	1292	17	viii.	— <i>parvula</i> , Link	1591	56	x.
— leaved Bramble	455	193	iii.	— <i>pungens</i> , Reich.	1600	66	x.
Head Wark	58	88	i.	— <i>trig'onum</i> , Reich.	1598	64	x.
Heartsease	178	25	ii.	— <i>trique'trum</i> , Reich.	1599	65	x.
Heath Bedstraw	651	219	iv.				

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
<i>Helianthème à feuilles de Polium</i>				Hemlock, Water-Dropwort	597	129	iv.
(Fr.)	11	ii.		Hemp-Agrimony, Common	785	121	v.
— <i>blanchâtre</i> (Fr.)	10	ii.		— Common	1283	132	viii.
— <i>commun</i> (Fr.)	11	ii.		— -nettle, Common	1078	67	vii.
— <i>tache</i> (Fr.)	8	ii.		— Downy	1076	65	vii.
HELIAN'THEMUM				— Intermediate	1075	64	vii.
— Breweri, <i>Planch.</i>	166	8	ii.	— Large-flowered ...	1077	66	vii.
— CA'NUM, <i>Duval.</i>	167	9	ii.	— Narrow-leaved.....	1074	63	vii.
— <i>ca'num</i> , <i>Reich.</i>	167	9	ii.	Henbane, Common.....	936	107	vi.
— var. <i>vinea'le</i> , <i>Syme.</i>	9	ii.		Henbit Dead-nettle	1081	70	vii.
— <i>eu-gutta'tum</i> , <i>Syme.</i>	165	7	ii.	Henne-belle.....	936	108	vi.
— GUTTA'TUM, <i>Müller.</i>				HERAC'LEUM			
165 & 166	7	ii.		— SPHONDYL'IUM, <i>Linn.</i>	613	154	iv.
— Auct. Plur.	165	7	ii.	Herb Bennet	629	174	iv.
— var. <i>B</i> , <i>Hook. & Arn.</i>	166	8	ii.	— Christopher	49	67	i.
— <i>ital'icum</i> , <i>Pers.</i>	10	ii.		— Gerard	611	151	iv.
— [<i>ledifolium</i> , <i>Willd.</i>] (ex-				— Paris	1509	174	ix.
cluded)	235	ii.		— Robert	305	203	ii.
— <i>oelan'dicum</i> , <i>Wahl.</i>	10	ii.		— var. <i>γ</i>	306	205	ii.
— POLIFO'L'IUM, <i>Pers.</i> ...	169	11	ii.	— St. Barbara	120	171	i.
— <i>pulverulentum</i> , <i>DC.</i>	169	11	ii.	<i>Herbe à jaunir</i> (Ger.)	5	ii.	
— <i>surreja'num</i> , <i>Mill.</i>	11	ii.		— <i>au chantre</i> (Fr.)	144	i.	
— <i>vinea'le</i> , <i>Pers.</i>	9	ii.		— <i>aux cuilliers</i> (Fr.)	185	i.	
— VULGA'RE, <i>Gärtn.</i>	168	10	ii.	— <i>aux varices</i> (Fr.)	19	v.	
Heliotrope, Winter.....	781	118	v.	— <i>Sainte-Barbe</i> (Fr.)	171	i.	
<i>Hellebore fétide</i> (Fr.)	59	i.		<i>Herbst Löwenzahn</i> (Ger.)	135	v.	
— <i>vert</i> (Fr.)	57	i.		— <i>Wasserstern</i> (Ger.).....	123	viii.	
Hellebore, Green	44	57	i.	— <i>Wendelorch</i> (Ger.)	116	ix.	
— Stinking	45	59	i.	— <i>Zeitlose</i> (Ger.).....	225	ix.	
Helleborine, Broad-leaved	1480	125	ix.	HERMINIUM			
— Long-leaved.....	1484	129	ix.	— <i>clandestinum</i> , <i>Gren. &</i>			
— Marsh	1482	127	ix.	Godr.	1466	109	ix.
— Narrow-leaved.....	1479	124	ix.	— MONOR'CHIS, <i>Br.</i>	1466	109	ix.
— Oval-leaved	1481	126	ix.	HERMODAC'TYLUS			
— Red	1483	128	ix.	— <i>tuberosus</i> , <i>Salisb.</i>	1496	147	ix.
— White	1485	130	ix.	HERNARIA			
HELLEBORUS				— CILIA'TA, <i>Bab.</i>	1172	179	vii.
— FÆTIDUS, <i>Linn.</i>	45	58	i.	— GLA'BRA, <i>Linn.</i>	1171	178	vii.
— <i>hyem'lis</i> , <i>Linn.</i>	43	55	i.	— [<i>hirsuta</i> , <i>Linn.</i>] (excluded)	183	vii.	
— VIRIDIS, <i>Linn.</i>	44	56	i.	— <i>latifolia</i> , <i>Lapey.</i>	180	vii.	
HELMINTHIA				<i>Herzblättriges Zweiblatt</i> (Ger.)	120	ix.	
— ECHIOIDES, <i>Gärtn.</i>	797	137	v.	HESPERIS			
<i>Helminthie vipérine</i> (Fr.)	138	v.		— <i>inod'ra</i> , <i>Linn., Sm.</i>	103	150	i.
<i>Helosciadie nodiflore</i> (Fr.)	101	iv.		— MATRONA'LIS, <i>Linn.</i> ...	103	150	i.
HELOSCIA'DIUM				<i>Hêtre fayard</i> (Fr.).....	165	viii.	
— INUNDA'TUM, <i>Koch</i> ...	575	102	iv.	HIERA'CIUM			
— NODIFLO'RUM, <i>Bab.</i>				— AGGREGA'TUM, <i>Back.</i>	845	189	v.
573 & 574	100	iv.		— <i>alp'num</i> , <i>Back.</i>	827	170	v.
— Koch	573	100	iv.	— Sm.	826	169	v.
— var. <i>longipeduncula-</i>				— var. <i>α</i> , <i>Hook. & Arn.</i>	827	170	v.
<i>tum</i> , <i>F. Schultz</i>	574	100	iv.	— var. <i>β</i> , <i>Hook. & Arn.</i>	826	169	v.
— var. <i>re'pens</i> , <i>Syme</i> ...	574	100	iv.	— AMPLEXICA'ULE,			
— var. <i>vulga're</i> , <i>Schultz</i>	573	100	iv.	<i>Linn.</i>	835	178	v.
— <i>re'pens</i> , <i>Koch</i>	574	100	iv.	— AN'GLICUM, <i>Fries</i> 836 & 837	179	v.	
<i>Hemes'theum montanum</i> , <i>Newm.</i>	1849	54	xii.	— var. <i>acutifolium</i> ,			
— <i>Thelyp'teris</i> , <i>Newm.</i>	1848	52	xii.	<i>Back.</i>	180	v.	
Hemlock, Common.....	629	174	iv.	— var. <i>amplexicaule</i> ,			
— Water	571	97	iv.	<i>Bab.</i>	838	180	v.

	PLATE	PAGE	VOL.
HIERA'CIUM			
— an'glicum, var. decip'iens, <i>Syme</i>		180	v.
— ARGEN'TEUM, <i>Fries</i> ...	843	187	v.
— <i>atra'tum</i> , Bab.	831	174	v.
— ——— <i>Fries</i>	833	176	v.
— AURANTI'ACUM, <i>Linn.</i> 823	166		v.
— [Auric'ula, <i>Linn.</i>] (ex- cluded)		218	v.
— [— Sm.] (excluded) ...		218	v.
— bif'idum, <i>Kit.</i>	190		v.
— BOREA'LE, <i>Fries</i>	854	204	v.
— BOR'RERI, <i>Syme</i>	859	212	v.
— CÆ'SIUM, <i>Fries</i> (?)	847	192	v.
— ——— <i>Fries</i>	848	193	v.
— ——— var. obtusifol'ium, <i>Syme</i>		193	v.
— CALENDULIFLORUM, <i>Back.</i>	824	167	v.
— <i>cerintho'des</i> , <i>Back.</i> ...	836 & 837	179	v.
— [— <i>Linn.</i>] (excluded)...		218	v.
— ——— var. α, <i>Back.</i>	837	180	v.
— ——— var. β, <i>Back.</i>	836	180	v.
— CHRYSANTHUM, <i>Back.</i> 830 & 831	174		v.
— ——— var. γ, <i>Hook. & Arn.</i>	833	176	v.
— ——— var. microceph'alum, <i>Back.</i>	831	174	v.
— CINERES'CENS, <i>Jord.</i> ...	841	185	v.
— CORYMBO'SUM, <i>Fries</i> ...	855	206	v.
— CROCA'TUM, <i>Fries</i>	856	207	v.
— <i>denticula'tum</i> , <i>Sm.</i>	857	208	v.
— ——— <i>Borrer</i>	859	212	v.
— [Dovre'n'se, <i>Fries</i>] (ex- cluded)		219	v.
— [du'bitum, <i>Linn.</i>] (ex- cluded)		218	v.
— [— Sm.] (excluded).....		218	v.
— EXIM'IUM, <i>Back.</i>	825	168	v.
— ——— var. α, <i>Hook. & Arn.</i>	825	168	v.
— ——— var. β, <i>Hook. & Arn.</i>	824	167	v.
— ——— var. tenel'ium, <i>Back.</i>	169		v.
— <i>flocco'sum</i> , Bab.	848	193	v.
— FLOCCULO'SUM, <i>Back.</i>	848	193	v.
— GIBSO'NI, <i>Back.</i>	842	186	v.
— [glacia'le, <i>Lachn.</i>] (ex- cluded)		218	v.
— GLOBO'SUM, <i>Back.</i>	829	173	v.
— GOTH'ICUM, <i>Fries</i>	851	199	v.
— ——— var. latifo'lium, <i>Back.</i>	200		v.
— GRACILEN'TUM, <i>Back.</i>	828	172	v.
— <i>heterophyl'lum</i> , <i>Bladon</i>	854	204	v.
— HOLOSERIC'EUM, <i>Back.</i>	826	169	v.
— <i>hypochæroi'des</i> , S. Gibson	842	186	v.
— <i>inquina'tum</i> , <i>Jord.</i>	849	195	v.
— <i>inuloi'des</i> , <i>Tausch.</i>	856	207	v.
— IR'ICUM, <i>Fries</i>	838	181	v.
— <i>Lapeyrou'sii</i> , Bab.	838	181	v.
— <i>lasiophyl'lum</i> , <i>Back.</i>	841	185	v.
— ——— <i>Koch</i>		186	v.

	PLATE	PAGE	VOL.
HIERA'CIUM			
— <i>Lawso'ni</i> , <i>Sm.</i>	836 & 837	179	v.
— LINGULA'TUM, <i>Back.</i> ...	834	177	v.
— MACULA'TUM, <i>Sm.</i>	849	195	v.
— MELANOCEPH'ALUM, <i>Tausch</i>	827	170	v.
— ——— var. insign'e, <i>Syme</i> ...		171	v.
— ——— <i>mol'le</i> , <i>Jacq.</i>	820	162	v.
— MUROR'UM, <i>Fries</i>	846	190	v.
— ——— <i>Sm.</i>	847	192	v.
— " ——— var. α, <i>Linn.</i> " <i>Fries</i>	847	192	v.
— ——— var. canes'cens, <i>Syme</i>	191		v.
— ——— var. rotunda'tum, <i>Back.</i>		191	v.
— ——— var. sub-cæ'sium, <i>Fries</i> (?)		191	v.
— " ——— var. β. <i>sylva'ticum</i> , <i>Linn.</i> "	846	190	v.
— NIGRES'CENS, <i>Willd.</i> ...	832	175	v.
— NIT'IDUM, <i>Back.</i>	844	188	v.
— <i>Norve'gium</i> , <i>Fries</i> (?).....		200	v.
— obtusifol'ium, <i>Back.</i>		193	v.
— [Ore'ades, <i>Fries</i>] (excluded)	218		v.
— PAL'LIDUM, <i>Fries</i>	840	184	v.
— ——— var. (?) <i>persicifo'lium</i> , <i>Fries.</i>	844	188	v.
— <i>paludo'sum</i> , <i>Linn.</i>	821	163	v.
— <i>Peleteria'num</i> <i>Mérat.</i>	165		v.
— PILOSEL'LA, <i>Linn.</i>	822	165	v.
— ——— var. pilosis'simum, <i>Fries</i>		165	v.
— [p'lum'beum, <i>Fries</i>] (excl.)	218		v.
— PRENANTHOIDES, <i>Vill.</i>	858	210	v.
— <i>pulmona'rium</i> , <i>Sm.</i>	830 ?	174	v.
— rig'idum, <i>Back.</i>	855	206	v.
— [— <i>Hartm.</i>] (excluded)	219		v.
— ——— <i>Koch</i>	852	201	v.
— <i>rupes'tre</i> , Bab.	830	174	v.
— <i>Saba'u'dum</i> , <i>Sm.</i>	854	204	v.
— <i>Saxif'ragum</i> , Bab.	834	177	v.
— [— <i>Fries</i>] (excluded) ...		218	v.
— ——— <i>Schmid'tii</i> , <i>Koch</i>	840	184	v.
— SENES'CENS, <i>Back.</i>	833	176	v.
— <i>stellig'erum</i> , <i>Back.</i>	848	193	v.
— [stolonif'erum, <i>W. & K.</i>] (excluded)		218	v.
— STRIC'TUM, <i>Fries</i>	857	208	v.
— <i>sylva'ticum</i> , <i>Sm.</i>	850	196	v.
— ——— var. <i>nemoro'sum</i> , <i>Back.</i>	196		v.
— TRIDENTA'TUM, <i>Fries</i>	852	201	v.
— UMBELLA'TUM, <i>Vill.</i> ...	853	202	v.
— ——— var. filifo'lium, <i>Back.</i>	204		v.
— VILLOSUM, <i>Linn.</i>	839	182	v.
— ——— <i>Sm.</i>	825	169	v.
— <i>vires'cens</i> , <i>Sonder</i>	205		v.
— VULGA'TUM, <i>Fries</i>	850	196	v.
— ——— var. cine'reum, <i>Back.</i>	197		v.
— ——— var. <i>nemoro'sum</i> , <i>Back.</i>	849	195	v.
— ——— var. rosula'tum, <i>Syme</i>	197		v.
— ——— var. rufes'cens, <i>Back.</i>	197		v.

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.	
HIERA'CIUM				Hop, Common.....	1284	134	viii.	
— <i>vulga'tum</i> , var. <i>subnigres'</i> - <i>cens</i> , <i>Syme</i>		197	v.	— Trefoil.....	365	61	iii.	
HIEROCHLO'A. See HIEROCHLO'E.				<i>Hopfen Schneckenklee</i> (Ger.) ..		25	iii.	
HIEROCHLO'E				HORDEUM				
— BOREA'LIS , <i>R. & S.</i>	1695	16	xi.	— MARITIMUM , <i>With</i>	1823	195	xi.	
— <i>odora'ta</i> , <i>Wahl.</i>	1695	16	xi.	— MURINUM , <i>Linn.</i>	1822	194	xi.	
Higtaper, or High-taper	937	111	vi.	— var. β , <i>Linn.</i>	1821	193	xi.	
HLMANTOGLOS'SUM				— PRATEN'SE , <i>Huds.</i>	1821	193	xi.	
— <i>hirci'num</i> , <i>Spreng.</i>	1448	90	ix.	— <i>secal'i'num</i> , <i>Schreb.</i>	1821	193	xi.	
<i>Himbeere</i> (Ger.)	161	iii.		— SYLVATICUM , <i>Huds.</i>	1820	192	xi.	
<i>Himmelschlüssel - Schlüsselblume</i> (Ger.)		132	vii.	Horehound, Black	1065 & 1066	53	vii.	
<i>Hippocrévide en Ombelle</i> (Fr.)... ..	80	iii.		— Water.....	1019	3	vii.	
HIPPOCRE'PIS				— White.....	1064	51	vii.	
— COMO'SA , <i>Linn.</i>	380	79	iii.	Hornbeam	1293	177	viii.	
HIPPOPHA'E				— leaved Bramble		176	iii.	
— RHAMNOIDES , <i>Linn.</i>	1245	82	viii.	Horned Pondweed, Common ...	1425	57	ix.	
HIPPU'RIS				— Stalked-fruited		1426	57	ix.
— VULGA'RIS , <i>Linn.</i>	516	33	iv.	Horn Poppy, Red	65	97	i.	
HIRSCHFEL'DIA				— Violet	64	96	i.	
— <i>adpres'sa</i> , <i>Münc.</i>	86	129	i.	— Yellow	66	98	i.	
<i>Hirsenartige Segge</i> (Ger.).....		134	x.	<i>Hornschnuck's Segge</i> (Ger.)		154	x.	
Hog's-Fennel, Marsh.....	610	150	iv.	Hornwort, Common	1276	124	viii.	
— Sea	609	149	iv.	— Unarmed	1277	124	viii.	
<i>Hohe Esche</i> (Ger.)	57	vi.		Horse Mint, Broad-leaved	1021	6	vii.	
— <i>Sommerwurz</i> (Ger.)	197	vi.		— Common.....	1022	7	vii.	
— <i>Wolfsmilch</i> (Ger.)	104	viii.		Horseradish.....	129	183	i.	
<i>Hoher Himmelschlüssel</i> (Ger.) ...	135	vii.		Horseshoe Vetch	380	80	iii.	
— <i>Schwügel</i> (Ger.).....	151	xi.		Horsetail, Blunt-topped	1890	154	xii.	
— <i>Wiesenhäfer</i> (Ger.).....	83	xi.		— Corn	1889	152	xii.	
HOL'CUS				— Great	1888	150	xii.	
— <i>avena'ceus</i> , <i>Scop.</i>	1742	81	xi.	— Mackay's	1896	166	xii.	
— LANA'TUS , <i>Linn.</i>	1744	84	xi.	— Marsh.....	192	157	xii.	
— MOLLIS , <i>Linn.</i>	1743	83	xi.	— Moore's	1895	164	xii.	
— <i>odora'tus</i> , <i>Linn.</i>	1695	16	xi.	— Rough	1894	162	xii.	
Holly	316	220	ii.	— Variegated ... 1897 & 1898	1898	169	xii.	
— Sea	569	95	iv.	— Water	1893	159	xii.	
Holly-fern, Alpine.....	1859	90	xii.	— Wood	1891	156	xii.	
— Hard.....	1860	92	xii.	<i>Hottone des marais</i> (Fr.)		130	vii.	
— Soft	1861	95	xii.	HOTTO'NIA				
HOLOSCHÆ'NUS				— PALUS'TRIS , <i>Linn.</i>	1128	130	vii.	
— <i>Linnæ'i</i> , <i>Reich. & Sch.</i> ...	1595	61	x.	<i>Houblon grim pant</i> (Fr.).....		134	viii.	
— <i>vulga'ris</i> , <i>Link</i>	1595	61	x.	<i>Houlque laineuse</i> (Fr.)		85	xi.	
<i>Holostée en ombelle</i> (Fr.)	76	ii.		— <i>molle</i> (Fr.)		84	xi.	
HOLOS'TEUM				Hound's Tongue, Common	1118	119	vii.	
— UMBELLA'TUM , <i>Linn.</i> ..	216	75	ii.	— Green-leaved 1119	120	vi.		
Holy-grass, Northern.....	1695	16	xi.	House-leek, Common.....	538	61	iv.	
HOMOG'YNE				<i>Houx commun</i> (Fr.)		220	ii.	
— [<i>alp'na</i> , <i>Cass.</i>] (excluded)	217	v.		<i>Hügel Meier</i> (Ger.).....		229	iv.	
<i>Honckéne pourpier</i> (Fr.)	107	ii.		<i>Hühner-Hirse</i> (Ger.)		12	xi.	
Honestalks	347	39	iii.	<i>Hülsebaum</i> (Ger.)		220	ii.	
Honeysuckle	642	207	iv.	HUMULUS				
— Trefoil	347	39	iii.	— LUPULUS , <i>Linn.</i>	1284	133	viii.	
— Upright Fly	643	208	iv.	<i>Hunds Gleisse</i> (Ger.).....		133	iv.	
HONKENE'YA				— <i>Rose</i> (Ger.).....		226	iii.	
— <i>oblongifo'lia</i> , <i>Torr. & Gray.</i>	107	ii.		— <i>Straussgras</i> (Ger.)		47	xi.	
— PEPLOIDES , <i>Ehrh.</i>	239	106	ii.	— <i>Weizen</i> (Ger.)		177	xi.	
				<i>Hungerblümchen</i> (Ger.)		188	i.	
				Hutchinsia, Rock	151	210	i.	

	PLATE	PAGE	VOL.
HUTCHIN'SIA			
— PETRÆA, <i>R. Brown</i>	151	210	i.
Hyacinth, Starch	1529	203	ix.
— Wood	1528	201	ix.
HYACIN'THUS			
— <i>non-scriptus</i> , <i>Linn.</i>	1528	200	ix.
— <i>racemosus</i> , <i>Linn.</i>	1529	201	ix.
HYDROCHARIS			
— MOR'SUS-RANÆ, <i>Linn.</i> 1444	78		ix.
HYDROCHLOA			
— <i>aqual'ica</i> , <i>Hartm.</i>	1751	100	xi.
HYDROCOTYLE			
— VULGARIS, <i>Linn.</i>	566	89	iv.
<i>Hydrocotyle vulgaire</i> (Fr.)		90	iv.
HYMENOPHYLLUM			
— <i>ala'tum</i> , <i>Sm.</i>	1839	33	xii.
— <i>pelta'tum</i> , <i>Desv.</i>	1841	36	xii.
— TUNBRIDGEN'SE,			
<i>Smith</i>	1840	35	xii.
— var. <i>Bentham</i>	1841	36	xii.
— var. <i>β</i> , <i>Sm.</i>	1839	33	xii.
— UNILATERALE, <i>Bory.</i> 1841	36		xii.
— <i>Wilso'ni</i> , <i>Hook.</i>	1841	36	xii.
HYOSCYAMUS			
— [al'bus, <i>Linn.</i>] (excluded)	109		vi.
— NIGER, <i>Linn.</i>	936	106	vi.
— var. pal'lidus, <i>Syme</i>		106	vi.
— pal'lidus, <i>Kitt.</i>		106	vi.
HYOSERIS			
— <i>mini'ma</i> , <i>Linn.</i>	788	127	v.
HYPERICUM			
— ANDROSÆMUM, <i>Linn.</i>	264	143	ii.
— Eng. Bot. ed. i.	265	145	ii.
— <i>Anglicum</i> , <i>Bert.</i>	265	145	ii.
— [barba'tum, <i>Jaeg.</i>] (ex-			
cluded).....		160	ii.
— BE'TICUM, <i>Boiss.</i> ...270 (bis)		153	ii.
— CALYCFNUM, <i>Linn.</i> ...	267	147	ii.
— <i>decip'iens</i> , <i>Wats.</i>.....270 (bis)		153	ii.
— <i>decumbens</i> , <i>Peterm.</i>		156	ii.
— DU'BIUM, <i>Leers</i>	269	151	ii.
— var. macula'tum,			
<i>Syme</i>		151	ii.
— ELA'TUM, <i>Ait.</i>	265	145	ii.
— ELO'DES, <i>Linn.</i>	276	159	ii.
— <i>grandifo'lium</i> , <i>Chois.</i>	265	145	ii.
— HIRCINUM, <i>Linn.</i>	266	146	ii.
— HIRSU'TUM, <i>Linn.</i>	274	157	ii.
— HUMIFUSUM, <i>Linn.</i> ...	271	155	ii.
— LINARIIFOLIUM, <i>Vill.</i> 272	156		ii.
— <i>lincola'tum</i> , <i>Jord.</i>		149	ii.
— <i>macula'tum</i> , <i>Bab. (olim)</i> ...		151	ii.
— <i>microphy'llum</i> , <i>Jord.</i>		148	ii.
— MONTANUM, <i>Linn.</i>	275	158	ii.
— PERFORA'TUM, <i>Linn.</i>	268	148	ii.
— <i>Jord.</i>	268	148	ii.

	PLATE	PAGE	VOL.
HYPERICUM			
— perforat'um, var. angusti-			
fo'lium, <i>Syme</i>	148		ii.
— PULCHRUM, <i>Linn.</i>	273	157	ii.
— <i>quadran'gulum</i> , "Linu.,"			
<i>Sm.</i>	270	152	ii.
— "Linu.," <i>Reich., Fries</i>	269	151	ii.
— var. <i>ε. undula'tum</i> ,			
DC. ?	270 (bis)	153	ii.
— TETRAP'TERUM, <i>Fries.</i> 270		152	ii.
— <i>undula'tum</i> , "Schousb.,"			
<i>Reich.</i>	270 (bis)	153	ii.
HYPOCHERIS			
— <i>Balbis'ii</i> , <i>Lois.</i>		128	v.
— GLA'BRA, <i>Linn.</i>	789	128	v.
— var. <i>Balbis'ii</i> , <i>Syme</i>		128	v.
— MACULATA, <i>Linn.</i>		791	130
— RADICATA, <i>Linn.</i>		790	129
HYPOPHYTIS			
— <i>glu'bra</i> , <i>Bernh.</i>	901	53	vi.
— <i>multiflo'ra</i> , <i>Scop.</i>		53	vi.
HYSSOPUS			
— [officina'lis, <i>Linn.</i>] (ex-			
cluded).....		86	vii.
<i>Iberide amère</i> (Fr.).....		208	i.
IBERIS			
— AMA'RA, <i>Linn.</i>	149	207	i.
— <i>medicav'lis</i> , <i>Linn.</i>	150	209	i
<i>If commun</i> (Fr.).....		278	viii'
ILEX			
— AQUIFOLIUM, <i>Linn.</i> ...	316	219	ii.
ILLECEBRUM			
— VERTICILLA'TUM,			
<i>Linn.</i>	1173	180	vii.
— Whorled.....	1173	181	vii.
<i>Immergrüner Buchsbaum</i> (Ger.)		95	viii.
IMPATIENS			
— FULVA, <i>Nutt.</i>	314	217	ii.
— NOLI-ME-TANGERE,			
<i>Linn.</i>	313	216	ii.
— PARVIFLORA, <i>DC.</i> ...	315	218	ii.
<i>Impatiens-n'y-touchez-pas</i> (Fr.)		217	ii.
<i>Impatière commune</i> (Fr.)		151	iv.
IMPERATORIA			
— <i>Ostru'thium</i> , <i>Linn.</i>	611	150	iv.
<i>Inkarnat Klee</i> (Ger.)		45	iii.
INULA			
— CONY'ZA, <i>DC.</i>	767	99	v.
— CRITHMOIDES, <i>Linn.</i>	769	101	v.
— DYSENTERICA, <i>Linn.</i>	770	102	v.
— HELENIUM, <i>Linn.</i>	766	97	v.
— PULICARIA, <i>Linn.</i>	771	103	v.
— SALICINA, <i>Linn.</i>	768	100	v.
— semialexicau'lis, <i>Reut.</i>		100	v.
— Willow-leaved	768	100	v.

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
IRIS				Ivy Broom-rape	1015	199	vi.
— <i>acorifor'mis</i> , Bor.	1495	145	ix.	— Common	633	182	iv.
— <i>Bastar'di</i> , Bor.	146	ix.	— Ground.....	1055	41	vii.
— Fœtid.....	1494	144	ix.	Ivy-leaved Bell-flower	875	19	vi.
— FŒTIDIS'SIMA, Linn....	1494	143	ix.	— Cyclamen .....1136-1138	141	vii.	
— var. <i>citri'na</i> , <i>Syme</i>	144	ix.	— Duckweed	1394	17	ix.
— [German'ica, Linn.] (ex- cluded)	155	ix.	— Lettuce	808	151	v.
— <i>Pseud-a'corus</i> , Bor.	145	ix.	— Speedwell	970	150	vi.
— PSEUD-A'CORUS, Linn. 1495	1495	145	ix.	— Toadflax	955	134	vi.
— var. <i>acorifor'mis</i> , <i>Syme</i> 1495	1495	145	ix.	— Water Crowfoot	26	30	i.
— var. <i>Bastar'di</i> , <i>Syme</i>	146	ix.	IX'TA			
— [pu'milla, Linn.] (excluded)	155	ix.	— <i>Bulboc'dium</i> , Sm.	1492	140	ix.
— [Susia'na, Willd.] (excluded).....	155	ix.	Jack-by-the-Hedge.....	100	147	i.
— TUBEROSA, Linn.	1496	147	ix.	<i>Jacobs Baldgreis</i> (Ger.).....	85	v.	
— Tuberosus	1496	149	ix.	Jacob's Ladder	922	82	vi.
— [xiphioi'des, Ehrh.] (excluded)...	155	ix.		<i>Jacquin's Alsine</i> (Ger.).....	115	ii.	
— [Xiph'ium, Ehrh.] (excluded) ...	155	ix.		<i>Jasione de montagne</i> (Fr.).....	5	vi.	
— Yellow Water	1495	146	ix.	JASIONE			
<i>Iris faur-acore</i> (Fr.)	146	ix.		— MONTA'NA, Linn.	863	4	vi.
— <i>gigot</i> (Fr.).....	144	ix.		<i>Jonc à fleurs aiguës</i> (Fr.)	30	x.	
— <i>tubéreux</i> (Fr.)	149	ix.		— obtuses (Fr.)	29	x.	
Irish Burnet Rose	463	206	iii.	— à fruits lustrés (Fr.)	32	x.	
— Hawkweed.....	838	182	v.	— à trois glumes (Fr.)	16	x.	
— Heath.....	893	43	vi.	— pointes (Fr.)	14	x.	
— Mossy Saxifrage	558-562	{81- 83}	iv.	— aggloméré (Fr.)	20	x.	
— Spurge	1257	103	viii.	— aigu (Fr.)	18	x.	
ISA'TIS				— arctique (Fr.).....	27	x.	
— TINCTORIA, Linn.	161	222	i.	— bothnicus (Fr.)	37	x.	
ISNAR'DIA				— des terres argileuses (Fr.)... ..	36	x.	
— Marsh.....	510	27	iv.	— diffus (Fr.).....	25	x.	
— <i>palustris</i> , Linn.	510	27	iv.	— en tête (Fr.)	34	x.	
<i>Isnardie des marais</i> (Fr.) .....	.....	27	iv.	— épars (Fr.)	21	x.
ISOE'TES				— filiforme (Fr.)	27	x.	
— <i>Duriei</i> , Hook.	1828	8	xii.	— glauque (Fr.).....	26	x.	
— echinos'pora, Dur.....	1827	7	xii.	— maritime (Fr.)	19	x.	
— eu-lacus'tris, <i>Syme</i>	1826	4	xii.	— multiflore (Fr.)	10	x.	
— Hys'trix, Dur.	1828	8	xii.	— sétacé (Fr.).....	33	x.	
— LACUS'TRIS, Linn. 1826, 1827	1826, 1827	4	xii.	<i>Joubarbe des toits</i> (Fr.).....	61	iv.	
— var. <i>Mor'ci</i> , <i>Syme</i>	1826*	5	xii.	JU'GLIA			
— <i>Mor'ei</i> , D. Moore	1826*	5	xii.	— [re'gia, Linn.] (excluded).....	261	viii.	
— seta'cea, Del. ....	.....	7	xii.	<i>Julienne des dames</i> (Fr.)	151	i.
— vela'ta. A. Br.	7	xii.	JUNCUS			
ISOL'EPIS				— ACUTIFLORUS, Ehrh. 1567	29	x.	
— <i>acicul'ris</i> , Schl.	1585	50	x.	— var. <i>macroceph'alus</i> ,			
— <i>flu'tians</i> , R. Br.....	1592	57	x.	— Koch	30	x.	
— <i>Holoschæ'nus</i> , Röm. & Sch. 1595	61	x.		— ACUTUS, Linn.....	1558	17	x.
— <i>pygma'ea</i> , Kunth	59	x.		— var. β , Linn.	1559	18	x.
— <i>Sa'rviana</i> , Kunth	1593	59	x.	— arcticus, Hook.	1564	26	x.
— Schult.	1593	58	x.	— arcua'tus, Wahl.	1552	11	x.
— <i>sa'rvii</i> , Hook.....	1593	58	x.	— articula'tus, Fries	1568	31	x.
— seta'cea, R. Br.	1594	60	x.	— Linn.	1567	29	x.
Italian Catchfly	208	66	ii.	— BAL'TICUS, Willd.	1564	26	x.
— Cuckoo-pint	1393	16	ix.	— BIGLUMIS, Linn.....	1557	16	x.
— Rye-grass	1815	187	xi.	— Bot'nicus, Wahl.	1574	37	x.
<i>Italienisches Raygras</i> (Ger.).....	.....	187	xi.	— breviro'stris, Nees.....	30	x.
<i>Itraie d'Italie</i> (Fr.)	187	xi.	— byfo'nus, Bor.	1572	35	x.
— <i>eniv'ante</i> (Fr.) .....	.....	188	xi.	— BUFO'NIUS, Linn. 1572, 1573	34	x.
— <i>vivace</i> (Fr.).....	.....	186	xi.			

	PLATE	PAGE	VOL.
JUN'CUS			
— bufo'nius, var. fascicula'tus, Koch	1573	35	x.
— — var. rana'rius, Syme	35	x.	
— BULBO'SUS, Linn. 1574 & 1575	36	x.	
— — Sm.	1575	37	x.
— cæno'sus, Bichen	1574	37	x.
— campe'stris, Linn.	1551	8	x.
— — var. γ, Linn.	1550	9	x.
— CAPITA'TUS, Weig.	1571	34	x.
— CASTA'NEUS, Sm.	1555	14	x.
— COMMUNIS, E. Mey.	1560 & 1561	20	x.
— — compres'sus, Jacq.	1575	37	x.
— — var. α, Hook. & Arn.	1575	37	x.
— — var. β, Hook. & Arn.	1574	37	x.
— conglomerata'tus, Linn.	1560	20	x.
— DIFFU'SUS, Hoppe	1562	24	x.
— effuso-glau'cus, Schn. et Frickh.	1562	24	x.
— effu'sus, Linn.	1561	21	x.
— ericeto'rum, Poll.	1571	34	x.
— fascicula'tus, Bert.	1573	35	x.
— FILIFOR'MIS, Linn.	1565	27	x.
— Fors'teri, Sm.	1547	4	x.
— Gerar'di, Lois.	1574	37	x.
— [Ges'neri, Sm.] (excluded)	39	x.	
— GLAU'CUS, Sibth.	1563	25	x.
— — var. β. diffu'sus, Hook. & Arn.	1562	24	x.
— — var. Ehrhar'ti, Hook. & Arn.	1563	25	x.
— — var. littora'lis, Wahl.	1564	26	x.
— [grac'ilis, Sm.] (excluded)	39	x.	
— hybr'idus, Brc't.	1573	35	x.
— lampocar'pus. See LAMPRO-CARPUS.			
— LAMPROCARTUS, Ehrh.	1568 & 1569	30	x.
— — D. Don.	1568	31	x.
— — var. nigritel'us, Syme	1569	31	x.
— MARIT'IMUS, Sm.	1559	18	x.
— max'imus, With.	1549	7	x.
— nigritel'us, D. Don.	1569	31	x.
— — Koch.	33	x.	
— OBTUSIFLO'RUS, Ehrh.	1566	28	x.
— pilo'sus, Linn.	1548	5	x.
— polyceph'alus, Hook.	1569	31	x.
— rana'rius, Soug. & Perr.	35	x.	
— [Smith'i, Kunth] (excluded) ...	39	x.	
— spica'tus, Linn.	1553	12	x.
— SQUARRO'SUS, Linn.	1576	38	x.
— subverticilla'tus, Wulf.	33	x.	
— SUP'NUS, Mönch.	1570	32	x.
— — var. Koch'i, Bab. ...	33	x.	
— — var. subverticilla'tus, Syme	33	x.	
— — var. uligino'sus, Syme	1570	33	x.
— sylvat'icus, Huds.	1549	7	x.
— — Reichard	1567	29	x.

	PLATE	PAGE	VOL.
JUN'CUS			
— [ten'uis, Willd.] (excluded)	39	x.	
— TRIF'IDUS, Linn.	1554	13	x.
— TRIGLU'MIS, Linn.	1556	15	x.
— — uligino'sus, Hook. & Arn.	1570	32	x.
— — Sibth.	1570	33	x.
— Juniper, Alpine.	1383	276	viii.
— — Common	1382	274	viii.
JUNIPERUS			
— alpi'na, Clus.	1383	275	viii.
— COMMUNIS, Linn. 1382 & 1383	273	viii.	
— — Willd.	1382	273	viii.
— — var. α, Hook. & Arn.	1382	273	viii.
— — var. na'na, Hook. & Arn.	1383	275	viii.
— — cu-commu'nis, Syme.	1382	273	viii.
— — na'na, Willd.	1383	275	viii.
— [Sabi'na, Linn.] (excluded)	285	viii.	
— Jusqu'ame noire (Fr.)	107	vi.	
— Kahles Ferkelkraut (Ger.)	129	v.	
— — Tausendkorn (Ger.)	179	vii.	
— Kahlstengelige Teesdalee (Ger.)	209	i.	
— Kälberkropf' (Ger.)	166	iv.	
— Kalk-Kreuzblume (Ger.)	40	ii.	
— Kammnähriger Wachtelweizen (Ger.) ...	184	vi.	
— Kammförmige Kälerie (Ger.) ...	89	xi.	
— Kammförmiger Nadelkerbel (Ger.) ...	172	iv.	
— Kanarien-Hirse (Ger.)	21	xi.	
— Kegelkelchiger Taubenkropf (Ger.)	59	ii.	
— Kelchfrüchtiges Schildkraut (Ger.)	197	i.	
— Kidney Vetch, Common	333	20	iii.
— Kiefer (Ger.)	265	viii.	
— Kingcup	33	39	i.
— King's-taper	937	111	vi.
— Klapperröse (Ger.)	88	i.	
— Klatschmohn (Ger.)	88	i.	
— Klebriger Baldgreis (Ger.)	82	v.	
— Klee Seide (Ger.)	93	vi.	
— Kleinblättriger Schotenweiderich (Ger.)	12	iv.	
— Kleinblumige Galinsoge (Ger.) ...	96	v.	
— Kleinblumiger Steinklee (Ger.) ...	33	iii.	
— Kleinblumiges Wollkraut (Ger.)	111	vi.	
— Kleinblüthige Erdrauch (Ger.) ...	115	i.	
— Kleinblüthiger Gänseric (Ger.)	152	iii.	
— Kleinblüthiges Knabenkraut (Ger.) ...	93	ix.	
— — Springkraut (Ger.)	218	ii.	
— Kleine Butterblume (Ger.)	39	i.	
— — Klapper (Ger.)	181	vi.	
— — Klauenschote (Ger.)	78	iii.	
— — Salbei (Ger.)	44	vii.	
— — Simse (Ger.)	57	x.	
— — Sommerwurz (Ger.)	200	vi.	
— — Wolfsmilch (Ger.)	112	viii.	
— Kleiner Ampfer (Ger.)	57	viii.	
— — Baldrian (Ger.)	239	iv.	
— — Frauenflachs (Ger.)	144	vi.	

	PLATE	PAGE	VOL.
<i>Kleiner Knöterich</i> (Ger.)	73	viii.	
— <i>Schildträger</i> (Ger.)	49	vii.	
— <i>Wasserhelm</i> (Ger.)	128	vii.	
<i>Kleines Lammkraut</i> (Ger.)	127	v.	
— <i>Samkraut</i>	51	ix.	
— <i>Wintergrün</i> (Ger.)	50	vi.	
<i>Kleinste Ingelskolbe</i> (Ger.)	8	ix.	
— <i>Wasserlinse</i> (Ger.).....	22	ix.	
<i>Kleinster Schneckenklee</i> (Ger.)... ..	28	iii.	
<i>Kleinstes Schimmelkraut</i> (Ger.)	71	v.	
<i>Kletterndes Labkraut</i> (Ger.).....	226	iv.	
KNAP'PIA			
— <i>agrostifolia</i> , Sm.	1689	7	xi.
Knapweed, Black, var. α	706	32	v.
— var. β	707	32	v.
— Brown-rayed	705	31	v.
— Greater.....	708	33	v.
KNAUTIA			
— <i>arvensis</i> , Coult.	679	252	iv.
Knawel, Common... 1174, var. β , 1175	182	vii.	
— Perennial.....	1176	183	vii.
<i>Knoblauchduftender Ganander</i> (Ger.)	83	vii.	
<i>Knoblauchkraut</i> (Ger.)	147	i.	
<i>Knollentragende Kratzdistel</i> (Ger.).....	14	v.	
<i>Knollentragender Kümmel</i> (Ger.)	113	iv.	
— <i>Steinbrech</i> (Ger.) ...	78	iv.	
<i>Knollentragendes Mädesüss</i> (Ger.).....	129	iii.	
<i>Knopfgrasartige Simse</i> (Ger.) ...	62	x.	
<i>Knötenbinse</i> (Ger.)	36	x.	
<i>Knotenblütiger Scheiberich</i> (Ger.).....	101	iv.	
<i>Knotenfrüchtiger Haftdolde</i> (Ger.).....	165	iv.	
Knottgrass, Common.....	1229-1231	64	viii.
— Ray's.....	1232	69	viii.
— Sea.....	1233	70	viii.
<i>Knottige Braunwurz</i> (Ger.)	124	vi.	
— <i>Sagine</i> (Ger.)	126	ii.	
Knotted Hedge-Parsley.....	621	165	iv.
— Spurrey.....	251	126	ii.
KOBRESIA			
— <i>cariciua</i> , Willd.	1609	77	x.
— Sedgelike	1609	77	x.
<i>Kobresie carex</i> (Fr.)	77	x.	
KOELERIA			
— <i>albescens</i> , DC.	89	xi.	
— <i>arenaria</i> , Dum.	89	xi.	
— <i>CRISTA'TA</i> , Pers.	1746	88	xi.
— <i>crista'ta</i> , Bor.....	1746	88	xi.
— var. <i>albescens</i> , Syme	89	xi.	
— var. <i>gracilis</i> , Syme... ..	1746	89	xi.
— var. <i>vulgaris</i> , Syme	1746	89	xi.
— <i>gracilis</i> , Bor.	1746	88	xi.
<i>Koelerie à crête</i> (Fr.)	89	xi.	
Kohl (Ger.)	130	i.	
<i>Kohlartige Saudistel</i> (Ger.)	153	v.	
KOILLRAUSCHIA			
— <i>prolifera</i> , Kunth.....	196	51	ii.
KO'NIGA			
— <i>maritima</i> , R. Brown	140	197	i.

	PLATE	PAGE	VOL.
<i>Konrad's Kraut</i> (Ger.)	144	ii.	
<i>Kopfbliühige Binse</i> (Ger.).....	34	x.	
<i>Korb-Weide</i> (Ger.).....	224	viii.	
<i>Korn Rade</i> (Ger.)	74	ii.	
<i>Korublume</i> (Ger.)	34	v.	
<i>Krähenfussartiger Wegerich</i> (Ger.).....	174	vii.	
<i>Kratzbeere</i> (Ger.)	197	iii.	
<i>Krause Distel</i> (Ger.)	9	v.	
<i>Krauser Ampfer</i> (Ger.)	50	viii.	
<i>Krauses Samkraut</i> (Ger.)	44	ix.	
<i>Krautartige Weide</i> (Ger.).....	260	viii.	
<i>Krautartiges Glasschmalz</i> (Ger.)	7	viii.	
<i>Kreichende Goodjere</i> (Ger.).....	119	ix.	
— <i>Weide</i> (Ger.)	248	viii.	
<i>Kreuz-Kraut</i> (Ger.)	80	v.	
— <i>Labkraut</i> (Ger.).....	214	iv.	
<i>Kreuzblüttrige Wolfsmilch</i> (Ger.)	113	viii.	
<i>Kriechender Günsel</i> (Ger.) ...	149	iii.	
— <i>Günsel</i> (Ger.).....	78	vii.	
<i>Kugelranunkel</i> (Ger.)	54	i.	
<i>Kukuks Krauzrade</i> (Ger.).....	71	ii.	
<i>Kurzgestielte Zammichellie</i> (Ger.)	57	ix.	
<i>Kurzhaarige Segge</i> (Ger.).....	163	x.	
<i>Lachenal's Pferdesaat</i> (Ger.) ...	128	iv.	
<i>Lack</i> (Ger.)	154	i.	
<i>Lackviole</i> (Ger.).....	154	i.	
LACTUCA			
— <i>MURA'LIS</i> , Fresen.	808	150	v.
— <i>SALIGNA</i> , Linn.	807	149	v.
— var. <i>runcinata</i> , Gr. & <i>Godr.</i>	150	v.	
— <i>SCARIO'OLA</i> , Linn.....	806	148	v.
— <i>VIRO'SA</i> , Linn.	805	145	v.
Ladies'-finger	333	20	iii.
— Smock	108	158	i.
— Hairy-leaved ...	110	160	i.
— Impatient-podded	112	162	i.
— Meadow	109	159	i.
— Tresses, Autumnal	1472	116	ix.
— Creeping	1475	119	ix.
— Summer	1473	116	ix.
— Three-ranked	1474	118	ix.
Lady-fern	1869	108	xii.
— Alpine	1870	113	xii.
— Dwarf Alpine	1871	112	xii.
— Flexile	115	xii.	
Lady's-mantle, Alpine	425	141	iii.
— Common	423	138	iii.
— Field	? 422	137	iii.
— Silvery.....	424	140	iii.
— Slipper, Common.....	1490	136	ix.
LAGURUS			
— <i>OVA'TUS</i> , Linn.....	1712	39	xi.
<i>Laitron des Alpes</i> (Fr.).....	152	v.	
— <i>des champs</i> (Fr.)	155	v.	
— <i>des lieux cultivés</i> (Fr.)... ..	153	v.	
— <i>des marais</i> (Fr.)	157	v.	
— <i>rude</i> (Fr.)	154	v.	

	PLATE	PAGE	VOL.
<i>Laitue des murs</i> (Fr.)	151	v.	
— <i>effilée</i> (Fr.)	150	v.	
— <i>sauvage</i> (Fr.)	148	v.	
— <i>vireuse</i> (Fr.)	146	v.	
Lamb's-Lettuce, Carinated	670	241	iv.
— Common	669	240	iv.
— Hairy-fruited	673	244	iv.
— Narrow-fruited	672	243	iv.
— Sharp-fruited	671	242	iv.
Lamb-toe.....	? 333	20	iv.
<i>Lamier blanc</i> (Fr.).....	75	vii.	
— <i>découpé</i> (Fr.).....	72	vii.	
— <i>embrassant</i> (Fr.)	70	vii.	
— <i>jaune</i> (Fr.).....	77	vii.	
— <i>pourpre</i> (Fr.).....	73	vii.	
— <i>taché</i> (Fr.).....	74	vii.	
LAMIUM			
— ALBUM, <i>Linn.</i>	1086	74	vii.
— var. β , <i>Hook. & Arn.</i>	1085	73	vii.
— AMPLEXICAULE, <i>Linn.</i>	1081	69	vii.
— var. <i>Benth.</i>	1082	70	vii.
— <i>confer'tum</i> , <i>Fries</i>	1083	71	vii.
— GALEOB'DOLON, <i>Crantz</i>	1087	76	vii.
— <i>hirsu'tum</i> , <i>Lam.</i>	1085	73	vii.
— <i>hyb'ridum</i> , <i>Vill.</i>	1083	71	vii.
— INCISUM, <i>Willd.</i>	1083	71	vii.
— INTERMEDIUM, <i>Fries</i>	1082	70	vii.
— MACULATUM, <i>Linn.</i> ...	1085	73	vii.
— PURPUREUM, <i>Linn.</i> ...	1084	72	vii.
— var. <i>decip'iens</i> , <i>Sond.</i>	72	vii.	
— <i>rubrum</i> , <i>Wallr.</i>	1085	73	vii.
— <i>rugosum</i> , <i>Ait.</i>	1085	73	vii.
LAMPROTHAMNUS			
— <i>aleopuceu'ides</i> , <i>A. Braun.</i> ...	1909	193	xii.
LAMPSANA			
— <i>commu'nis</i> , <i>DC.</i>	787	125	v.
<i>Lampsane commune</i> (Fr.)	126	v.	
— <i>minima</i> (Fr.)	127	v.	
Lancashire Asphodel	1542	222	ix.
<i>Land-Schilf</i> (Ger.).....	54	xi.	
<i>Langestielte Zannichellie</i> (Fr.)... ..	57	ix.	
<i>Längliches Samkraut-gewächse</i> (Ger.)	29	ix.	
<i>Langwurzliches Ferkelkraut</i> (Ger.).....	130	v.	
<i>Lanzettliche Kratzdistel</i> (Ger.)... ..	11	v.	
<i>Lanzettlicher Schotenweiderich</i> (Ger.)	14	iv.	
— <i>Wegerich</i> (Ger.) ...	171	vii.	
<i>Lanzettliches Schilf</i> (Ger.)	55	xi.	
LAPPA			
— <i>ma'jor</i> , <i>Gärtn.</i>	699	23	v.
— <i>mi'nor</i> , <i>Lam.</i>	700-702	24	v.
— <i>officina'lis</i> , <i>All.</i>	699	23	v.
LAPPA'GO			
— [<i>racemo'sa</i> , <i>Willd.</i>] (excluded)...	203	xi.	
<i>Lappländische Weide</i> (Ger.).....	253	viii.	
LAPSA'NA			
— COMMUNIS, <i>Linn.</i>	787	125	v.
— <i>pusilla</i> , <i>Willd.</i>	788	127	v.

	PLATE	PAGE	VOL.
LARBRÆA			
— <i>aquat'ica</i> , <i>Ser.</i>	227	91	ii.
LARBRE'A			
— <i>aquat'ica</i> , <i>St. Hil.</i>	233	99	ii.
— <i>uligino'sa</i> , <i>Reich.</i>	233	99	ii.
Larkspur, Branching.....	47	63	i.
— Wild	47	64	i.
LASTREA			
— <i>abbrevia'ta</i> , <i>Wollaston</i>	61	xii.	
— ÆMULA, <i>Brackenridge</i>	1858	87	xii.
— <i>alpi'na</i> , <i>Moore</i>	1857	84	xii.
— <i>calca'rea</i> , <i>Bory</i>	1846	48	xii.
— <i>Callip'teris</i> , <i>Newm.</i>	1853	70	xii.
— <i>coll'i'na</i> , <i>Bab.</i>	1857	84	xii.
— CRISTA'TA, <i>Presl</i>	1853	70	xii.
— var. <i>spinulo'sa</i> , <i>Moore</i>	1855	76	xii.
— var. <i>uligino'sa</i> , <i>Moore</i>	1854	73	xii.
— <i>crista'tum</i> , <i>F. Moore</i>	1853	70	xii.
— var. <i>Callip'teris</i> , <i>Hook</i>	1853	70	xii.
— DILATA'TA, <i>Presl</i>	1857	82	xii.
— var. <i>alpi'na</i> , <i>Moore</i> ...	85	xii.	
— var. <i>coll'i'na</i> , <i>Bab.</i> ...	84	xii.	
— var. <i>duneto'rum</i> , <i>Moore</i>	84	xii.	
— var. <i>glandulo'sa</i> , <i>Moore</i>	1856	80	xii.
— var. <i>lepido'ta</i> , <i>Moore</i>	85	xii.	
— var. <i>tanacetifo'lia</i> , <i>Moore</i>	84	xii.	
— <i>Dryopteris</i> , <i>Bory</i>	1845	46	xii.
— <i>duneto'rum</i> , <i>Moore</i>	1857	84	xii.
— FULIX-MAS, <i>Presl</i>	1850	57	xii.
— var. <i>abbrevia'ta</i> , <i>Bab.</i>	61	xii.	
— var. <i>aff'inis</i> , <i>Bab.</i>	59	xii.	
— var. <i>Bor'reri</i> , <i>Bab.</i>	59	xii.	
— var. <i>inci'sa</i> , <i>Moore</i> ...	59	xii.	
— var. <i>palea'cea</i> , <i>Moore</i>	59	xii.	
— var. <i>pu'mila</i> , <i>Moore.</i> ...	60	xii.	
— var. <i>subin'tegra</i> , <i>Moore</i>	62	xii.	
— <i>Fenise'cii</i> , <i>Watson</i>	1858	87	xii.
— GLANDULO'SA, <i>Newm.</i>	1856	80	xii.
— <i>lepido'ta</i> , <i>Moore</i>	1857	84	xii.
— <i>mont'na</i> , <i>Newm.</i>	1849	54	xii.
— <i>multifo'ra</i> , <i>Newm.</i>	1857	82	xii.
— var. <i>na'na</i> , <i>Newm.</i> ...	84	xii.	
— OREOP'TERIS, <i>Presl</i> ...	1849	54	xii.
— <i>palus'tris</i> , <i>J. S. Wilde</i>	1848	52	xii.
— <i>Phegop'teris</i> , <i>Bory</i>	1847	50	xii.
— <i>propin'qua</i> , "Wollaston"	61	xii.	
— <i>pseu'do-mas</i> , <i>Wollast.</i>	59	xii.	
— <i>recur'ra</i> , <i>Newm.</i>	1858	87	xii.
— REMO'TA, <i>Moore</i>	1852	67	xii.
— RIGIDA, <i>Presl</i>	1851	65	xii.
— <i>Robertia'na</i> , <i>Newm.</i>	1846	48	xii.
— <i>rufid'ula</i> , <i>Presl</i>	1862	98	xii.
— <i>spino'sa</i> , <i>Newm.</i>	1855	76	xii.
— SPINULO'SA, <i>Presl</i>	1855	76	xii.
— var. <i>decip'iens</i> , <i>Syme</i>	78	xii.	

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
LAS'TREA				LEON'TODON			
— spinulo'sa, var. eleva'tum, <i>Syme</i>		78	xii.	— <i>has'tilis</i> , var. <i>vulga'ris</i> , Koch	793	133	v.
— — var. exalta'tum, <i>Syme</i>		78	xii.	— HIR'TUS, <i>Linn.</i>	792	131	v.
— <i>tanacetifo'lia</i> , Moore	1857	84	xii.	— HIS'PIDUS, <i>Linn.</i>	793	133	v.
— THELYP'TERIS, <i>Presl</i>	1848	52	xii.	— <i>palus'tre</i> , Sm.	804	143	v.
— ULIGINO'SA, <i>Newm.</i>	1854	73	xii.	— <i>proteifo'ris</i> , var. <i>vulga'ris</i> , Gr. & Godr.....	793	133	v.
Late Spider Orchis	1468	112	ix.	— <i>Taraz'acum</i> , <i>Linn.</i>	802-804	142	v.
LATHRÆA				— — Sm.	802	142	v.
— SQUAMA'RIA, <i>Linn.</i> ...	1006	189	vi.	LEONU'RUS			
LATHYRUS				— CARDI'ACA, <i>Linn.</i>	1080	68	vii.
— APH'ACA, <i>Linn.</i>	397	101	iii.	Leopard's-bane, Great	761	91	v.
— <i>bithyn'icus</i> , Lam.	396	99	iii.	— — Plantain-leaved	762	92	v.
— HIRSU'TUS, <i>Linn.</i>	399	103	iii.	LEPID'IUM			
— LATIFO'LIOUS, <i>Linn.</i> ...	403	107	iii.	— CAMPEST'RE, <i>R. Brown.</i>	156	216	i.
— MACRORRHIZUS, <i>Wimm.</i>	406	110	iii.	— <i>did'yumum</i> , <i>Linn.</i>	159	220	i.
— — var. tenuifo'lius, <i>Syme</i>	111	iii.		— DRA'BA, <i>Linn.</i>	158	218	i.
— MARITIMUS, <i>Big.</i>	405	109	iii.	— <i>heterophyl'lum</i> <i>β. canes'cens</i> , Gr. & Godr.....	157	217	i.
— — var. acutifo'lius, <i>Bab.</i>	109	iii.		— [hir'tum, <i>Linn.</i>] (excluded).....	224	i.	
— <i>monta'nus</i> , Bernh.	406	110	iii.	— — Sm., in part	157	217	i.
— NI'GER, <i>Wimm.</i>	407	14	iii.	— LATIFO'LIOUS, <i>Linn.</i> ...	153	213	i.
— NISSO'LIA, <i>Linn.</i>	398	102	iii.	— <i>petræ'um</i> , <i>Linn.</i>	151	210	i.
— PALUS'TRIS, <i>Linn.</i>	404	108	iii.	— RUDERA'LE, <i>Linn.</i>	154	214	i.
— PRATEN'SIS, <i>Linn.</i>	400	104	iii.	— SATY'VUM, <i>Linn.</i>	155	215	i.
— SYLVES'TRIS, <i>Linn.</i> ...	402	106	iii.	— SMITHII, <i>Hook.</i>	157	217	i.
— TUBEROSUS, <i>Linn.</i>	401	105	iii.	LEPIG'ONUM			
<i>Lauchblättrige Haferwurx</i> (Ger.)	141	v.		— <i>marginat'um</i> , Koch.....	257	131	ii.
Laurel, Spurge	1247	87	viii.	— <i>mar'ium</i> , <i>Wahl.</i>	257	131	ii.
LAVATERA				— <i>me'dium</i> , <i>Fries.</i>	130	ii.	
— ARBO'REA, <i>Linn.</i>	279	165	ii.	— <i>neglec'tum</i> , <i>Kindb.</i>	255	129	ii.
<i>Lavatière en arbre</i> (Fr.)	165	ii.		and 130	ii.		
Lavender, Great Sea	1156 & 1157	161	vii.	— <i>ru'brum</i> , <i>Fries</i>	254	129	ii.
Lesser Sea	1159	165	vii.	— <i>rupes'tre</i> , <i>Kindb.</i>	256	132	ii.
Matted Sea	1161	166	vii.	— <i>sal'num</i> , <i>Kindb.</i>	130	ii.	
Remote-flowered Sea	1158	163	vii.	LEPTU'RUS			
<i>Lederblättrige Rose</i> (Ger.)	221	iii.		— FILIFORMIS, <i>Trin.</i>	1818	189	xi.
LE'DUM				— [incurva'tus, <i>Trin.</i>] (ex- cluded)	203	xi.	
— [palus'tre, <i>Linn.</i>] (excluded) ...	54	vi.		— — <i>β. filifo'ris</i> , <i>Bab.</i> ...	1818	189	xi.
Leek, Sand	1532	208	ix.	<i>Lerchensporn</i> (Ger.)	102	i.	
— Wild	1530 & 1531	206	ix.	Lettuce, Ivy-leaved	808	151	v.
LEER'SIA				— — Least.....	807	150	v.
— ORYZOIDES, <i>Soland.</i> ...	1686	2	xi.	— — Prickly.....	806	148	v.
<i>Léersie à fleurs de riz</i> (Fr.)	3	xi.		— — Strong-scented	805	146	v.
<i>Leinkraut</i> (Ger.).....	112	v.		LEUCAN'THEMUM			
LEM'NA				— <i>Chamæme'tum</i> , Lam.	719	48	v.
— ARRHI'ZA, <i>Linn.</i>	1398	24	ix.	— <i>Parthen'ium</i> , Gr. & Godr.	715	43	v.
— GIB'BA, <i>Linn.</i>	1396	22	ix.	— <i>vulga're</i> , Lam.	714	41	v.
— MI'NOR, <i>Linn.</i>	1395	21	ix.	LEUCO'IUM			
— POLYRRHI'ZA, <i>Linn.</i> ...	1397	23	ix.	— ÆSTIVUM, <i>Linn.</i>	1505	164	ix.
— TRISUL'CA, <i>Linn.</i>	1394	17	ix.	— VER'NUM, <i>Linn.</i>	1506	165	ix.
<i>Lenticule à plusieurs racines</i> (Fr.).....	24	ix.		LIBANO'TIS			
— <i>gonflée</i> (Fr.)	23	ix.		— <i>monta'na</i> , All.	602	137	iv.
— — <i>naine</i> (Fr.)	22	ix.		— <i>vulga'ris</i> , DC.	602	137	iv.
— — <i>prolifère</i> (Fr.).....	17	ix.		<i>Lichtnelkenartiges Wollkraut</i> (Ger.).....	114	vi.	
LEON'TODON				<i>Licbstöckel</i> (Ger.)	139	iv.	
— AUTUMNA'LIS, <i>Linn.</i>	794 & 795	134	v.				
— — var. pratens'is, <i>Koch</i>	795	134	v.				

	PLATE	PAGE	VOL.
<i>Liegende Sieblingie</i> (Ger.)		87	xi.
<i>Liegendes Schlangenaugelein</i> (Ger.).....		121	vii.
<i>Lierre grim pant</i> (Fr.)		182	iv.
— <i>terrestre</i> (Fr.)		41	vii.
LIGUSTICUM			
— <i>Me'um</i> , DC.	605	141	iv.
— SCOT'ICUM, Linn.	603	138	iv.
<i>Ligustique Levesche</i> (Fr.)		139	iv.
LIGUSTRUM			
— VULGA'RE, Linn.	904	60	vi.
LILIIUM			
— MARTAGON, Linn.	1518	187	ix.
— <i>pomp'onium</i> , Bab.....	1517	186	ix.
— PYRENA'ICUM, Gouan	1517	186	ix.
Lily, Least Water	56	80	i.
— of the Valley	1514	181	ix.
— Purple Martagon	1518	188	ix.
— White Water	53	77	i.
— Yellow Martagon	1517	187	ix.
— Water	55	79	i.
Lime, Common	286	174	ii.
— Large-leaved	285	173	ii.
— Small-leaved	287	177	ii.
Limestone-Fern	1846	48	xii.
— Polypody	1846	48	xii.
Limewort.....	196	52	ii.
LIMNANTHEMUM			
— NYMPHEOIDES, Link.	921	80	vi.
LIMNETIS			
— <i>pun'gens</i> , Pers.	1687	4	xi.
LIMNOCHLO'A			
— <i>acicula'ris</i> , Reich.....	1585	50	x.
— <i>Bæothry'on</i> , Reich.	1589	54	x.
— <i>cæspitosa</i> , Reich.....	1590	55	x.
— <i>par'cula</i> , Reich.	1591	56	x.
LIMOSELLA			
— AQUAT'ICA, Link.....	968	146	vi.
<i>Limoselle aquatique</i> (Fr.)		147	vi.
<i>Lin à feuilles étroites</i> (Fr.)		184	ii.
— <i>cultivé</i> (Fr.)		185	ii.
— <i>purgatif</i> (Fr.)		181	ii.
— <i>usuel</i> (Fr.)		185	ii.
— <i>virace</i> (Fr.)		183	ii.
<i>Linaiquette à larges gaines</i> (Fr.) ...		72	x.
— à <i>pédoncules lisses</i> (Fr.) ...		74	x.
— <i>pubescents</i> (Fr.)		75	x.
— <i>rudes</i> (Fr.)		76	x.
— <i>des Alpes</i> (Fr.)		71	x.
<i>Linaique à racine rampante</i> (Fr.)		140	vi.
— <i>commune</i> (Fr.)		142	vi.
— <i>couchée</i> (Fr.).....		137	vi.
— <i>cymbalaire</i> (Fr.)		134	vi.
— <i>de la pelissier</i> (Fr.).....		138	vi.
— <i>Elatine</i> (Fr.)		135	vi.
— <i>naine</i> (Fr.)		144	vi.
— <i>purpurine</i> (Fr.)		139	vi.
— <i>velrote</i> (Fr.)		136	vi.

LINARIA

	PLATE	PAGE	VOL.
— CYMBALA'RIA, Mill....	955	133	vi.
— <i>dalmatica</i> , Mill.		142	vi.
— ELAT'INE, Mill.		956	134
— [<i>jun'cea</i> , DC.] (excluded)		188	vi.
— [<i>Lösel'ii</i> , Schweg.] (excluded) ...		188	vi.
— MINOR, Desf.	966	143	vi.
— PELISSERIANA, Mill.	959	138	vi.
— PURPUREA, Mill.	960	138	vi.
— REPENS, Mill.	961	139	vi.
— <i>Se'pium</i> , Allm.	965	142	vi.
— [<i>Spartia</i> , Hoffm.] (ex- cluded).....		187	vi.
— <i>speciosa</i> , Ten.	964	141	vi.
— SPURIA, Mill.	957	135	vi.
— <i>striata</i> , DC.	961	139	vi.
— SUP'INA, Desf.	958	137	vi.
— <i>vulga'ri-re'pens</i> , Syme.....	965	142	vi.
— VULGARIS, Mill.	962-965	140	vi.
— <i>latifolia</i> , Bab.	964	141	vi.
— <i>Pelo'ria</i>	963	142	vi.
Ling, Common	894	44	vi.

LINNÆA

— BOREALIS, Gronov.....	644	209	iv.
— Two-flowered	644	210	iv.
<i>Limée du nord</i> (Fr.).....		210	iv.

LINOSYRIS

— <i>vulga'ris</i> , Cass.	777	112	v.
---------------------------------	-----	-----	----

LINUM

— alpi'num, Jacq.....		183	ii.
— <i>anglicum</i> , Mill.....		290	ii.
— ANGUSTIFOLIUM, <i>Huds.</i>		291	183
— austriacum, Linn.		183	ii.
— CATHARTICUM, Linn.	289	181	ii.
— <i>crep'itans</i> , Dumort.		184	ii.
— <i>hu'mile</i> , Mill.		184	ii.
— Leo'nii, F. Schultz		183	ii.
— PEREN'NE, Linn.....		290	182
— var. <i>anglicum</i> , Planch.		290	182
— <i>Rad'ola</i> , Linn.....		288	179
— USITATISSIMUM, <i>Linn.</i>		292	184
— var. <i>crep'itans</i> , Bab.		184	ii.
<i>Liondent d'autonne</i> (Fr.)		135	v.
— <i>hispidè</i> (Fr.)		133	v.

LIP'ARIS

— LOESEL'II, Rich.	1488	133	ix.
Liquorice Vetch.....	377	76	iii.
— Wild	331	18	iii.
<i>Liseron des champs</i> (Fr.)		85	vi.
— <i>des haies</i> (Fr.)		87	vi.
— <i>soldanelle</i> (Fr.)		88	vi.

LISTERA

— CORDA'TA, Br.	1476	120	ix.
— <i>ni'dus-a'vis</i> , Hook.	1478	122	ix.
— OVA'TA, Br.	1477	120	ix.

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
LITHOSPERMUM				London Pride, Kidney-leaved.			
— ARVEN'SE, <i>Linn.</i>	1102	96	vii.	— Rocket	99	146	i.
— <i>maritimum</i> , <i>Lehm.</i>	1099	93	vii.	LONIC'ERA			
— OFFICINA'LE, <i>Linn.</i> ...	1101	95	vii.	— [<i>alpig'ena</i> , <i>Linn.</i>] (ex-			
— PURPUREO-CÆRU'-				cluded).....	210		iv.
LEUM, <i>Linn.</i>	1100	94	vii.	— CAPRIFO'LIUM, <i>Linn.</i>	641	205	iv.
LITTOREL'LA				— <i>pallida</i> , <i>Host</i>	641	206	iv.
— LACUS'TRIS, <i>Linn.</i>	1159	174	vii.	— PERICLYMENUM,			
<i>Littorelle des lacs</i> (Fr.)		175	vii.	<i>Linn.</i>	642	206	iv.
Live-long.....	526	49	iv.	— XYLOS'TEUM, <i>Linn.</i> ...	643	208	iv.
Lizard Orchis.....	1448	91	ix.	Loosestrife, Ciliated	1143	148	vii.
LLOYDIA				— Common.....		145	vii.
— Mountain	1521	192	ix.	— Punctate.....	1142	147	vii.
— SEROT'INA, <i>Reich.</i>	1521	192	ix.	— Purple	491	3	iv.
LOBELIA				— Tufted	1140	144	vii.
— Acrid	862	4	vi.	LOPHODIUM			
— DORTMAN'NA, <i>Linn.</i> ...	861	2	vi.	— <i>Callip'teris</i> , <i>Newm.</i>	1853	70	xii.
— <i>speciosa</i> , [a mistake for				— <i>collinum</i> , <i>Newm.</i>	84		xii.
<i>L. Erinus</i> , <i>Linn.</i>]	4	vi.		— <i>Filix-mas</i> , <i>Newm.</i>	1850	57	xii.
— U'RENS, <i>Linn.</i>	862	3	vi.	— <i>Fœnise'cii</i> , <i>Newm.</i>	1858	88	xii.
— Water.....	861	2	vi.	— <i>fra'grans</i> , <i>Newm.</i>	1851	65	xii.
<i>Lobélie brûlante</i> (Fr.).....	4	vi.		— <i>glandulif'erum</i>	1856	80	xii.
<i>Lobélie de Dortmann</i> (Fr.)	2	vi.		— <i>glandulo'sum</i> , <i>Newm.</i>	1856	80	xii.
LOBULARIA				— <i>multiflorum</i> , <i>Newm.</i>	1857	82	xii.
— <i>maritima</i> , <i>Desv.</i>	140	197	i.	— <i>na'num</i> , <i>Newm.</i>	84		xii.
<i>Lockerblütige Segge</i> (Ger.)	135	x.		— <i>recur'rum</i> , <i>Newm.</i>	1858	88	xii.
<i>Lockerblütiges Knabenkraut</i> (Ger.) ...	99	ix.		— <i>rig'idum</i> , <i>Newm.</i>	1851	65	xii.
<i>Löffelkresse</i> (Ger.)	185	i.		— <i>spino'sum</i> , <i>Newm.</i>	1855	77	xii.
LOG'FIA				— <i>uligino'sum</i> , <i>Newm.</i>	1854	73	xii.
— <i>Gal'lica</i> , <i>Coss. & Germ.</i> ...	740	71	v.	LOROGLOSSUM			
— <i>subula'ta</i> , <i>Cass.</i>	740	71	v.	— <i>hirc'num</i> , <i>Rieh.</i>	1448	90	ix.
LOISELEURIA				<i>Lösel's Glanzkraut</i> (Ger.)	134	ix.	
— PROCUMBENS, <i>Desv.</i>	884	32	vi.	<i>Lotier corniculé</i> (Fr.).....	66	iii.	
LO'LIIUM				— <i>dij'fus</i> (Fr.)	69	iii.	
— <i>arven'se</i> , <i>With.</i>	1817	187	xi.	— <i>hispide</i> (Fr.)	70	iii.	
— <i>Bouchea'num</i> , <i>Kunth</i>	1815	186	xi.	LOTUS			
— <i>eu-peren'ne</i> , <i>Syme</i>	1814	185	xi.	— ANGUSTISSIMUS,			
— <i>festuca'ceum</i> , <i>Link</i>	1792	183	xi.	<i>Linn.</i>	371 & 372	68	iii.
— <i>Ital'icum</i> , <i>Braun</i>	1815	186	xi.	— Koch.....	371	69	iii.
— [<i>linic'ola</i> , <i>Sond.</i>] (ex-	188,			— var. <i>a</i> , <i>Benth.</i>	371	69	iii.
cluded).....	202		xi.	— var. <i>hispidus</i> , <i>Benth.</i>	372	69	iii.
— [<i>multiflorum</i> , <i>Lam.</i>] (ex-				— var. <i>ma'jor</i> , <i>Hook. &</i>			
cluded).....	202		xi.	<i>Arn.</i>	372	69	iii.
— PEREN'NE, <i>L.</i> ...1814 & 1815	185		xi.	— var. <i>mi'nor</i> , <i>Hook. &</i>			
— var. <i>tenuè</i> , <i>Syme</i>	185		xi.	<i>Arn.</i>	371	69	iii.
— <i>robustum</i> , <i>Reich.</i>	1817	187	xi.	— CORNICULA'TUS, <i>Linn.</i>			
— TEMULEN'TUM, <i>L.</i> ...	1816			368 & 369	65	iii.	
	& 1817	187	xi.	— Koch.....	368	65	iii.
— Sm.	1816	187	xi.	— vars. <i>a</i> and <i>β</i> , <i>Hook.</i>			
— var. <i>arven'se</i> , <i>Syme</i> ...	1817	187	xi.	& <i>Arn.</i>	368	65	iii.
— <i>tenuè</i> , <i>Linn.</i>	185	185	xi.	— var. <i>a</i> , <i>β</i> , and <i>γ</i> ,			
LOMARIA				<i>Bab.</i>	368	65	iii.
— [<i>alpi'na</i> , <i>Spreng.</i>] (ex-				— var. <i>b</i> and <i>c</i> , <i>Benth.</i>	368	65	iii.
cluded).....	148		xii.	— var. <i>crassifolius</i> , <i>Syme</i>	370	67	iii.
— <i>borea'lis</i> , <i>Link</i>	1885	143	xii.	— var. <i>ma'jor</i> , <i>Benth.</i>	370	67	iii.
— SPI'CANT, <i>Desv.</i>	1885	143	xii.	— var. <i>tenuifolius</i> , <i>Hook.</i>			
London Pride, <i>Andrews'</i>	549	72	iv.	& <i>Arn.</i>	369	67	iii.
— Common	547	71	iv.	— var. <i>tenu'uis</i> , <i>Benth.</i>	369	67	iii.
— Hairy	546	70	iv.	— var. <i>villosus</i> , <i>Syme</i> ...	65	iii.	

	PLATE	PAGE	VOL.
LOTUS			
— corniculatus, var. vulgaris, Syme	368	65	iii.
— decumbens, Forst.....	369	67	iii.
— diffusus, Sm.	371	69	iii.
— eu-corniculatus, Syme.....	368	65	iii.
— gracilis, Walst. & Kit. ...	371	69	iii.
— hispidus, Desf.....	372	69	iii.
— MA'JOR, Scop.	370	67	iii.
— — var. hirsutus, Syme... ..	370	68	iii.
— — var. subglaber, Syme	68		iii.
— tenuifolius, Reich.	369	67	iii.
— tenuis, Kit.	369	67	iii.
— uliginosus, Schkähr.....	370	67	iii.
Lonsewort, Procumbent	997	180	vi.
— Upright	996	179	vi.
Lovage, Sea	603	139	iv.
Löwenfuss (Ger.)	138		iii.
Loydie tardive (Fr.)	192	ix.	
Lucerne, Common	334	22	iii.
— Fries'	335	23	iii.
— Yellow	336	24	iii.
Lucerne (Fr.)	22		iii.
— en faucille (Fr.)	24		iii.
— denticulée (Fr.).....	27		iii.
— lupuline (Fr.)	25		iii.
— naive (Fr.)	28		iii.
— tachée (Fr.)	28		iii.
LU'CIOLA			
See LUZULA.			
LUDWIGIA			
— PALUS'TRIS, Elliot.....	510	27	iv.
Lungwort, Common	1098	93	vii.
— Narrow-leaved	1097	92	vii.
Luzerne (Ger.)	22		iii.
LU'ZULA			
— ARCUATA, Hook.....	1552	11	x.
— Bor'leri, Bromf.	5		x.
— CAMPESTRIS, DC.....	1551	8	x.
— — var. β, Hook. & Arn.	1550	9	x.
— — var. congesta, Syme	8		x.
— — var. umbellata, Syme	8		x.
— congesta, Lej.	1550	9, 10	x.
— FORSTERI, DC.	1547	4	x.
— MAXIMA, DC.	1549	7	x.
— multiflora, Koch	1550	9	x.
— — Lej.	10		x.
— — var. congesta, Syme... ..	10		x.
— — var. nigricans, Koch	10		x.
— — var. Sudetica, Syme	10		x.
— — var. umbellata, Syme	10		x.
— [niv'ea, DC.] (excluded)...	39		x.
— PILOSA, Willd.	1548	5	x.
— — var. Bor'leri, Syme... ..	5		x.
— SPICATA, DC.	1553	12	x.
— Sudet'ica, DC.	10		x.
— SYLVATICA, Bichen ...	1549	7	x.
— vernalis, DC.	1548	5	x.
Luzule à larges feuilles (Fr.) ...	7		x.

	PLATE	PAGE	VOL.
<i>Luzule de Forster</i> (Fr.).....	5		x.
— <i>des champs</i> (Fr.)	9		x.
— <i>en épi</i> (Fr.).....	12		x.
— <i>poilue</i> (Fr.).....	6		x.
<i>Lychnide des Alpes</i> (Fr.)	73		ii.
— <i>dioïque</i> (Fr.)	68		ii.
— <i>lucinée</i> (Fr.)	71		ii.
— <i>nielle</i> (Fr.)	74		ii.
— <i>rouge</i> (Fr.)	70		ii.
— <i>visqueuse</i> (Fr.)	72		ii.
LYCH'NIS			
— ALPINA, Linn.	214	73	ii.
— dio'ica, Linn.	210	67	ii.
— dio'ica, flore al'bo, Smith... ..	210	67	ii.
— — flore ru'bro, Smith... ..	211	69	ii.
— — Sibth.	211	69	ii.
— FLOS-CUCULI, Linn. ...	212	71	ii.
— GITHA'GO, Lam.	215	74	ii.
— pratens'is, Spreng.	210	67	ii.
— Smooth	212	71	ii.
— vespert'ina, Sib.	210	67	ii.
— VISCA'RIA, Linn.	213	72	ii.
LYCHNOTHAMNUS			
— alopecuroïdes, H. & J. Groves	1909	193	xii.
— stel'tiger, A. Braun	1910	195	xii.
— Wallroth'ii, Wahlst.....	1909	193	xii.
<i>Lyciet de Barbarie</i> (Fr.)	99		vi.
LYCIUM			
— BARBARUM, Linn.	933	98	vi.
<i>Lycipe d'Europe</i> (Fr.)	3		vii.
LYCOPODIUM			
— ALPINUM, Linn.	1834	17	xii.
— [an'ceps, Wallr.] (excluded).....	18		xii.
— ANNOTINUM, Linn. ...	1832	15	xii.
— [chamæcyparissus, A. Br.] (excluded)	18		xii.
— CLAVA'TUM, Linn.	1833	16	xii.
— [complana'tum, Linn.] (ex- cluded).....	18		xii.
— INUNDA'TUM, Linn. ...	1831	14	xii.
— juniperifo'lium, DC.....	1832	15	xii.
— SELA'GO, Linn.	1830	12	xii.
— — var. recurvum, Syme	13		xii.
— — var. vulga'tum, Syme	1830	12	xii.
— selaginoï'des, Linn.	1829	10	xii.
LYCOP'SIS			
— arven'sis, Linn.	1111	109	vii.
LYCOPUS			
— EUROPE'US, Linn.	1019	2	vii.
Lyme-grass, Sand	1819	191	xi.
<i>Lys des Pyrénées</i> (Fr.)	187		ix.
— martagon (Fr.).....	188		ix.
LYSIMA'CHIA			
— CILIATA, Linn.	1143	147	vii.
— NEMORUM, Linn.....	1145	149	vii.
— NUMMULA'RIA, Linn.	1144	148	vii.
— puncta'ta, Jacq.....	1142	146	vii.
— PUNCTATA, Linn.	1142	146	vii.

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
LYSIMACHIA				MALUS			
— puncta'ta, var. verticilla'ta, <i>Syme</i>	146	vii.		— acer'ba, Merat	489	255	iii.
— [quadrifo'lia, <i>Linn.</i>] (ex- cluded).....	156	vii.		— commu'nis, Poir.....	490	256	iii.
— THYRSIFLO'RA, <i>Linn.</i>	1140	143	vii.	MALVA			
— verticilla'ta, <i>Bieb.</i>	146	vii.		— BOREALIS, <i>Wall.</i>	283	169	ii.
— VULGA'RIS, <i>Linn.</i>	1141	144	vii.	— MOSCHA'TA, <i>Linn.</i>	280	166	ii.
— var. puncta'ta, <i>Benth.</i>	1142	146	vii.	— parvij'o'ra, <i>Huds.</i>	283	169	ii.
<i>Lysimache à bouquets</i> (Fr.)	144	vii.		— pusi'la, <i>Sm.</i>	283	169	ii.
— commune (Fr.).....	145	vii.		— ROTUNDIFO'LIA, <i>Linn.</i>	282	168	ii.
— des bois (Fr.)	150	vii.		— Fries.....	283	169	ii.
— nummulaire (Fr.)	149	vii.		— SYLVES'TRIS, <i>Linn.</i>	281	167	ii.
— punctuée (Fr.)	147	vii.		— VERTICILLA'TA, <i>Linn.</i>	284	170	ii.
LYTHRUM				— vulga'ris, <i>Fries</i>	282	168	ii.
— alternifo'lium, <i>Lorey</i>	3	iv.		— Ten.	281	167	ii.
— HYSOPIFO'LIA, <i>Linn.</i>	492	3	iv.	Man Orchis.....	1447	87	ix.
— hyssopifo'lium, <i>Sib.</i>	492	3	iv.	<i>Mandelblüttrige Weide</i> (Ger.)	216	viii.	
— SALICARIA, <i>Linn.</i>	491	2	iv.	— Wolfsmilch (Ger.)	106	viii.	
				<i>Männliches Knabenkraut</i> (Ger.)	98	ix.	
<i>Maceron</i> (Fr.).....	177	iv.		Maple, Common.....	321	233	ii.
<i>Mâche à fruit velu</i> (Fr.)	244	iv.		— Great	320	231	ii.
— commune (Fr.).....	240	iv.		— -leaved Goosefoot	1193	18	viii.
— de Morison (Fr.).....	243	iv.		Mare's-tail, Common.....	516	34	iv.
— en Nacelle (Fr.)	241	iv.		Marigold, Corn	713	40	v.
— ortiellette (Fr.)	242	iv.		— Marsh	41	52	i.
Madder, Blue Field	663	232	iv.	Marjoram, Common	1045	30	vii.
— Wild.....	645	212	iv.	Marl Grass	347	39	iii.
Madwort, German	1120	120	vii.	Marram	1722	52	xi.
— Large-calysed	139	197	i.	<i>Marrube commune</i> (Fr.)	51	vii.	
MATAN'THEMUM				MARRUBIUM			
— bifo'lium, DC.	1510	175	ix.	— VULGA'RE, <i>Linn.</i>	1064	51	vii.
Maiden Pink	192	47	ii.	Martagon Lily, Purple	1518	188	ix.
Maidenhair	1887	146	xii.	— Yellow	1517	187	ix.
— Annual	1843	42	xii.	MARU'TA			
— Spleenwort.....	1878	131	xii.	— Col'ula, DC.	720	49	v.
MALACHIUM				<i>Massette à feuilles étroites</i> (Fr.)	4	ix.	
— aquat'icum, <i>Fries</i>	227	91	ii.	— larges feuilles (Fr.)	3	ix.	
MALAXIS				<i>Massholder</i> (Ger.)	233	ii.	
— Lösel'i, Sw.	1488	133	ix.	Master-wort.....	611	151	iv.
— PALUDO'SA, <i>Stc.</i>	1489	135	ix.	Mat-grass	1814	198	xi.
<i>Malaxis des marais</i> (Fr.)	135	ix.		<i>Matricaire camomille</i> (Fr.)	48	v.	
MALCOLMIA				MATRICA'RIA			
— [marit'ima, <i>R. Brown</i>] (ex- cluded).....	224	i.		— Chamomil'la, <i>Linn.</i>	719	48	v.
Male-fern	1850	57	xii.	— inodo'ra, <i>Linn.</i>	717	46	v.
— Peony, Entire-leaved	50	69	i.	— var. α , <i>Bab.</i>	717	46	v.
— Shield-fern	1850	57	xii.	— var. marit'ima, <i>Bab.</i>	718	47	v.
Mallow, Common	281	167	ii.	— marit'ima, <i>Linn.</i>	718	48	v.
— Dwarf	282	169	ii.	— Parthen'ium, <i>Linn.</i>	715	43	v.
— Erect	284	170	ii.	MATTHIOLA			
— Hispid	277	163	ii.	— INCA'NA, <i>R. Brown</i>	105	152	i.
— -leaved Bramble.....	194	iii.		— SINUA'TA, <i>R. Brown</i>	104	152	i.
— Marsh	278	163	ii.	<i>Matthiöle</i> (Fr.)	151	i.	
— Musk	280	166	ii.	— blanchâtre (Fr.)	153	i.	
— Small-flowered	283	170	ii.	— sinuée (Fr.)	152	i.	
— Tree	279	165	ii.	<i>Mauer Gänsefuss</i> (Ger.)	17	viii.	
				— Habichtskraut (Ger.)	192	v.	
				— Lattich (Ger.)	151	v.	
				<i>Maure musquée</i> (Fr.)	166	ii.	
				— sauva'ge (Fr.)	167	ii.	

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
<i>Mäuse Gerste</i> (Ger.)		195	xi.	<i>Meersenf</i> (Ger.)	117	i.	
<i>Mauseschwanz</i> (Ger.).....		15	i.	<i>Meerstrands Beifuss</i> (Ger.)	66	v.	
<i>Mäuseschwanz-Schwängel</i> (Ger.)		142	xi.	— <i>Binse</i> (Ger.)	19	x.	
May	? 479	237	iii.	— <i>Milchkrak</i> (Ger.).....	66	ix.	
—	? 480	238	iii.	— <i>Gansefüßchen</i> (Ger.).....	4	viii.	
— Flower	109	159	i.	— <i>Gerste</i> (Ger.)	197	xi.	
<i>Maysamen</i> (Ger.)		84	i.	— <i>Männertreu</i> (Ger.)	95	iv.	
Mayweed, Scentless, var. <i>a</i>	717	47	v.	— <i>Milchkrak</i> (Ger.)... ..	154	vii.	
— var. <i>β</i>	718	47	v.	— <i>Platterbse</i> (Ger.)	110	iii.	
— Stinking	720	50	v.	— <i>Runkelrübe</i> (Ger.)... ..	9	viii.	
Meadow Rout	41	52	i.	— <i>Ruppie</i> (Ger.)	59	ix.	
— Rue, Alpine.....	2	4	i.	— <i>Sagine</i> (Ger.).....	118	ii.	
— Koch's	6	7	i.	— <i>Schildkraut</i> (Ger.)	198	i.	
— Lesser, var. <i>a</i>	3	5	i.	— <i>Simse</i> (Ger.)	69	x.	
— Lesser, var. <i>β</i>	4	5	i.	— <i>Wegerich</i> (Ger.)	173	vii.	
— Stone	7	8	i.	— <i>Winde</i> (Ger.).....	88	vi.	
— Yellow.....	8	10	i.	<i>Meerzwiebel</i> (Ger.).....	200	ix.	
— Zigzag.....	5	6	i.	<i>Mehlbeere</i> (Ger.).....	244	iii.	
—sweet	415	127	iii.	<i>Meisterwurz</i> (Ger.).....	151	iv.	
Meal-tree.....	640	204		<i>Melampyre à crêtes</i> (Fr.)	184	vi.	
<i>Meconopside de Galle</i> (Fr.).....		94	i.	— <i>des champs</i> (Fr.)	184	vi.	
MECONOPSIS				— <i>des prés</i> (Fr.)	186	vi.	
— CAMBRICA, <i>Vig.</i>	63	94	i.	MELAMPYRUM			
MEDICA'GO				— ARVEN'SE, <i>Linn.</i>	1001	184	vi.
— <i>apiculata</i> , Willd.		26	iii.	— CRISTA'TUM, <i>Linn.</i>	1000	183	vi.
— DENTICULA'TA, <i>Benth.</i>	338	26	iii.	— <i>moutanum</i> , Johnst.	1004	185	vi.
— <i>denticulata</i> , Willd.	338	26	iii.	— PRATEN'SE, <i>Linn.</i> 1002-1004	184	vi.	
— var. <i>apiculata</i> , <i>Syme</i>	26	iii.		— var. <i>latifolium</i> , <i>Syme</i> 1002	185	vi.	
— var. <i>vulgaris</i> , <i>Syme</i>	338	26	iii.	— var. <i>moutanum</i> , <i>Syme</i> 1004	185	vi.	
— eu-falca'ta, <i>Syme</i>	336	24	iii.	— var. <i>vulgaris</i> , <i>Syme</i>	1003	185	vi.
— FALCA'TA, <i>Linn.</i> ... 335 & 336	336	24	iii.	— SYLVATICUM, <i>Linn.</i>	1005	186	vi.
— Fries.....	336	24	iii.	Melancholy, Thistle	691	16	v.
— var. <i>β</i> , Hook. & Arn.	335	23	iii.	MELANDRIUM			
— var. <i>versicolor</i> , Wallr.	335	23	iii.	— album, Garcke	210	67	ii.
— <i>falca'to-sati'va</i> , Gr. & Godr.	335	23	iii.	— <i>dioicum</i> , Cost. & Germ. ...	210	67	ii.
— LUPULINA, <i>Linn.</i>	337	24	iii.	— <i>diu'num</i> , Fries.....	211	69	ii.
— MACULATA, <i>Sibth.</i>	339	27	iii.	— <i>noctiflorum</i> , Fries	209	66	ii.
— <i>media</i> , Pers.	22, 23	iii.		— <i>pratense</i> , Röhring	210	67	ii.
— MINIMA, <i>Lam.</i>	340	28	iii.	— <i>rubrum</i> , Garcke	211	69	ii.
— [<i>muricata</i> , Willd.] (ex- cluded)		112	iii.	— <i>sylvestre</i> , Röhring.....	211	69	ii.
— <i>ornithopodioides</i> , Fries ...	345	34	iii.	— <i>vespertinum</i> , Fries	210	67	ii.
— <i>polycarpa</i> , Willd.....	338	26	iii.	Melic-grass, Nodding	1748	93	xi.
— <i>polymorpha</i> , Linn.	339	27	iii.	— Purple	1747	91	xi.
— SATIVA, <i>Linn.</i>	334	21	iii.	— Wood	1749	14	xi.
— <i>sylvestris</i> , <i>Fries</i>	335	23	iii.	MELICA			
Medick, Black	337	25	iii.	— <i>caerulea</i> , Linn.	1747	90	xi.
— Little Bur	340	28	iii.	— <i>moutana</i> , Huds.	1748	92	xi.
— Reticulated	338	27	iii.	— NUTANS, <i>Linn.</i>	1748	92	xi.
— Spotted.....	339	28	iii.	— UNIFLORA, <i>Linn.</i>	1749	93	xi.
Medlar, Wild	478	235	iii.	<i>Melilot à petites fleurs</i> (Fr.).....	33	iii.	
<i>Meer-Samkraut</i> (Ger.)	55	ix.		— <i>blanc</i> (Fr.).....	31	iii.	
<i>Meerjeuche Strandsbazille</i> (Ger.)	143	iv.		— <i>de Petit-pierre</i> (Fr.).....	32	iii.	
<i>Meergrüne Binse</i> (Ger.).....	26	x.		— <i>officinal</i> (Fr.).....	30	iii.	
— <i>Segge</i> (Ger.).....	118	x.		Melilot, Common	341	30	iii.
— <i>Trinie</i> (Ger.)	108	iv.		— Field.....	343	32	iii.
<i>Meergrüner Gänsefuß</i> (Ger.)	24	viii.		— Small-flowered.....	344	33	iii.
<i>Meergrünes Vogelkraut</i> (Ger.)	98	ii.		— White	342	31	iii.
<i>Meerkohl</i> (Ger.)	118	i.		MELILO'TUS			
<i>Meerrettig</i> (Ger.)	182	i.		— ALTA, <i>Lam.</i>	342	31	iii.

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
MELILO'TUS				MENTHA			
— ARVEN'SIS, Waltr.	343	32	iii.	— <i>dulcis'sima</i> , Dum.....	1021	5	vii.
— <i>in'dica</i> , All.	344	33	iii.	— <i>gen'tilis</i> , Fries.	20	vii.	
— <i>leucan'tha</i> , Koch.	342	31	iii.	— GEN'TILIS, Linn.	1037	19	vii.
— <i>macrorrh'za</i> , Pers.	341	29	iii.	— Sole.	1035	18	vii.
— OFFICINA'LIS, Willd....	341	29	iii.	— vars. 1, 2, and 3, Baker	1037	19	vii.
— Lam.	343	32	iii.	— var. 4, Baker.	1036	18	vii.
— PARVIFLO'RA, Desf. ...	344	33	iii.	— var. Paulia'na, <i>Syme</i>	1037	20	vii.
— <i>Perit'pierre'na</i> , Willd. ...	332	32	iii.	— var. <i>Wirtgenia'na</i> ,			
— <i>vulga'ris</i> , Waltr.	342	31	iii.	<i>Syme</i>	20	vii.	
<i>Melique penche'e</i> (Fr.).....	93	xi.		— GRAC'ILIS, <i>Sm.</i> ...1034 & 1035	17	vii.	
— <i>uniflora</i> (Fr.).....	94	xi.		— Sole.	1034	17	vii.
MELISSA				— var. α , <i>Sm.</i>	1034	17	vii.
— <i>Ac'inos</i> , Benth.	1048	32	vii.	— var. β , <i>Sm.</i>	1036	18	vii.
— <i>Nep'eta</i> , Linn.	1049	33	vii.	— var. γ , <i>Sm.</i>	1035	18	vii.
— OFFICINA'LIS, Linn. ...	1053	37	vii.	— var. <i>Cardi'aca</i> , <i>Syme</i>	1035	18	vii.
<i>Melisse des bois</i> (Fr.).....	50	vii.		— <i>hirci'na</i> , Hull.	1027	11	vii.
— <i>officinale</i> (Fr.).....	38	vii.		— HIRSU'TA, Linn.	1030	13	vii.
<i>Melissenblättrige Biensauge</i> (Ger.)....	50	vii.		— vars. <i>Sm.</i> ....1031 & 1032	15	vii.	
MELIT'NIS				— vars. α & β , <i>Sm.</i>	1030	13	vii.
— <i>grandiflo'ra</i> , <i>Sm.</i>	1063	50	vii.	— var. δ , <i>Sm.</i>	1026	11	vii.
— MELISSOPHYLL'UM,				— var. <i>subgla'bra</i> , <i>Baker</i>	14	vii.	
<i>Linn.</i>	1062 & 1063	49	vii.	— <i>mollis'sima</i> , <i>Borkh.</i>	6	vii.	
<i>Menschenähnliches Ohnhorn</i> (Ger.).....	87	ix.		— <i>nemorosa</i> , Willd.	6	vii.	
MENTHA				— <i>nepeto'des</i> , <i>Lej.</i> ... 1026 & 1027	10	vii.	
— <i>acutifolia</i> , <i>Sm.</i>	1031	15	vii.	— <i>nummularia</i> , <i>Schreb.</i>	1039	21	vii.
— <i>agrestis</i> , <i>Sole</i>	1040	21	vii.	— <i>odora'ta</i> , <i>Reich.</i>	14	vii.	
— <i>Allio'ni</i> , <i>Boreau</i>	22	vii.		— Sole.	1029	12	vii.
— ALOPECUROI'DES,				— <i>officina'lis</i> , Hull.	1024	9	vii.
<i>Hull.</i>	1021	5	vii.	— <i>paludo'sa</i> , <i>Sole</i>	1032	15	vii.
— <i>aquat'ica</i> , vars. α & β ,				— <i>palustris</i> , <i>Sole</i>	1026	11	vii.
<i>Benth.</i> , and var. α , <i>Bab.</i>	1030	13	vii.	— <i>parietariifolia</i> , <i>Beck.</i>	22	vii.	
— var. δ , <i>Benth.</i>	1026	11	vii.	— <i>Paulia'na</i> , <i>Schultz.</i>	1037	20	vii.
— vars. δ , ϵ & ζ , <i>Fries.</i>				— PIPERI'TA, <i>Huds.</i> 1024 & 1025	9	vii.	
1031 & 1032	15	vii.		— Hull.	1025	9	vii.
— vars. <i>Sole</i>	1030	13	vii.	— var. γ , <i>Sm.</i>	1027	11	vii.
— var. <i>cris'pa</i> , <i>Benth.</i> ...	1028	12	vii.	— var. <i>cris'pa</i> , <i>Koch.</i> ...	1028	12	vii.
— var. <i>glabra'ta</i> , <i>Benth.</i>	1029	12	vii.	— var. <i>officina'lis</i> , <i>Sole</i>	1024	9	vii.
— ARVEN'SIS, Linn....1038-1040	21	vii.		— var. <i>sylvestris</i> , <i>Sole</i> ...	1027	11	vii.
— vars. α & β , <i>Hook. &</i>				— var. <i>vulga'ris</i> , <i>Sole</i> ...	1025	9	vii.
<i>Arn.</i>	1038-1040	21	vii.	— <i>praten'sis</i> , <i>Benth.</i> ...1034 & 1035	17	vii.	
— var. ϵ , <i>Benth.</i>	1038	21	vii.	— PRATEN'SIS, <i>Sole</i>	1036	18	vii.
— var. ζ , <i>Benth.</i>	1037	19	vii.	— <i>præ'cox</i> , <i>Sole</i>	22	vii.	
— var. γ , <i>Hook. & Arn.</i>	1037	19	vii.	— PULE'GIUM, Linn.			
— var. <i>agres'tis</i> , <i>Syme</i>	1040	21	vii.	1041 & 1042	23	vii.	
— var. <i>Allio'ni</i> , <i>Syme</i>	22	vii.		— var. <i>decumbens</i> , <i>Syme</i>	1041	23	vii.
— var. <i>nummularia</i> ,				— var. <i>erec'ta</i> , <i>Syme</i> ...	1042	24	vii.
<i>Syme</i>	1039	21	vii.	— PUBES'CENS, Willd.			
— var. <i>parietariifolia</i> ,				1026 & 1027	10	vii.	
<i>Syme</i>	22	vii.		— var. <i>hirci'na</i> , <i>Syme</i> ...	1027	11	vii.
— var. <i>præ'cox</i> , <i>Syme</i> ...	22	vii.		— <i>rival'is</i> , <i>Sole</i>	1031	15	vii.
— var. <i>ru'bra</i> , <i>Benth.</i> ...	1033	16	vii.	— ROTUNDIFO'LIA, Linn. 1020	4	vii.	
— var. <i>sati'va</i> , <i>Benth.</i>				— Sole.	1021	5	vii.
1031 & 1032	15	vii.		— var. <i>veluti'na</i> , <i>Bab.</i> ...	1021	5	vii.
— <i>Cardi'aca</i> , <i>Baker</i> ... 1034 & 1035	17	vii.		— <i>ru'bra</i> , <i>Fries</i>	1035	18	vii.
— var. 1, <i>Baker</i>	1035	18	vii.	— RU'BRA, <i>Sm.</i>	1033	16	vii.
— var. 2, <i>Baker</i>	1034	17	vii.	— Sole.	1037	19	vii.
— CITRA'TA, <i>Ehrh.</i>	1029	12	vii.	— <i>sati'va</i> , <i>Fries</i>	1033	16	vii.
— CRIS'PA, Linn.	1028	12	vii.	— SATI'VA, Linn. ... 1031 & 1032	15	vii.	
				— var. γ , <i>Bab.</i>	1037	19	vii.

	PLATE	PAGE	VOL.
MEN'THA			
— <i>sati'va</i> , var. <i>glabra</i> , Koch	1033	16	vii.
— — var. <i>paludo'sa</i> , <i>Syme</i>	1032	15	vii.
— — var. <i>ru'bra</i> , <i>Bab.</i>	1033	16	vii.
— — var. <i>subgla'bra</i> , <i>Baker</i> .....	.....	15	vii.
— — <i>subspici'ta</i> , <i>Weihe</i>	1032	15	vii.
— — SYLVES'TRIS , <i>Linn.</i> ...	1022	6	vii.
— — <i>Sole</i>	1020	4	vii.
— — var. <i>α</i> , <i>Sm.</i>	1022	6	vii.
— — var. <i>β</i> , <i>Sm.</i> .....	.....	6	vii.
— — var. <i>δ</i> , <i>Sm.</i>	1021	5	vii.
— — var. <i>alopeuroi'des</i> , <i>Baker</i>	1021	5	vii.
— — var. <i>gla'bra</i> , <i>Koch</i> ...	1023	7	vii.
— — var. <i>mollis'sima</i> , <i>Benth.</i> .....	.....	6	vii.
— — var. <i>nemorosa</i> , <i>Benth.</i> .....	.....	6	vii.
— — var. <i>veluti'na</i> , <i>Bab.</i>	1021	5	vii.
— — <i>villo'sa</i> , <i>pri'ma</i> , <i>Sole</i>	1022	6	vii.
— — <i>secun'da</i> , <i>Sole</i> .....	.....	6	vii.
— — VIR'IDIS , <i>Linn.</i>	1023	7	vii.
— — <i>Wirtgeni'na</i> , <i>Schultz</i> .....	.....	20	vii.
<i>Menthe à feuilles rondes</i> (Fr.) ...	.....	4	vii.
— — <i>cultivée</i> (Fr.)	8, 16	vii.	
— — <i>des champs</i> (Fr.) .....	.....	23	vii.
— — <i>des jardins</i> (Fr.) .....	.....	20	vii.
— — <i>poivrée</i> (Fr.) .....	.....	10	vii.
— — <i>poultot</i> (Fr.) .....	.....	24	vii.
— — <i>pubescente</i> (Fr.).....	.....	11	vii.
— — <i>rouge</i> (Fr.).....	.....	17	vii.
— — <i>sauvage</i> (Fr.).....	.....	7	vii.
<i>Menyanthe Trèfle d'eau</i> (Fr.) ...	.....	79	vi.
MENYANTHES			
— — <i>Nymphaei'des</i> , <i>Linn.</i>	921	80	vi.
— — TRIFOLIA'TA , <i>Linn.</i> ...	920	79	vi.
<i>Menzièse Dabeöce</i> (Fr.).....	.....	34	vi.
MENZIESIA			
— — CÆRU'LEA , <i>Sm.</i>	886	34	vi.
— — POLIFO'LIA , <i>Juss.</i>	885	33	vi.
— — <i>St. Dabeoc's</i>	885	34	vi.
— — <i>Yew-leaved</i>	886	35	vi.
<i>Mercuriale annuelle</i> (Fr.).....	.....	117	viii.
— — <i>vivace</i> (Fr.) .....	.....	115	viii.
MERCURIALIS			
— — <i>ambig'ua</i> , <i>Linn. fil.</i>	1270	116	viii.
— — AN'NUA , <i>Linn.</i> ...1269 &	1270	115	viii.
— — <i>an'ua</i> , <i>Linn. fil.</i>	1269	116	viii.
— — var. <i>ambig'ua</i> , <i>Syme</i>	1270	116	viii.
— — <i>ova'ta</i> , <i>Hoppe & Sternb.</i>....	.....	114	viii.
— — PEREN'NIS , <i>Linn.</i>	1268	114	viii.
— — <i>Reich.</i>	1268	114	viii.
— — var. <i>ova'ta</i> , <i>Syme</i>.....	.....	114	viii.
<i>Mercury, Annual Dog's</i> , var. <i>α</i>	1269	117	viii.
— — var. <i>β</i>	1270	117	viii.
— — <i>Perennial</i>	1268	115	viii.
MERTENSIA			
— — MARIT'IMA , <i>Don</i>	1099	93	vii.
— — [<i>virgin'ica</i> , <i>Don</i>] (excluded) .....	.....	121	vii.

	PLATE	PAGE	VOL.
MES'PILUS			
— — <i>Cotoncas'ter</i> , <i>Linn.</i>	477	233	iii.
— — GERMAN'ICA , <i>Linn.</i> ...	478	235	iii.
— — <i>monog'yna</i> , <i>Willd.</i>	480	237	iii.
— — <i>Oxyacantha</i> , <i>Willd.</i>	479	236	iii.
ME'UM			
— — ATHAMAN'TICUM , <i>Jaeq.</i> 605	141	iv.	
— — <i>Fœnic'ulans</i> , <i>Spreng.</i>	601	133	iv.
<i>Meum Athamante</i> (Fr.).....	.....	141	iv.
<i>Mezereon</i>	1246	85	viii.
MIBORA			
— — <i>min'ima</i> , <i>Desv.</i>	1689	7	xi.
— — <i>ver'na</i> , <i>P. de B.</i>	1689	7	xi.
MICROCAL'LA			
— — <i>filifor'mis</i> , <i>Link</i>	912	71	vi.
<i>Mignonnette</i>	162	3	ii.
— — Upright	163	4	ii.
— — Yellow	162	3	ii.
<i>Milder Knöteriek</i> (Ger.) .....	.....	74	viii.
<i>Milfoil, Alternate-flowered Water-</i>	515	33	iv.
— — Spiked Water-	514	32	iv.
— — Whorled Water-	513	32	iv.
<i>Military Orchis</i>	1452	95	ix.
MIL'TIUM			
— — EFFU'SUM , <i>Linn.</i>	1728	60	xi.
— — <i>lendig'erum</i> , <i>Linn.</i>	1711	37	xi.
<i>Milk Thistle</i>	681	5	v.
— — Vetch, Alpine	375	74	iii.
— — Purple	376	75	iii.
— — Sweet	377	76	iii.
<i>Milkwort, Chalk</i>	188	40	ii.
— — Common	186	37	ii.
— — Lesser, Common	187	38	ii.
— — Small Bitter.....	189	41	ii.
<i>Millepertuis à feuilles linéaires</i> (Fr.).....	.....	156	ii.
— — à quatre ailes (Fr.) .....	.....	153	ii.
— — beau (Fr.) .....	.....	157	ii.
— — couché (Fr.) .....	.....	155	ii.
— — de montagne (Fr.)... ..	.....	159	ii.
— — des marais (Fr.) ... ..	.....	160	ii.
— — douteux (Fr.).....	.....	152	ii.
— — perforé (Fr.) .....	.....	149	ii.
— — sousligneux (Fr.) ... ..	.....	146	ii.
— — velu (Fr.) .....	.....	158	ii.
<i>Millet étalé</i> (Fr.).....	.....	61	xi.
<i>Millet-grass, Wood</i>	1728	61	xi.
MIM'ULUS			
— — [<i>gutta'tus</i> , <i>DC.</i>] (excluded)	188	vi.	
— — LUTEUS , <i>Linn.</i>	967	145	vi.
<i>Mint, Bergamot</i>	1029	13	vii.
— — Blunt-spiked	1026 & 1027	11	vii.
— — Broad-leaved Horse.....	1021	6	vii.
— — Cardiac	1035	18	vii.
— — Common Horse	1022	7	vii.
— — Corn.....	1038-1040	21	vii.
— — Curled	1028	12	vii.
— — Hairy Water.....	1030	14	vii.

	PLATE	PAGE	VOL.
Mint, Marsh Whorled ...	1031 & 1032	16	vii.
— Meadow	1036	19	vii.
— Round-leaved	1020	4	vii.
— Slender	1034	17	vii.
— Spear	1023	8	vii.
— Tall Red	1033	17	vii.
MINUAR' TIA			
— <i>fastigiata</i> , Reich.....	243 (<i>bis</i>)	114	ii.
Mistletoe, Common	635 (<i>bis</i>)	190	iv.
Mittlere Schuppenmiere (Ger.)... ..	132	ii.	
— <i>Taubnessel</i> (Ger.)	71	vii.	
Mittlerer Klee (Ger.).....	41	iii.	
— <i>Sonnenhau</i> (Ger.).....	33	ii.	
— <i>Wasserhelm</i> (Ger.).....	129	vii.	
— <i>Wegerich</i> (Ger.).....	170	vii.	
Mittleres Nelkenwurzel (Ger.).....	199	iii.	
— <i>Vergissmeinnicht</i> (Ger.).....	106	vii.	
— <i>Wintergrün</i> (Ger.).....	49	vi.	
MCEHRIN' GLA			
— <i>pentau'dra</i> , Gay	101	ii.	
— <i>triner'via</i> , Reich.....	234	101	ii.
— <i>triner'vis</i> , Clair.	234	101	ii.
MCEN' CHIA			
— <i>erec'ta</i> , Smith	217	77	ii.
— <i>glau'ca</i> , Pers.....	217	77	ii.
— <i>quaternel'la</i> , Ehrh.	217	77	ii.
Mœnchia, Upright.....	217	77	ii.
Mœnchie droite (Fr.).....	77	ii.	
Mohn (Ger.)	81-93	i.	
Molène Blattaire (Fr.)	117	vi.	
— <i>bouillon blanc</i> (Fr.)	111	vi.	
— <i>lychnite</i> (Fr.).....	114	vi.	
— <i>noire</i> (Fr.)	115	vi.	
— <i>pulcrèrulente</i> (Fr.).....	113	vi.	
MOLIN' IA			
— <i>altis'sima</i> , Link	90	xi.	
— <i>arundina'cea</i> , Schrank.....	90	xi.	
— <i>cærru'lea</i> , Host.	1747	90	xi.
— CÆRU'LEA, Mönch	1747	90	xi.
— var. <i>ma'jor</i> , Roth.....	90	xi.	
— <i>depauper'da</i> , Lindl.	90	xi.	
— <i>littora'lis</i> , Host.....	90	xi.	
Molinie bleue (Fr.).....	91	xi.	
MONE'S ES			
— <i>grandifl'ora</i> , Salisb.	900	51	vi.
Moneywort	1144	149	vii.
— Cornish	969	148	vi.
Monkey-flower, Yellow	967	146	vi.
— Orchis	1453	96	ix.
Monkshood	48	65	i.
Monk's Rhubarb	1221	53	viii.
MONOTROPA			
— <i>Hypopheg'ea</i> , Wallr.....	901	53	vi.
— HYPOP'ITYS, Linn.....	901	53	vi.
— Wallr.	53	vi.	
— var. <i>gl'a'bra</i> , Roth.....	901	53	vi.
— var. <i>hirsu'ta</i> , Roth.....	53	vi.	
— <i>Monotrope sucepin</i> (Fr.)	54	vi.	

MON'TIA

	PLATE	PAGE	VOL.
— FONTA'NA, Linn.....	259	136	ii.
— var. <i>mi'nor</i> , Syme ...	259	136	ii.
— var. <i>rivula'ris</i> , Syme	136	ii.	
— <i>m'z'nor</i> , Gmel.	259	136	ii.
— <i>rivula'ris</i> , Gmel.	136	ii.	
Montie des fontaines (Fr.).....	137	ii.	
Moon-wort	1837	24	xii.
Moor-grass, Blue	1710	36	xi.
Moorkönig (Ger.)	179	vi.	
Moosartige Tillæ (Fr.)	47	iv.	
Moosbeere (Ger.).....	21	vi.	
Morast Labkraut (Ger.).....	223	iv.	
Morelle douce-amère (Fr.).....	96	vi.	
— <i>noire</i> (Ger.)	98	vi.	
Morène aquatique (Fr.).....	79	ix.	
Mörenförmige Haaftdolde (Ger.)	161	iv.	

MORGAGNIA

— <i>bicolor</i> , Bab.....	1541	220	ix.
Moschatel, Tuberosus.....	636	198	iv.
Moschus Käsepappel (Ger.)	166	ii.	
Moss Campion	205	63	ii.
— Golden	532	55	iv.
— Saxifrage, Irish	558-562	81-83	iv.
Mossy Cyphel.....	240	109	ii.
Moth Mullein.....	942	117	vi.
Mother-of-Thousands	955	134	vi.
Motherwort	1080	68	vii.
Mountain Ash	486	248	iii.
— Bastard	485	247	iii.
— Sorrel, Kidney-shaped	1225	58	viii.
Mouron délicat (Fr.)	153	vii.	
— <i>des champs</i> (Fr.)	151	vii.	
Mouse-ear Chickweed, Broad- leaved	221	83	ii.
— Curtis's	219	80	ii.
— Dark			
— Green	218	79	ii.
— Little	220	81	ii.
— Narrow- leaved	222	84	ii.
— Hawkweed	822	166	v.
Mouse-tail, Common.....	14	15	i.
— Fescue-grass	1781	142	xi.
— Little	14	15	i.
Moutarde blanchâtre (Fr.)	129	i.	
— <i>blanche</i> (Fr.)	125	i.	
— <i>des Allemands</i> (Fr.)	183	i.	
— <i>des champs</i> (Fr.)	124	i.	
— <i>noire</i> (Fr.)	127	i.	
Mud-rush	1574	37	x.
— sedge, Broad-leaved	1648	119	x.
— Loose-flowered.....	1649	122	x.
— Narrow-leaved.....	1647	120	x.
Mudwort	968	147	vi.
Mujlier à grandes fleurs (Fr.)	131	vi.	
— <i>rubicond</i> (Fr.)	132	vi.	
Muguet de Mai (Fr.).....	181	ix.	
— <i>de serpent</i> (Fr.).....	180	ix.	

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.		
<i>Muguet sceau de Salomon</i> (Fr.)	.....	178	ix.	MYOSOTIS				
— <i>verticellé</i> (Fr.)	.....	177	ix.	— <i>rupic'ola</i> , Sm.	1106	102	vii.	
Mugwort	.....	647	214	iv.	— <i>strigulo'sa</i> , Reich.	.....	99	vii.
	.....	732	63	v.	— <i>sua'veolens</i> , Waldst. & Kit.	1106	102	vii.
MULGEDIUM				— SYLVATICA , Ehrh.	1107	103	vii.		
— ALPINUM , Less	.....	809	151	v.	— — var. <i>alpes'tris</i> , Koch	1106	102	vii.
Mullein, Dark	.....	940	115	vi.	— VERSICOLOR , Reich.	1110	107	vii.
— Great	.....	937	111	vi.	<i>Myosotis changeant</i> (Fr.)	.....	108	vii.
— Hoary	.....	938	113	vi.	— <i>des Alpes</i> (Fr.)	.....	103	vii.
— Hybrid	.....	943-946	{117-119}	vi.	— <i>des champs</i> (Fr.)	.....	106	vii.
— Moth	.....	942	117	vi.	— <i>des collines</i> (Fr.)	.....	107	vii.
— White	.....	939	114	vi.	— <i>des forêts</i> (Fr.)	.....	104	vii.
MUSCARI				— <i>marais</i> (Fr.)	.....	100	vii.	
— <i>neglectum</i> , Bab.	.....	1529	201	ix.	— <i>gazonnante</i> (Fr.)	.....	98	vii.
— RACEMOSUM , DC.	.....	1529	201	ix.	<i>Myosure</i> (Fr.)	.....	15	i.
— <i>à grappe</i> (Fr.)	.....	.....	203	ix.	MYOSURUS			
Musk Mallow	.....	280	166	ii.	— MINIMUS , Linn.	14	15	i.
— Orchis	.....	1466	110	ix.	MYRICA			
— Stork's-bill	.....	308	208	ii.	— GA'LE , Linn.	1298	189	viii.
— Thistle	.....	683	7	v.	— <i>galé</i> (Fr.)	.....	190	viii.
<i>Muskateller Salbei</i> (Ger.)	.....	.....	43	vii.	<i>Myrikarie</i> (Ger.)	.....	139	ii.
Mustard, Black	.....	85	127	i.	MYRIOPHYLLUM			
— Broad-leaved Hedge...	.....	99	146	i.	— ALTERNIFLORUM , DC.	515	32	iv.
— Cabbage	101	149	i.	— <i>pectina'tum</i> , DC.	513	31	iv.
— Corn	83	142	i.	— SPICATUM , Linn.	514	32	iv.
— Fine-leaved Hedge ...	.....	98	145	i.	— VERTICILLATUM , Linn.	513	31	iv.
— Garlic Hedge	100	147	i.	— DC.	513	31	iv.
— Hairy Tower	.....	96	166	i.	— — var. <i>pectina'tum</i> ,			
— Hare's Ear	.....	101	149	i.	— <i>Syme</i>	.....	31	iv.
— Hedge	.....	96	144	i.	<i>Myrrhe odorante</i> (Fr.)	.....	170	iv.
— Hoary	.....	86	129	i.	MYRRHIS			
— Mithridate	.....	144	202	i.	— ODORATA , Scop.	626	170	iv.
— Narrow-leaved	.....	93	140	i.	— <i>temulenta</i> , Sm.	625	169	iv.
— Sand or Wall	94	141	i.	Myrtle, Bog	1298	190	viii.
— Treacle	.....	102	149	i.				
— White	.....	84	125	i.				
— Wild	.....	83	124	i.				
<i>Mutterkraut</i> (Ger.)	.....	.....	43	v.	<i>Nadel förmiges Ried</i> (Ger.)	.....	51, 59	x.
MYCE' LIS					NAIAS				
— <i>muralis</i> , Reich.	.....	808	150	v.	— FLEX'ILIS , Rostk.	1432	63	ix.
MYOG'ALUM					Naias, Flexible	1432	63	ix.
— <i>nutans</i> , Link	1523	194	ix.	Nailwort	134	189	i.
MYOSOTIS					<i>Narcisse des poëtes</i> (Fr.)	.....	162	ix.
— ALPES'TRIS , Schmidt	1106	102	vii.		— <i>faux-Narcisse</i> (Fr.)	.....	159	ix.
— — var. <i>rupic'ola</i> , Fries	1106	102	vii.		— <i>noupareil</i> (Fr.)	.....	161	ix.
— ARVEN'SIS , Hoffm.	1108	105	vii.		NARCIS'SUS				
— Sm.	1109	106	vii.		— BIFLORUS , Curt.	1503	161	ix.	
— — var. <i>dumeto'rum</i> , Crep.	.....	105	vii.		— [conspic'uus. Dou] (excluded)	.....	168	ix.
— — var. <i>umbro'sa</i> , Bab.	.....	105	vii.		— INCOMPARABILIS ,			
— CÆSPITOSA , Schultz	1103	98	vii.		— Mill.	1502	160	ix.	
— COLLI'NA , Reich.	1109	106	vii.		— [ma'jor. Curt.] (excluded)	.....	168	ix.
— <i>his'pida</i> , Schlecht.	1109	106	vii.		— [mi'nor. Linn.] (excluded)	.....	168	ix.
— <i>interme'dia</i> , Link	1108	105	vii.		— [moscha'tus. Linn.] (excluded)	.....	169	ix.
— <i>lingula'ta</i> , Lehm.	1103	98	vii.		— POETICUS , Linn.	1504	162	ix.	
— <i>nemoro'sa</i> , Fl. Tarn	.....	105	vii.		— PSEUDO-NARCIS'SUS ,			
— PALUS'TRIS , With.	1104	99	vii.		— Linn.	1501	157	ix.	
— — var. <i>strigulo'sa</i> , Syme	.....	99	vii.		— — var. Bromfield ii,			
— REPENS , Don	1105	101	vii.		— <i>Syme</i>	.....	158	ix.
					— — var. <i>concolor</i> , Bromf.	.....	158	ix.

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
Narcissus, Poet's	1504	162	ix.	NEP'ETA			
— Two-flowered	1503	162	ix.	— glecho'ma, var. hirsu'ta,			
<i>Nard roide</i> (Fr.).....		198	x.	— <i>Benth.</i>	40	vii.	
NARDOS'MIA				— — var. parviflo'ra, <i>Benth.</i>	40	vii.	
— <i>fra'grans</i> , Reich.	781	117	v.	NEPHRO'DIUM			
NARDUS				— æ'mulum, Baker	1858	87	xii.
— STRICTA , L.	1824	197	xi.	— <i>crista'tum</i> , Mich.	1853	70	xii.
<i>Narrenkappe</i> (Ger.)		61	i.	— — var. <i>uligin'o'sum</i> , Hook. 1854	73	xii.	
<i>Narthéc des marais</i> (Fr.)		222	ix.	— <i>dilata'tum</i> , Desv.	1857	82	xii.
NARTHECIUM				— — var. <i>glandulo'sum</i> ,			
— OSSIF'RAGUM , <i>Huds.</i> ... 1542	222	ix.		— Hook. f.	1856	80	xii.
NASTURTIUM				— <i>F'ilix-mas</i> , Richard.....	1850	57	xii.
— AMPHIBIUM , <i>R. Brown</i> 128	181	i.		— — var. <i>abbreviatum</i> ,			
— <i>an'ceps</i> , DC.	180	i.		— Hook.	61	xii.	
— <i>Marsh.</i>	127	181	i.	— — var. <i>affi'ne</i> , Hook. ...	59	xii.	
— <i>microphyllum</i> , <i>Boeungh.</i>	177	181	i.	— — var. <i>Bor'leri</i> , Hook. f.	59	xii.	
— OFFICINA'LE , <i>R. Brown</i> 125	176	i.		— <i>Fœnise'cii</i> , Lowe	1858	88	xii.
— Reich.	125	176	i.	— <i>monta'num</i> , Baker	1849	54	xii.
— — var. <i>siifo'llium</i> , <i>Syme</i>	177	177	i.	— <i>Oreopteris</i> , Desv.....	1849	54	xii.
— PALUSTRE , DC.	127	180	i.	— <i>remo'tum</i> , Hook.	1852	67	xii.
— <i>ricula're</i> , Reich.	180	180	i.	— <i>rig'idum</i> , Desv.....	1851	65	xii.
— <i>siijo'llium</i> , Reich.	177	177	i.	— <i>spiuulo'sum</i> , "Desv."	1855	76	xii.
— SYLVESTRE , <i>R. Brown</i> 126	179	180	i.	— — <i>a</i> , Hook. & Bak.....	1855	76	xii.
— <i>terres'tre</i> , R. Brown	127	180	i.	— — var. <i>dilata'tum</i> , Hook.			
— Wild	126	180	i.	— & Bak.....	1857	82	xii.
<i>Natterkopf</i> (Ger.)	90	vii.		— — var. <i>remo'tum</i> , Hook. 1852	67	xii.	
<i>Natterkopfurrtiges Wurmkrout</i> (Ger.)	138	v.		— <i>Thelyp'teris</i> , Desv.	1848	52	xii.
NAUMBURGIA				<i>Nerprum bourdaine</i> (Fr.)	229	ii.	
— <i>gutta'ta</i> , Mönch	1140	143	vii.	— — <i>purgatif</i> (Fr.)	227	ii.	
— <i>thyrsi'flora</i> , Duby.....	1140	143	vii.	<i>Nesselblättrige Glockenblume</i> (Ger.) ...	9	vi.	
<i>Navel-wort</i> , Common	539	63	iv.	<i>Nettle</i> , Common.....	1279	128	viii.
<i>Navette</i> (Fr.)	135	135	i.	— Common Hemp...1078 & 1079	65	vii.	
— — <i>d'été</i> (Fr.)	125	135	i.	— Cut-leaved Dead	1083	72	vii.
<i>Navette</i> , Wild	89	135	i.	— Downy Hemp	1077	65	vii.
<i>Naveu</i>	88	134	i.	— Henbit Dead.....	1081	70	vii.
— Wild	89	135	i.	— Intermediate Dead	1082	71	vii.
<i>Nayade marina</i> (Fr.).....	63	ix.		— Intermediate Hemp	1074	64	vii.
<i>Nebenblatt Weide</i> (Ger.)	226	viii.		— Large-flowered Hemp ... 1077	65	vii.	
<i>Nebenblättrige Platterbse</i> (Ger.)	102	iii.		— -leaved Bell-flower	867	9	vi.
<i>Needle Furze</i>	326	8	iii.	— Goosefoot	1192	17	viii.
<i>Néjtler commun</i> (Fr.).....	235	iii.		— Narrow-leaved Hemp ... 1074	63	vii.	
<i>Nelkeblättriger Hafer</i> (Ger.)... ..	71	xi.		— Red Dead	1084	73	vii.
<i>Nelkenduftende Sommerwurz</i> (Ger.)... ..	196	vi.		— Roman	1280 & 1281	130	viii.
<i>Nénuphar blanc</i> (Fr.).....	77	i.		— Small	1282	131	viii.
NEOTINEA				— Spotted Dead.....	1085	74	vii.
— INTACTA , Reich. <i>fil.</i> ... 1465	108	ix.		— White Dead	1086	75	vii.
NEOT'IA				NICAN'DRA			
— <i>æstiva'lis</i> , DC.	1473	116	ix.	— [physaloi'des, <i>Gärtn.</i>] (excluded) 108	vi.		
— <i>corda'ta</i> , Rich.	1476	120	ix.	<i>Nickende Distel</i> (Ger.)	7	v.	
— NI'DUS-AVIS , Rich.....	1478	122	ix.	— — <i>Vogelmilch</i> (Ger.).....	195	ix.	
— <i>ora'ta</i> , Bluff. & Fing.	1477	120	ix.	<i>Nickender Taubenkropf</i> (Ger.)... ..	65	ii.	
— <i>spra'tis</i> , Sw.	1472	115	ix.	— — <i>Wasser-dost</i> (Ger.) ...	94	v.	
<i>Néottie en cœur</i> (Fr.)	120	ix.		<i>Nickendes Perlgras</i> (Ger.)	93	xi.	
— <i>nid d'oiseau</i> (Fr.).....	122	ix.		<i>Niederliegende sagine</i> (Fr.)	121	ii.	
— <i>ovale</i> (Fr.)	121	ix.		<i>Niederliegender Klee</i> (Ger.).....	61	iii.	
NEP'ETA				— — <i>Schwügel</i> (Ger.)	108	xi.	
— CATARIA , Linn.	1054	38	vii.	<i>Niederliegendes Hartheu</i> (Ger.)	155	ii.	
— GLECHIO'MA , <i>Benth.</i>	1055	40	vii.	<i>Niedrige Segge</i> (Ger.)	125	x.	
				<i>Niedriger Kranichschnabel</i> (Ger.).....	199	ii.	

	PLATE	PAGE	VOL.
<i>Niedriges Ruhrkraut</i> (Ger.).....		76	v.
Nightshade, Alpine Enchanter's	512	30	iv.
—— Common Enchanter's	511	29	iv.
—— Black	931	98	vi.
—— Deadly	930-934	{96-100}	vi.
—— Garden	931	98	vi.
—— Woody	930	96	vi.
Nipple-wort, Common	787	126	v.
<i>Nixéole d'été</i> (Fr.).....		165	ix.
—— <i>du printemps</i> (Fr.)		166	ix.
Nit-grass, Awned	1711	38	xi.
Nitella, Clustered	1905 & 1906	186	xii.
—— Dwarf.....	1904	184	xii.
—— Flaccid	1899	174	xii.
—— Many-fruited.....	1907 & 1908	187	xii.
—— Mucronate	1902	182	xii.
—— Slender	1903	183	xii.
—— Translucent	1901	180	xii.
—— Twin-fruited	1900	176	xii.
NITEL'LA			
—— <i>atrov'rens</i> , Wallm.	1890	178	xii.
—— <i>Bertoloni</i> , Kütz.....	1910	195	xii.
—— <i>Bor'reri</i> , Wallm.	1908	189	xii.
—— <i>Braun'i</i> , Rabenh.	1911	197	xii.
—— <i>Bronquiartia'na</i> , Coss. & Germ.	1899	175	xii.
—— <i>capita'ta</i> , Agardh	1900	177	xii.
—— — Kützing	1900	177	xii.
—— <i>ex'ilis</i> , A. Braun	1902	182	xii.
—— <i>fascicula'ta</i> , A. Braun.....	1907	188	xii.
—— — <i>var. robustior</i> , A. Braun	1908	189	xii.
—— <i>flabella'ta</i> , Kütz.	1902	182	xii.
—— FLEX'ILIS, <i>Agardh</i>	1899	174	xii.
—— — <i>var. glomerulif'era</i> , Kütz.	1905	186	xii.
—— — <i>furcula'ta</i> , Nordst.	1899	175	xii.
—— GLOMERA'TA, <i>Chevallier</i> 1905 & 1906	185	xii.	
—— — Coss. & Germ.	1907	188	xii.
—— — <i>var. Smith'i</i> , <i>Syme</i> ... 1906	186	xii.	
—— — <i>glomerulif'era</i> , Wallm..... 1905	186	xii.	
—— GRAC'ILIS, <i>Agardh</i>	1903	183	xii.
—— <i>hyali'na</i> , Agardh	1904	184	xii.
—— INTRICA'TA, <i>Agardh</i> . 1907 & 1908	187	xii.	
—— — <i>var. prolif'era</i> , <i>Syme</i> 1908	189	xii.	
—— — <i>longifur'ca</i> , Wallm.	1902	182	xii.
—— MUCRONA'TA, <i>Cosson & Germain</i>	1902	182	xii.
—— — <i>var. homomor'pha</i> , A. Braun	183	xii.	
—— [NIDIF'ICA, <i>Agardh</i>] (excluded)	190	xii.	
—— Norve'gica, Wallm.....	1902	182	xii.
—— <i>opa'ca</i> , Agardh.....	1890	178	xii.
—— — A. Braun	1890	178	xii.
—— — Kützing	1890	178	xii.
—— <i>pedunculata</i> , Agardh	1890	178	xii.

NITEL'LA

	PLATE	PAGE	VOL.
—— <i>polysper'ma</i> , Kütz.	1907	188	xii.
—— <i>prolif'era</i> , Kütz	1908	189	xii.
—— <i>Smith'i</i> , Wallm.	1906	186	xii.
—— <i>stellifera</i> , Kütz	1910	195	xii.
—— [<i>Stenhammaria'na</i> Wallm.] (excluded)		191	xii.
—— SYNCAR'PA, <i>Chevallier</i>	176	xii.	
—— — <i>vars. A. Braun & Kütz</i>	1900	177, 178	xii.
—— — <i>var. capita'ta</i> , Coss. & Germ.	177	xii.	
—— — <i>var. capita'ta</i> , Kütz.	177	xii.	
—— — <i>var. opa'ca</i> , Kütz. ...	1900	178	xii.
—— TENUIS'SIMA, <i>Kützing</i> . 1904	184	xii.	
—— TRANSLUC'ENS, <i>Agardh</i> . 1901	180	xii.	
—— — <i>ulrov'des</i> , Kütz.....	1910	195	xii.

NIVAR'IA

—— <i>ver'na</i> , Mönch	1506	165	ix.
Nonsuch	337	25	iii.
<i>Nordische Linnæ</i> (Ger.)	210	iv.	
<i>Nordisches Habichtskraut</i> (Ger.)	205	v.	
—— <i>Labkraut</i> (Ger.)	213	iv.	
<i>Norwegisches Ruhrkraut</i> (Ger.)	75	v.	

NOTOLE'PIUM

—— <i>Ceterach</i> , Newm.....	1883	139	xii.
Nottingham Catchfly.....	207	65	ii.

NUP'HAR

—— <i>interme'dium</i> , Ledebour ...	55	78	i.
—— LU'TEA, <i>Sm.</i>	54	78	i.
—— <i>lu'tea</i> , <i>var.</i> , Benth.	56	80	i.
—— — <i>var. ma'jor</i> , <i>Syme</i> ...	54	78	i.
—— — <i>var. mi'nor</i> , <i>Syme</i> ...	55	78	i.
—— — <i>mi'ima</i> , <i>Sm.</i>	56	80	i.
—— PUMILA, <i>Sm.</i>	56	80	i.
<i>Nuphar jaune</i> (Fr.)	79	i.	

NYPHÆA

—— ALBA, <i>Linn.</i>	53	76	i.
—— — <i>var. ma'jor</i> , <i>Syme</i> ...	53	76	i.
—— — <i>var. mi'nor</i> , <i>Syme</i> ...	76	i.	

Oak, Common	1288	146	viii.
—— fern	1845	46	xii.
—— leaved Goosefoot	1198	24	viii.
—— Sessile-fruited	1289	157	viii.
Oat, Black	1740	78	xi.
—— Wild	1741	80	xi.
Oat-grass, Downy	1737	78	xi.
—— False	1742	83	xi.
—— Glabrous	1738 & 1739	76	xi.
—— Yellow	1736	74	xi.

OBTONE

—— <i>pedunculata</i> , Moq.-Tand. 1209	37	viii.
—— — <i>portulacoi'des</i> , Moq.-Tand. 1208	36	viii.

ODONTITES

—— <i>rotunda'ta</i> , Ball	174	vi.
-----------------------------------	-----	-----

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
ODONTITES				OPHIGLOSSUM			
— <i>rubra</i> , Gr. & Godr.	993	174	vi.	— <i>Azor'icum</i> , Presl	1835	20	xii.
— — Pers.	993	174	vi.	— LUSITANICUM, Linn.	1836	22	xii.
— <i>serotina</i> , Reich.	174	vi.		— <i>polyphyllum</i> , A. Br.	1835	20	xii.
— <i>ver'na</i> , Reich.	993	174	vi.	— VULGATUM, Linn.	1835	19	xii.
— — var. <i>elegans</i> , Ball. ...	174	vi.		— — var. <i>ambiguum</i> , Coss.			
— <i>Elder's Segge</i> (Ger.)	158	x.		— — & Germ.	1835	20	xii.
— <i>Eillet bleuâtre</i> (Fr.)	48	ii.		— — var. <i>microstichum</i> ,			
— <i>deltôide</i> (Fr.)	47	ii.		— — "Acharius," T. Moore	1835	20	xii.
— <i>giroflée</i> (Fr.)	49	ii.		— — var. <i>polyphyllum</i> ,			
— <i>mignardise</i> (Fr.)	51	ii.		— — A. Br.	1835	20	xii.
— <i>prolifère</i> (Fr.)	52	ii.		OPHIURUS			
— <i>velu</i> (Fr.)	46	ii.		— <i>filifor'mis</i> , R. & S.	1818	189	xi.
— <i>Oelmagen</i> (Ger.)	84	i.		— <i>incurvatus</i> , Lindl.	1818	189	xi.
ENANTHE				OPHRYS			
— <i>apifolia</i> , Brot. ?	597	129	iv.	— <i>anthroph'ora</i> , Linn.	1447	87	ix.
— CROCAT'A, Sm.	597	128	iv.	— APIF'ERA, Linn.	1467	111	ix.
— FISTULOSA, Linn.	593	124	iv.	— ARACHNITES, Reichard	1468	111	ix.
— FLUVIAT'ILIS, Colem.	599	131	iv.	— ARANIF'ERA, Huds. ...			
— LACHENAL'II, Gmel. ...	596	127	iv.	— — 1469 & 1470	112	ix.	
— <i>me'dia</i> , Auct.	127	iv.		— — Sm.	1469	112	ix.
— <i>peucedanifolia</i> , Sm.	595	126	iv.	— — var. <i>fucif'era</i> , Syme...	1470	113	ix.
— PHELLAN'DRIUM, Lam.	598	130	iv.	— <i>Corallorrh'iza</i> , Linn.	1487	132	ix.
— PIMPINELLOIDES, Linn.	594	125	iv.	— <i>cordata</i> , Linn.	1476	120	ix.
— — Sm.	596	127	iv.	— <i>fucif'era</i> , Sm.	1470	113	ix.
— SILAIFOLIA, Bieb. ? ...	595	126	iv.	— <i>fucif'ora</i> , Reich.	1468	111	ix.
— <i>Smith'i</i> , H. C. Wats.	595	126	iv.	— <i>Lösel'ii</i> , Linn.	1488	133	ix.
— <i>Enanthe à feuilles de Silaus</i> (Fr.) ...	127	iv.		— <i>Monor'chis</i> , Linn.	1466	109	ix.
— — <i>suc jaune</i> (Fr.)	129	iv.		— MUSCIF'ERA, Huds. ...	1471	114	ix.
— — <i>de Lachenal</i> (Fr.) ...	128	iv.		— <i>Myo'des</i> , Jacq.	1471	114	ix.
— — <i>faux boucage</i> (Fr.) ...	126	iv.		— <i>N'odus-a'vis</i> , Linn.	1478	122	ix.
— — <i>fistuleuse</i> (Fr.)	125	iv.		— <i>ora'ta</i> , Linn.	1477	120	ix.
— — <i>phillandre</i> (Fr.)	131	iv.		— <i>paludo'sa</i> , Linn.	1489	135	ix.
ENOTHERA				— <i>spira'lis</i> , Linn.	1472	115	ix.
— BIEN'NIS, Linn.	508	24	iv.	— <i>Ophrys à un tubercle</i> (Fr.)	110	ix.	
— ODORATA, Jacq.	509	25	iv.	— <i>abeille</i> (Fr.)	111	ix.	
— <i>Ohrlöfel Taubenkropf</i> (Ger.) ...	64	ii.		— <i>araignée</i> (Fr.)	113	ix.	
— Old Man's Beard	1	3	i.	— <i>frelon</i> (Fr.)	112	ix.	
— <i>Onagre bisannuelle</i> (Fr.)	24	iv.		— <i>homme pendu</i> (Fr.)	87	ix.	
ENOBYRCHIS				— <i>mouche</i> (Fr.)	115	ix.	
— SATIVA, Lam.	381	81	iii.	— <i>Opium Poppy</i>	57	84	i.
ONOCLEA				OPPLISME'NUS			
— [sensibilis, Linn.] (ex-				— <i>Crus-galli</i> , Kunth	1692	12	xi.
— — cluded)	148	xii.		OPORINIA			
ONONIS				— <i>autumnalis</i> , Don ...	794 & 795	134	v.
— ARVEN'SIS, Fries	331	16	iii.	— <i>Orache</i> , Babington's	1206	33	viii.
— — Linn.	331	16	iii.	— — Frosted Sea	1207	35	viii.
— — Sm. E. B.	330	15	iii.	— — Grass-leaved Sea, var. α	1200	27	viii.
— — var. α , Hook. & Arn.	331	16	iii.	— — — var. β	1201	28	viii.
— — var. β , Hook. & Arn.	330	15	iii.	— — — var. β ...	1203	30	viii.
— CAMPESTRIS, Koch ...	330	15	iii.	— — Smith's	1205	33	viii.
— <i>procur'rens</i> , Wallr.	331	16	iii.	— — Stalked-fruited Sea	1209	38	viii.
— <i>reclinata</i> , Linn.	332	18	iii.	— — Triangular-leaved	1204	31	viii.
— <i>repens</i> , Koch	331	16	iii.	— <i>Orchide taché</i> (Fr.)	102	ix.	
— <i>spino'sa</i> , Linn.	330	15	iii.	ORCHIS			
— <i>Onoporde acanthe</i> (Fr.)	3	v.		— <i>albida</i> , Scop.	146	103	ix.
ONOPORDUM				— <i>angustifolia</i> , Reich	100	ix.	
— ACANTHIUM, Linn. ...	680	2	v.	— <i>bijolia</i> , Gren. & Godr. ...	1464	106	ix.

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
ORCHIS				Orehis, Greater Butterfly	1464	107	ix.
— <i>bijolia</i> , Linn.	1463 &	1464	105	— Green-winged Meadow	1454	97	ix.
— — Sm.	1463	107	ix.	— Late Spider	1468	112	ix.
— <i>conopsea</i> , Linn.	1460	102	ix.	— Lax-flowered	1456	99	ix.
— <i>deusijoru</i> , Wahl.	103	ix.		— Lesser Butterfly	1463	106	ix.
— <i>fusa</i> , Jacq.	1451	93	ix.	— Lizard	1448	91	ix.
— <i>galeata</i> , Lam.	1452	94	ix.	— Man	1447	87	ix.
— HIRCI'NA, Scop.	1448	90	ix.	— Military	1452	95	ix.
— <i>incarnata</i> , Linn.	1457	100	ix.	— Monkey	1453	96	ix.
— <i>intacta</i> , Link	1465	108	ix.	— Musk	1466	110	ix.
— <i>latifolia</i> , Benth. ...	1457 &	1458	99	— Palmate Spotted	1459	102	ix.
— — Linn.	1458	100	ix.	— Pyramidal	1449	92	ix.
— — Sm.	1457	100	ix.	— Small White	1461	104	ix.
— LAXIFLORA, Lam. ...	1456	98	ix.	<i>Orge queue de rat</i> (Fr.)	195	xi.	
— MACULATA, Linn. ...	1459	101	ix.	<i>Origan commune</i> (Fr.)	30	vii.	
— <i>maialis</i> , Reich.	1458	100	ix.	ORIG'ANUM			
— MAS'CVLA, Linn.	1455	97	ix.	— <i>Creticum</i> , var. β , Linn. ...	1046	29	vii.
— MILITA'RIS, Jacq.	1452	94	ix.	— <i>megastichum</i> , Link	1046	29	vii.
— — var. β , Linn.	1451	93	ix.	— [Onites, Linn.] (excluded)	86	vii.	
— — var. ϵ , Linn.	1453	95	ix.	— [virens, Link] (excluded)	86	vii.	
— <i>montana</i> , Schmidt	1463	107	ix.	— <i>vulgaris</i> , Link	1045	29	vii.
— MO'RIO, Linn.	1454	96	ix.	— VULGARE, Linn. 1045 & 1046	29	vii.	
— PALMATA, Syme 1457 & 1458	99	ix.		— — var. <i>megastichum</i> ,			
— PURPUREA, Huds.	1451	93	ix.	— Koch	1046	29	vii.
— PYRAMIDALIS, Linn.	1449	91	ix.	— — var. <i>prismaticum</i> ,			
— <i>Rivini</i> , Gouan.	1452	94	ix.	— Gaud.	1046	29	vii.
— <i>secundiflora</i> , Bert.	1465	108	ix.	<i>Orme commune</i> (Fr.)	139	viii.	
— SYMIA, Lam.	1453	95	ix.	— <i>de montagne</i> (Fr.)	142	viii.	
— <i>speciosa</i> , Host	98	ix.		OR'MENIS			
— <i>tephrosanthos</i> , Vill.	1453	95	ix.	— <i>nobilis</i> , J. Gay	724	53	v.
— Traunster'neri, Koch	100	ix.		<i>Ornithogale à fleurs pendantes</i> (Fr.) ...	195	ix.	
— TUPULA'TA, Linn.	1450	92	ix.	— — <i>des Pyrénées</i> (Fr.) ...	197	ix.	
— <i>viridis</i> , Crantz.	1462	105	ix.	— — <i>en ombelle</i> (Fr.)	196	ix.	
<i>Orchis à deux feuilles</i> (Fr.)	106	ix.		ORNITHOG'ALUM			
— — <i>fleurs lâches</i> (Fr.)	99	ix.		— <i>angustifolium</i> , Bor.	196	ix.	
— — <i>larges feuilles</i> (Fr.)	101	ix.		— <i>lu'teum</i> , Linn.	1522	193	ix.
— — <i>barbe de bouc</i> (Fr.)	91	ix.		— NUTANS, Linn.	1523	194	ix.
— — blanc (Fr.)	104	ix.		— PYRENA'ICUM, Linn. ...	1525	197	ix.
— — <i>Bouffon</i> (Fr.)	97	ix.		— <i>umbellatum</i> , Bor.	1524	195	ix.
— — <i>brûlé</i> (Fr.)	93	ix.		— UMBELLATUM, Linn. 1524	195	ix.	
— — <i>incarnat</i> (Fr.)	100	ix.		— — var. <i>angustifolium</i> ,			
— — <i>mâle</i> (Fr.)	98	ix.		— Syme.	196	ix.	
— — <i>militaire</i> (Fr.)	95	ix.		<i>Ornithope délicat</i> (Fr.)	78	iii.	
— — <i>pyramidal</i> (Fr.)	92	ix.		— — <i>sans bractées</i>	79	iii.	
— — <i>saure</i> (Fr.)	103	ix.		ORNITHOP'TERIS			
— — <i>vert</i> (Fr.)	105	ix.		— <i>aquilina</i> , John Smith	1886	145	xii.
<i>Orchis</i> , Bee	1467	111	ix.	ORNITH'OPUS			
— — Bird's-nest	1478	122	ix.	— EBRACTEATUS, Brot.	379	78	iii.
— — Bog	1489	135	ix.	— PERPUSILLUS, Linn.	378	77	iii.
— — Broad-leaved Marsh	1458	101	ix.	OROBAN'CHE			
— — Common Marsh	1457	100	ix.	— <i>amethys'tea</i> , Thuill.	1017	200	vi.
— — Dense-flowered	1465	109	ix.	— ARENARIA, Borl.	1008	191	vi.
— — Dwarf Dark-winged	1450	93	ix.	— <i>barbata</i> , Bab.	1015	198	vi.
— — Early Purple	1455	98	ix.	— CÆR'ULEA, Vill.	1009	192	vi.
— — Early Spider	1469 & 1470	113	ix.	— CARYOPHYLLACEA,			
— — Fen	1488	134	ix.	— Sm.	1012	195	vi.
— — Fly	1471	115	ix.	— ELA'TIOR, Sutt.	1013	196	vi.
— — Fragrant	1460	103	ix.	— <i>epithymum</i> , DC.	195	vi.	
— — Frog	1462	105	ix.	— <i>Eryngii</i> , Duby	1017	200	vi.
— — Great Dark-winged	1451	94	ix.				

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
OROBAN'CHE				OX'ALIS			
— eu-mi'nor, <i>Syme</i>	1016	199	vi.	— ACETOSEL'LA, <i>Linn.</i> ...	310	211	ii.
— <i>Galii</i> , <i>Duby</i>	1012	195	vi.	— CORNICULA'TA, <i>Linn.</i> ...	311	213	ii.
— HED'ERÆ, <i>Duby</i>	1015	198	vi.	— <i>europæ'a</i> , <i>Jord.</i>	312	214	ii.
— Inco'rum, <i>Koch</i> (?)	1013	197	vi.	— STRIC'TA, <i>Linn.</i>	312	214	ii.
— ma'jor, <i>Fries</i>	1013	196	vi.	— <i>villo'sa</i> , <i>M. B.</i>	311	213	ii.
— <i>Sm.</i>	1010	193	vi.	Ox-eye Chamomile	723	53	v.
— MI'NOR, <i>Linn.</i>	1016 & 1017	199	vi.	— Great White	714	42	v.
— <i>Thuill.</i>	1016	199	vi.	Oxlip, Common	1132	137	vii.
— P'PCRIDIS, <i>F. Sch.</i>	1014	197	vi.	— Cowslip	1133	137	vii.
— [pruino'sa, <i>Lup.</i>] (excluded).....	201	vi.		— <i>Jacquin's</i>	1131	135	vii.
— RAMO'SA, <i>Linn.</i>	1007	190	vi.	Ox-tongue, Bristly.....	797	138	v.
— RA'PUM, <i>Thuill.</i>	1010	193	vi.	— Hawkweed	796	136	v.
— RU'BRA, <i>Sm.</i>	1011	194	vi.	OXYCOC'CUS			
— [specio'sa, <i>DC.</i>] (excluded)	201	vi.		— <i>palus'tris</i> , <i>Pers.</i>	876	20	vi.
— <i>vulga'ris</i> , <i>DC.</i>	1012	195	vi.	OXYRIA			
<i>Orobanche à petites fleurs</i> (Fr.)	200	vi.		— <i>dig'yna</i> , <i>Campd.</i>	1225	57	viii.
— <i>bleue</i> (Fr.)	193	vi.		— RENIFORMIS, <i>Hook.</i> ...	1225	57	viii.
— <i>de la pieride</i> (Fr.) ...	198	vi.		<i>Oxytropes des Alpes</i> (Fr.)	73	iii.	
— <i>des sables</i> (Fr.)	192	vi.		OXYTROPIS			
— <i>du panicaut</i> (Fr.) ...	200	vi.		— CAMPESTRIS, <i>DC.</i> ...	374	72	iii.
— <i>du spartum</i> (Fr.).....	194	vi.		— HAL'LEHI, <i>Bunge</i>	373	71	iii.
— <i>elongée</i> (Fr.)	197	vi.		— <i>uralen'sis</i> , <i>DC.</i>	373	71	iii.
— <i>ramense</i> (Fr.)	191	vi.		Oxytropis, Blue	373	72	iii.
<i>Orobe noireissant</i> (Fr.)	112	iii.		— Pale-yellow	374	73	iii.
— <i>tubéreux</i> (Fr.)	111	iii.		Oyster-plant	1099	93	vii.
OR'OBUS				PÆO'NIA			
— <i>n'ger</i> , <i>Linn.</i>	407	111	iii.	— CORALL'INA, <i>Retz.</i>	50	68	i.
— <i>sylva'ticus</i> , <i>Linn.</i>	386	88	iii.	PAE'SIA			
— <i>tennifo'lius</i> , <i>Roth</i>	111	iii.		— <i>aquil'na</i> , <i>Moore</i>	1886	145	xii.
— <i>tuberosus</i> , <i>Linn.</i>	406	110	iii.	<i>Panais cultivé</i> (Fr.)	152	iv.	
<i>Orpin à odeur de rose</i> (Fr.)	49	iv.		<i>Panic pied de coq</i> (Fr.).....	12	xi.	
— <i>petites fleurs</i> (Fr.)	53	iv.		<i>Panic-grass</i> , Loose.....	1692	12	xi.
— <i>Févier</i> (Fr.).....	51	iv.		<i>Panicaut des champs</i> (Fr.)	96	iv.	
— <i>purpurin</i> (Fr.).....	50	iv.		— <i>maritime</i> (Fr.)	95	iv.	
Orpine, Broad-leaved	526	50	iv.	PANICUM			
— Everlasting	526	49	iv.	— <i>Crus-galli</i> , <i>Linn.</i>	1692	12	xi.
— Narrow-leaved	527	51	iv.	— <i>Dactylon</i> , <i>Linn.</i>	1690	8	xi.
<i>Ortie à pilules</i> (Fr.)	130	viii.		— <i>gl'abrum</i> , <i>Gaud.</i>	1691	10	xi.
— <i>brûlante</i> (Fr.).....	131	viii.		— <i>humifusum</i> , <i>Kunth.</i>	1691	10	xi.
<i>Ortwechslender Knöterich</i> (Ger.)	78	viii.		— [milia'ceum, <i>L.</i>] (excluded).....	199	xi.	
ORY'ZA				— <i>verticilla'tum</i> , <i>Linn.</i>	1694	14	xi.
— <i>clandest'ina</i> , <i>A. Br.</i>	1686	204 (2)	xi.	— <i>vir'ide</i> , <i>Linn.</i>	1693	13	xi.
Osier, Auricled	1323	226	viii.	<i>Pansy</i> , Large-flowered Field ...	178	25	iii.
— Common	1322	224	viii.	— Mountain	181	28	ii.
— Ferruginous.....	1325	229	viii.	— Sea	180	27	ii.
— Fine Basket. var. <i>B</i>	1321	222	viii.	— Small-flowered Field ...	179	26	i.
— Green-leaved, var. <i>a</i>	1320	222	viii.	PAPA'VER			
— Silky-leaved	1324	227	viii.	— ARGEMO'NE, <i>Linn.</i>	61	91	i.
Osmund Royal	1838	32	xii.	— <i>cam'briom</i> , <i>Linn.</i>	63	94	i.
OSMUN'DA				— DU'BUM, <i>Linn.</i>	59 & 60	88	i.
— <i>cris'pa</i> , <i>Linn.</i>	1844	44	xii.	— <i>Lamotte</i>	59	89	i.
— <i>Luna'ria</i> , <i>Linn.</i>	1837	24	xii.	— <i>Reich.</i>	60	90	i.
— REGA'LIS, <i>Linn.</i>	1838	30	xii.	— <i>horten'se</i> , <i>Hussnot</i>	57 A.	82	i.
— <i>Sp'cant</i> , <i>Linn.</i>	1885	143	xii.	— HYBRIDUM, <i>Linn.</i>	62	92	i.
<i>Oxalide cornue</i> (Fr.)	214	ii.		— <i>interme'dium</i> , <i>Becker</i>	87	i.	
— <i>osuille</i> (Fr.)	211	ii.					
— <i>raide</i> (Fr.).....	215	ii.					

	PLATE	PAGE	VOL.
PAPAVER			
— <i>lorigatum</i> "M.B.," Reich.	59	89	i.
— Lamot'tei, Borean	59	89	i.
— Lecoq'ii, Lamotte	60	90	i.
— modes'tum, Jord.	91		i.
— [nudicaule, Linn.] (excluded)...	115		i.
— officina'le, Gmel.	57 B.	83	i.
— RHE'AS, Linn.	58	87	i.
— var. strigo'sum, Boen-ningh.	87		i.
— var. vulgari's, Syme...	58	87	i.
— setig'erum, DC.	84		i.
— Godr.	57 A.	82	i.
— SOMNIF'ERUM, Linn.	57	82	i.
— Gmel.	57 A.	82	i.
— Gr. & Godr.	57 B.	83	i.
— var. al'bum, DC.	57 B.	83	i.
— var. macrocar'pum, Coss. & Germ.	57 B.	83	i.
— var. ni'grum, DC.	57 A.	82	i.
— var. officina'le, Coss. & Germ.	57 B.	83	i.
— var. setig'erum, Godr.	57 A.	82	i.
<i>Parietaire</i> (Fr.)	126	viii.	
PARIETA'RIA			
— <i>diffusa</i> , Bab. (olim)	1278	126	viii.
— DIFFU'SA, Koch	1278	126	viii.
— var. fal'lax, Gr. & Godr.	126	viii.	
— <i>erecta</i> , Bab. (olim)	126	viii.	
— officina'lis, Sm.	1278	126	viii.
PARIS			
— QUADRIFO'LIA, Linn.	1509	173	ix.
<i>Parisette à quatre feuilles</i> (Fr.)	174	ix.	
<i>Parisisches Labkraut</i> (Ger.)	224	iv.	
Parmacetie, Poor Man's	152	212	i.
PARNAS'SIA			
— PALUS'TRIS, Linn.	565	86	iv.
<i>Parnassie des marais</i> (Fr.)	86	iv.	
Parnassus, Grass of	565	86	iv.
Parsley, Common	576	104	iv.
— Fool's	600	133	iv.
— Corn-	577	105	iv.
— Cow-	624	168	iv.
— Fern	1844	44	xii.
— Field Hedge-	619	163	iv.
— Great Bur-	618	162	iv.
— Knotted Hedge-	621	165	iv.
— Piert	422	137	iii.
— Small Bur-	617	161	iv.
— Upright Hedge	620	164	iv.
— Water Dropwort	596	128	iv.
Parsnip, Common Cow-	613	154	iv.
— Great Water-	587	118	iv.
— Least Water-	575	103	iv.
— Procumbent Water-	573 & 4	101	ix.
— Water-	588	119	iv.
— Wild.	612	152	iv.

	PLATE	PAGE	VOL.
PASPALUM			
— <i>ambiguum</i> , DC.	1691	10	xi.
— <i>Dactylon</i> , DC.	1690	8	xi.
Pasque Flower	9	11	i.
<i>Passerage à larges feuilles</i> (Fr.)	213	i.	
— <i>des champs</i> (Fr.)	217	i.	
— <i>des décombres</i> (Fr.)	214	i.	
— <i>druce</i> (Fr.)	219	i.	
— <i>cultivée</i> (Fr.)	215	i.	
<i>Pastel des teinturiers</i> (Fr.)	223	i.	
PASTINA'CA			
— SATI'VA, Linn.	612	151	iv.
<i>Patience à écussons</i> (Fr.)	54	viii.	
— <i>à feuilles obtuses</i> (Fr.)	47	viii.	
— <i>à longues feuilles</i> (Fr.)	52	viii.	
— <i>agglomérée</i> (Fr.)	41	viii.	
— <i>erépe</i> (Fr.)	50	viii.	
— <i>des Alpes</i> (Fr.)	53	viii.	
— <i>des bois</i> (Fr.)	42	viii.	
— <i>domestique</i> (Fr.)	51	viii.	
— <i>maritime</i> (Fr.)	43	viii.	
— <i>oseille</i> (Fr.)	55	viii.	
— <i>petite oseille</i> (Fr.)	57	viii.	
— <i>violon</i> (Fr.)	45	viii.	
<i>Pâturin annuel</i> (Fr.)	112	xi.	
— <i>bulbeux</i> (Fr.)	114	xi.	
— <i>commun</i> (Fr.)	130	xi.	
— <i>comprimé</i> (Fr.)	126	xi.	
— <i>des Alpes</i> (Fr.)	115	xi.	
— <i>des bois</i> (Fr.)	125	xi.	
— <i>des prés</i> (Fr.)	128	xi.	
— <i>luxe</i> (Fr.)	117	xi.	
<i>Parot</i> (Fr.)	81-93	i.	
— <i>coquelicot</i> (Fr.)	88	i.	
— <i>somnifère</i> (Fr.)	84	i.	
Pea, Broad-leaved Everlasting	403	108	iii.
— Narrow-leaved Everlasting	402	107	iii.
— Sea	405	110	iii.
Pear, Wild	488	252	iii.
Pearwort, Alpine	249	122	ii.
— Awl-shaped	250	124	ii.
— Common Small-flowered	246	119	ii.
— Fries's Small-flowered	247	120	ii.
— l.indblom's..... (bis)	250	125	ii.
— Procumbent	248	121	ii.
— Sea	245	118	ii.
<i>Pelliculaire des forêts</i> (Fr.)	180	vi.	
— <i>des marais</i> (Fr.)	179	vi.	
PEDICULA'RI'S			
— PALUS'TRIS, Linn.	996	178	vi.
— SYLVATICA, Linn.	997	179	vi.
Pellitory-of-the-Wall	1278	126	viii.
Penny Cress, Field	144	202	i.
— Green Alpine	148	207	i.
— Long-styled Alpine	147	206	i.
— Perfoliate	145	204	i.
— Short-styled Alpine	146	205	i.
Penny-royal	1041 & 1042	24	vii.
Pennyweed	998	181	vi.

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
Pennywort, Marsh	566	90	iv.	<i>Pfefferfrüchtiger Sünnel</i> (Ger.)... ..	142	ii.	
Peony, Coral	50	69	i.	<i>Pfefferminze</i> (Ger.).....	10	vii.	
——— Entire-leaved	50	69	i.	<i>Pfeffernigalat</i> (Ger.)	49	i.	
——— Male	50	69	i.	<i>Pfirsichblättrige Glockenblume</i>			
<i>Peptide pourpier</i> (Fr.)	5	iv.		(Ger.)	14	vi.	
PEPLIS				<i>Pfriemblättrige Sagine</i> (Ger.) ...	124	ii.	
——— POR'TULA, <i>Linn.</i>	493	4	iv.	PHA'CA			
Peppermint	1024, var. β , 1025	9	vii.	——— <i>astragal'na</i> , DC.	375	73	iii.
Pepper, Grass.....	1825	2	xii.	PHALAN'GIUM			
——— Poor Man's	153	213	i.	——— <i>bicolor</i> , DC.	1541	220	ix.
——— Water	1234	71	i.	——— <i>planifolium</i> , Pers.	1541	220	ix.
Pepperwort, Broad-leaved	153	213	viii.	PHAL'ARIS			
——— Mithridate	156	217	i.	——— <i>arena'ria</i> , Huds.	1709	34	xi.
——— Narrow-leaved	154	214	i.	——— <i>arundin'cea</i> , Linn.	1697	19	xi.
——— Rubbish.....	154	214	i.	——— CANARIEN'SIS, <i>Linn.</i>	1698	20	xi.
——— Smooth Field	157	218	i.	——— <i>oryzoides</i> , Linn.	1686	2	xi.
——— Whitlow	158	219	i.	——— [paradox'a, <i>L.</i>] (excluded).	199	xi.	
<i>Perce-neige des Parisiens</i> (Fr.)... ..	167	ix.		——— <i>phæoides</i> , Linn.	1708	33	xi.
——— <i>piéd</i> (Fr.)	137	iii.		PHAL'ONA			
——— <i>piere</i> (Fr.)	143	iv.		——— <i>echinata</i> , Dum.....	1777	134	xi.
PERIS'TYLUS				Pheasant's Eye, Autumnal	13	14	i.
——— <i>albidus</i> , Lindl	1461	103	ix.	——— Common	13	14	i.
Periwinkle, Lesser	906	63	vi.	PHEGOP'TERIS			
——— or Pervinke, Greater	905	63	vi.	——— <i>alpes'tris</i> , Mettenius 1870 & 1871	112	xii.	
<i>Perlkopfiges Rührkraut</i> (Ger.)... ..	77	v.		——— J. Smith	1870	113	xii.
Persicaria, Glandular, var. α ...	1239	77	viii.	——— <i>calca'rea</i> , Fée	1846	48	xii.
——— var. β ...	1240	77	viii.	——— DRYOP'TERIS, Fée	1845	46	xii.
——— Lax flowered	1236	74	viii.	——— <i>flex'ilis</i> , J. Smith	1871	115	xii.
——— Small	1235	73	viii.	——— POLYPODIOIDES, Fée	1847	50	xii.
——— Spotted, var. α	1237	75	viii.	——— ROBERTIA'NA, <i>A. Braun</i>	1846	48	xii.
——— var. β	1238	75	viii.	——— <i>vulgaris</i> , Mett.....	1847	50	xii.
<i>Persil cultivé</i> (Fr.).....	104	iv.		PHELIPÆ'A			
<i>Perreuche à grande fleur</i> (Fr.)... ..	63	vi.		——— <i>arena'ria</i> , Walp.	1008	191	vi.
<i>Pesse commune</i> (Fr.)	34	iv.		——— <i>ceru'llea</i> , C. A. M.	1009	192	vi.
PETASITES				——— <i>ramosa</i> , C. A. M.....	1007	190	vi.
——— AL'BUS, <i>Gärtn.</i>	782	118	v.	PHELLAN'DRIUM			
——— FRA'GRANS, <i>Presl</i>	781	117	v.	——— <i>aquat'icum</i> , Linn.	598	130	iv.
——— <i>officin'lis</i> , Mönch ...	783 & 784	119	v.	PHLE'UM			
——— <i>pratensis</i> , <i>Jord.</i>	120	v.		——— ALP'NUM, <i>Linn.</i>	1705	30	xi.
——— <i>ripa'ria</i> , <i>Jord.</i>	783 & 784	120	v.	——— ARENA'RIMUM, <i>Linn.</i> ...	1709	34	xi.
——— VULGARIS, <i>Desf.</i>	783 & 784	119	v.	——— [as'perum, <i>Jacq.</i>] (excluded).....	199	xi.	
<i>Petite douce</i> (Fr.)	35	i.		——— BOEH'MERI, Schrad. ...	1708	33	xi.
——— <i>mauve ronde</i> (Fr.)	169	ii.		——— <i>commu'tatum</i> , Gaud.....	1705	30	xi.
PETROSELINUM				——— <i>erini'tum</i> , Schreb.....	1713	40	xi.
——— <i>horten'se</i> , Hoffm.	576	103	iv.	——— <i>interme'dium</i> , <i>Jord.</i>	1706	32	xi.
——— SATIVUM, <i>Hoffm.</i>	576	103	iv.	——— <i>læ've</i> , M. Bieb.	1708	33	xi.
——— SEG'ETUM, <i>Koch</i>	577	105	iv.	——— [Miche'l'ii, All.] (excluded).....	199	xi.	
Petty Spurge	1265	111	viii.	——— <i>nodosum</i> , Linn.....	1707	32	xi.
——— Whin	326	8	iii.	——— <i>phalaroides</i> , Køl.	1708	33	xi.
<i>Peuçédane officinal</i> (Fr.)	149	iv.		——— <i>præ'cox</i> , <i>Jord.</i>	1707	32	xi.
PEUCEDANUM				——— <i>pratens'e</i> , <i>Jord.</i>	1706	32	xi.
——— OFFICINA'LE, <i>Linn.</i> ...	609	118	iv.	——— PRATEN'SE, <i>Linn.</i> 1706 & 1707	31	xi.	
——— OSTRU'THIUM, <i>Koch</i> ...	611	150	iv.	——— var. <i>nodos'um</i> , <i>Syne</i>	1707	32	xi.
——— PALUS'TRE, Mönch	610	149	iv.	——— <i>sero'tinum</i> , <i>Jord.</i>	1707	32	xi.
——— <i>Sil'vus</i> , Linn.	604	139	iv.	——— [teu'ne, Schrad.] (excluded).....	200	xi.	
<i>Peuplier blanc</i> (Fr.)	193	viii.		PHENIX'OPUS			
——— <i>grisâtre</i> (Fr.)	195	viii.		——— <i>muralis</i> , Koch	808	150	v.
——— <i>noir</i> (Fr.).....	199	viii.		PHRAGMI'TIS			
——— <i>tremble</i> (Fr.)	197	viii.		——— COMMUNIS, <i>Trin.</i>	1727	58	xi.

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
PHRAGMITIS				Pink, Cheddar	193	48	ii.
— communis, var. nigricans,				— Childing	196	52	ii.
<i>Gr. & Godr.</i>	58	xi.		— Clove	194	49	ii.
— var. repens, <i>Mey.</i> ...	58	xi.		— Common	195	51	ii.
— var. vulgaris, <i>Gr. &</i>				— Deptford	191	46	ii.
<i>Godr.</i>	1727	58	xi.	— Maideu	192	47	ii.
— Meadow				— Meadow	212	71	ii.
— Mountain				— Proliferous	193	48	ii.
— Proliferous				— Proliferous	196	52	ii.
PHYLLOD'OCCE				PINUS			
— <i>carulea</i> , Bab.	886	34	vi.	— <i>maritima</i> , Lam.	1381	270	viii.
— <i>taxifolia</i> , Salisb.	886	34	vi.	— PINAS'TER, <i>Ait.</i>	1381	270	viii.
— [Alkeken'gi, <i>Linn.</i>] (excluded)	108	vi.		— [Pi'nea, <i>Linn.</i>] (excluded)	284	viii.	
— [Alkeken'gi, <i>Linn.</i>] (excluded)	108	vi.		— SYLVES'TRIS, <i>Linn.</i> ...	1380	264	viii.
PHYSOSPERMUM				Pipewort	1546	2	x.
— <i>aquilegifolium</i> , Koch	630	176	iv.	<i>Pissenlit officinal</i> (Fr.)	144	v	
— CORNUBIEN'SE, <i>DC.</i> ...	630	176	iv.	PI'SUM			
— <i>arvalis</i> , Jord.	136	v.		— <i>maritimum</i> , Linn.	405	109	iii.
— <i>echio'ides</i> , Linn.	797	137	v.	<i>Pivoine coralline</i> (Fr.)	69	i.	
— HIERACIOIDES, <i>Linn.</i>	796	136	v.	PLANTA'GO			
— Jord.	796	136	v.	— [alpi'na, <i>Linn.</i>] (excluded)	175	vii.	
— var. arvalis, <i>Syme</i> ...	136	v.		— [arena'ria, <i>Linn.</i>] (excluded).....	175	vii.	
— stricta, <i>Jord.</i> (excluded)	217	v.		— [argen'tea, <i>Linn.</i>] (excluded) ...	175	vii.	
<i>Pied d'alouette</i> (Fr.)	63	i.		— CORONOPUS, <i>Linn.</i> ...	1168	173	vii.
— <i>de griffon</i> (Fr.)	59	i.		— <i>intermedia</i> , Gilb.	167	vii.	
Piert, Parsley	422	137	iii.	— LANCEOLA'TA, <i>Linn.</i>			
<i>Pigamon</i> (Fr.).....	4	i.		1164 & 1165	170	vii.	
Pilewort	39	49	i.	— var. ma'jor, <i>Syme</i> ...	171	vii.	
<i>Pillentragende Nessel</i> (Ger.).....	130	viii.		— var. Timba'li, <i>Syme</i> ... 1165	171	vii.	
— <i>Segge</i> (Ger.)	127	x.		— var. vulga'ris, <i>Syme</i> ... 1164	170	vii.	
Pillwort	125	2	xii.	— ma'jor, Gren. & Godr.	1162	167	vii.
PILULARIA				— MA'JOR, <i>Linn.</i>	1162	167	vii.
— GLOBULIF'ERA, <i>Linn.</i> 1825	2	xii.		— var. interme'dia, <i>Dene</i>	167	vii.	
Pimpernel, Bastard	1149	154	vii.	— MARIT'IMA, <i>Linn.</i> 1166 & 1167	172	vii.	
— Blue	1147	152	vii.	— var. hirsu'ta, <i>Syme</i> ... 1167	172	vii.	
— Bog	1148	153	vii.	— var. latifo'lia, <i>Syme</i> ... 1166	172	vii.	
— Scarlet...1146 var. β , 1147	151	vii.		— var. linea'ris, <i>Syme</i> ...	172	vii.	
— Yellow	1145	150	vii.	— ME'DIA, <i>Linn.</i>	1163	169	vii.
PIMPINELLA				— [Psy'l'ium, <i>Linn.</i>] (excluded) ...	175	vii.	
— dio'ca, Linn.....	579	107	iv.	— [Serpenti'na, <i>Vill.</i>] (excluded) ...	175	vii.	
— MAG'NA, <i>Linn.</i>	586	116	iv.	— <i>Timba'li</i> , Jord.	1165	171	vii.
— SAXIFRAGA, <i>Linn.</i>	585	115	iv.	Plantain, Buck's-horn	1168	174	vii.
<i>Pimpinelle sanguisorbe</i> (Fr.) ...	134	iii.		— Greater	1162	168	vii.
<i>Pin maritime</i> (Fr.).....	271	viii.		— Hoary	1163	170	vii.
— <i>sauvage</i> (Fr.)	265	viii.		— Sea.....1166, var. γ , 1167	173	vii.	
Pine, Cluster	1381	271	viii.	— Shore-weed	175	vii.	
— Ground	1090	80	vii.	<i>Plantain à larges feuilles</i> (Fr.)... ..	168	vii.	
PINGUIC'ULA				— <i>corne de cerf</i> (Fr.)	174	vii.	
— ALPINA, <i>Linn.</i>	1123	124	vii.	— lance'olé (Fr.)	171	vii.	
— GRANDIFLO'RA, <i>Lam.</i> 1122	124	vii.		— <i>maritime</i> (Fr.).....	173	vii.	
— LUSITAN'ICA, <i>Linn.</i> ...	1124	125	vii.	— <i>moyen</i> (Fr.).....	170	vii.	
— VULGAR'IS, <i>Linn.</i> ...	1121	123	vii.	PLATAN'THERA			
— var. Benth.	1122	124	vii.	— <i>albida</i> , Lindl.	1461	103	ix.
— <i>albida</i> , Lindl.	1461	103	ix.	— <i>bifolia</i> , Lindl. ... 1463 & 1464	105	ix.	
— <i>bifolia</i> , Lindl. ... 1463 & 1464	105	ix.		— Reich.	1464	106	ix.
— Reich.	1464	106	ix.	— <i>chlorantha</i> , Reich.	1463	107	ix.
— <i>chlorantha</i> , Reich.	1463	107	ix.	— <i>montana</i> , Reich. fil.....	1463	107	ix.
— <i>montana</i> , Reich. fil.....	1463	107	ix.	— <i>solstitialis</i> , Bönn.....	1464	106	ix.
— <i>solstitialis</i> , Bönn.....	1464	106	ix.	— <i>viridis</i> , Lindl.	1462	105	ix.
— <i>viridis</i> , Lindl.	1462	105	ix.				

	PLATE	PAGE	VOL.
<i>Platterbsenartige Wicke</i> (Ger.)... ..	99	99	iii.
Ploughman's Spikenard	767	99	v.
Plum, Wild	410	118	iii.
Plume-Thistle, Creeping ...693 & 694	19	19	v.
PO'A			
— <i>airoi'des</i> , K�l.	1750	94	xi.
— ALPINA, Linn.	1762	114	xi.
— <i>angustifolia</i> , Linn.	127	xi.	
— AN'NUA, Linn.	1760	111	xi.
— <i>aquat'ica</i> , Linn.	1751	100	xi.
— Balfour'ii, Bab.	1767	121	xi.
— Parn.	1767	121	xi.
— var. <i>ambig'ua</i> , Syme	121	xi.	
— var. <i>monta'na</i> , Bab.	121	xi.	
— <i>Bor'reri</i> , Hook. & Arn. ...	1756	105	xi.
— BULBO'SA, Linn.	1761	112	xi.
— <i>c�'sia</i> , Reich.	1767	121	xi.
— Bab.	1766	119	xi.
— Sm.	1765	118	xi.
— <i>ceenis'ia</i> , All.	120	xi.	
— COMPRES'SA, Linn. ...	1770	125	xi.
— Parn.	1770	125	xi.
— var. <i>polyno'da</i> , Syme	126	xi.	
— <i>crista'ta</i> , Willd.	1746	88	xi.
— <i>decun'bens</i> , With.	1745	87	xi.
— [<i>dissitiflora</i> , R. & S.] (ex- cluded)	201	xi.	
— <i>dis'tans</i> , Linn.	1755	104	xi.
— <i>distichophyll'a</i> , Gaud.	120	xi.	
— <i>el'egans</i> , DC.	1764	116	xi.
— eu-glan'ca, Syme	1766	119	xi.
— eu-lax'a, Syme	1764	116	xi.
— <i>flexuo'sa</i> , Sm.	1764	116	xi.
— <i>flu'itans</i> , Scop.	1752 & 1753	96	xi.
— Hook. & Arn.	1752	97	xi.
— var. β , Hook. & Arn.	1753	98	xi.
— GLAUC'A, Sm.	1765-1767	118	xi.
— Sm.	1766	119	xi.
— var. α , Sm. (partly)	1767	121	xi.
— var. α , Sm. (partly)	1766	119	xi.
— var. β , Sm.	1765	118	xi.
— <i>K�h'leri</i> , DC.	129	xi.	
— <i>lax'a</i> , Auct. Plur.	1764	116	xi.
— Bab.	1763	116	xi.
— <i>H�nke</i>	1763 & 1764	115	xi.
— var. <i>mi'nor</i> , Hook. fil.	1764	116	xi.
— var. <i>virip'ara</i> , Ander.	1763	116	xi.
— <i>lobla'cea</i> , Huds.	1759	110	xi.
— <i>marit'ima</i> , Huds.	1754	102	xi.
— <i>mi'nor</i> , Bab.	1764	116	xi.
— Gaud.	117	xi.	
— <i>monta'na</i> , Parn.	121	xi.	
— NEMORA'LIS, Linn. 1768 & 1769	122	xi.	
— var. <i>angustifolia</i> , Parn.	123	xi.	
— var. <i>coarcta'ta</i> , Gaud.	123	xi.	
— var. <i>divarica'ta</i> , Syme	124	xi.	
— var. <i>glau'ca</i> , Bab. ...	124	xi.	
— Hook. fil.	1765-1767	118	xi.

PO'A

	PLATE	PAGE	VOL.
— — var. <i>glauca'n'tha</i> , Reich. ...	124	xi.	
— — var. <i>monta'na</i> , Bab.	121	xi.	
— — var. <i>Parnell'ii</i> , Hook. & Arn.	1769	124	xi.
— — var. <i>vulga'ris</i> , Gaud.	1768	123	xi.
— — var. δ , Hook. & Arn.	1766	119	xi.
— — var. ϵ , Hook. & Arn.	1767	121	xi.
— <i>Parnell'ii</i> , Bab.	1769	124	xi.
— <i>polyno'da</i> , Parn.	126	xi.	
— PRATEN'SIS, Linn. 1771 & 1772	127	xi.	
— — Sm.	1771	127	xi.
— — var. <i>angustifolia</i> , Gaud.	127	xi.	
— — var. <i>strigo'sa</i> , Gaud.	128	xi.	
— — var. <i>subc�ru'lea</i> , Sm.	1772	128	xi.
— — var. <i>vulga'ris</i> , Gaud.	1771	127	xi.
— <i>procun'bens</i> , Curt.	1757	107	xi.
— <i>rig'ida</i> , Linn.	1758	108	xi.
— <i>sca'bra</i> , Ehrh.	1773	129	xi.
— <i>stric'ta</i> , Lindb.	1763	116	xi.
— <i>subc�ru'lea</i> , Sm.	1772	128	xi.
— <i>subcompres'sa</i> , Parn.	126	xi.	
— [<i>Sudet'ica</i> , <i>H�nke</i>] (excluded) ...	201	xi.	
— <i>supi'na</i> , Schrad.	112	xi.	
— <i>sylvat'ica</i> , Poll. ...	1787 & 1788	148	xi.
— TRIVIAL'IS, Linn.	1773	129	xi.
— — var. <i>K�h'leri</i> , Syme ...	129	xi.	
— — var. <i>sca'bra</i> , Syme ...	129	xi.	
Poet's Narcissus	1504	162	ix.
<i>Poirier acerbe</i> (Fr.)	255	iii.	
— <i>commun</i> (Fr.)	252	iii.	
<i>Pois �ternel</i> (Fr.)	107	iii.	
— <i>maritime</i> (Fr.)	110	iii.	
<i>Polei</i> (Ger.)	24	vii.	
POLEMONIUM			
— C�ERULEUM, Linn.	922	82	vi.
<i>Poleybl�ttrige Gr�nke</i> (Ger.)	31	vi.	
<i>Pollich's Simse</i> (Ger.)	66	x.	
<i>Polycarpe � quatre feuilles</i> (Fr.)	134	ii.	
POLYCARPON			
— TETRAPHYL'LUM, Linn. fil.	258	133	ii.
POLYG'ALA			
— <i>ama'ra</i> , Don.	188	38	ii.
— AUSTRI'ACA, Crautz ...	189	40	ii.
— — var. <i>uligino'sa</i> , Syme	189	40	ii.
— CALCA'REA, F. Schultz	188	38	ii.
— — Lebel	36	ii.	
— <i>depres'sa</i> , Wend.	187	38	ii.
— eu-vulga'ris, Syme... 185 & 186	35	ii.	
— <i>oxypp'tera</i> , Reich.	186	36	ii.
— <i>serpylla'cea</i> , Weihe	187	38	ii.
— <i>uligino'sa</i> , Reich.	189	40	ii.
— VULGA'RI'S, Linn. ... 185-187	35	ii.	
— Benth.	185-189	40	ii.
— Koch	185 & 186	35	ii.
— Reich.	185	35	ii.

	PLATE	PAGE	VOL.
POLYG'ALA			
— <i>vulga'ris</i> , var. <i>α</i> , Bab. 185 & 186		35	ii.
— — var. <i>β</i> , Hook. & Arn. 188		38	ii.
— — var. <i>depres'sa</i> , Bab... 187		38	ii.
— — var. <i>grandiflo'ra</i> , Bab.		35	ii.
— — var. <i>oxyp'tera</i> , <i>Syme</i> ... 186		36	ii.
<i>Polygala commun</i> (Fr.)		37	ii.
— — <i>d'Autriche</i> (Fr.).....		41	ii.
POLYGONA'TUM			
— <i>interme'dium</i> , Bor.		179	ix.
— MULTIFLO'RUN, <i>All</i> ... 1513		177	ix.
— OFFICINA'LE, <i>All</i> 1512		178	ix.
— — var. <i>interme'dium</i> , <i>Syme</i>		179	ix.
— VERTICILLA'TUM, <i>All</i> . 1511		176	ix.
— <i>vulga're</i> , Bor. 1512		179	ix.
— — Desf. 1512		178	ix.
POLYG'ONUM			
— <i>agresti'num</i> , <i>Jord</i>		64	viii.
— AMPHIB'IUM, <i>Linn</i> . 1241 & 1242		77	viii.
— — var. <i>na'tans</i> , <i>Syme</i> ... 1242		viii.
— — var. <i>terres'tre</i> , <i>Syme</i> 1241		viii.
— <i>arenas'trum</i> , Bor..... 1230		65	viii.
— <i>avicula're</i> , Bor..... 1229		65	viii.
— AVICULARE, <i>Linn</i> . 1229-1231		63	viii.
— — <i>Linn</i> . Herb.....		64	viii.
— — <i>agresti'num</i> , <i>Jord</i>		64	viii.
— — <i>arenas'trum</i> , <i>Jord</i> 1230		65	viii.
— — <i>littora'le</i> , <i>Link</i>		67	viii.
— — <i>microsper'mum</i> , <i>Jord</i>		66	viii.
— — <i>ruriva'gum</i> , <i>Jord</i> 1231		67	viii.
— — <i>vulga'tum</i> , <i>Jord</i> 1229		65	viii.
— — <i>bifor'me</i> , <i>Wahl</i> 1238		74	viii.
— BISTOR'TA, <i>Linn</i> 1243		78	viii.
— CONVOL'VULUS, <i>Linn</i> . 1227		61	viii.
— — var. <i>pseudo-dumeto'-</i> <i>rum</i> , <i>Wats</i>		61	viii.
— — <i>du'vium</i> , <i>Gren. & Godr</i> 1236		73	viii.
— — DUMETO'RUM, <i>Linn</i> 1228		62	viii.
— — FAGOPY'RUM, <i>Linn</i> 1226		59	viii.
— — HYDROPIPER, <i>Linn</i> 1234		70	viii.
— — <i>lapathifo'lium</i> , <i>Auct</i> 1239		76	viii.
— — LAPATHIFOLIUM, <i>Linn</i> 1239 & 1240		75	viii.
— — var. <i>nodo'sum</i> , <i>Syme</i> 1240		76	viii.
— — <i>laz'um</i> , <i>Reich</i> 1240		76	viii.
— — <i>littora'le</i> , <i>Gren. & Godr</i> 1232		68	viii.
— — <i>Link</i>		67	viii.
— — MARIT'IMUM, <i>Linn</i> 1233		69	viii.
— — var. <i>Benth</i> 1232		68	viii.
— — <i>microsper'mum</i> , <i>Jord</i>		66	viii.
— — MINUS, <i>Huds</i> 1235		72	viii.
— — MITE, <i>Schrank</i> 1236		73	viii.
— — <i>nodo'sum</i> , <i>Pers.</i> ?		74	viii.
— — <i>Reich</i> 1240		76	viii.
— — PERSICA'RIA, <i>Linn</i> . 1237 & 1238		74	viii.

	PLATE	PAGE	VOL.
POLYG'ONUM			
— <i>Persica'ria</i> , var. <i>ela'tum</i> , <i>Gr. & Godr</i> 1238		74	viii.
— — RA'TI, <i>Bab</i> 1232		68	viii.
— — <i>Robert'i</i> , Hook. & Arn. ... 1232		68	viii.
— — <i>ruriva'gum</i> , <i>Jord</i> 1231		67	viii.
— — VIVIP'ARUM, <i>Linn</i> 1244		80	viii.
POLYPO'DIUM			
— — <i>aculea'tum</i> , <i>Huds</i> 1861		95	xii.
— — <i>æ'mulum</i> , <i>Ait</i> 1858		88	xii.
— — <i>alpes'tre</i> , <i>Bab</i> 1870		113	xii.
— — var. <i>flex'ile</i> , <i>Moore</i> ... 1871		115	xii.
— — Hoppe 1870 & 1871		112	xii.
— — var. <i>pu'mila</i> , <i>Hook. &</i> <i>Arn</i> 1870		115	xii.
— — <i>alp'num</i> , <i>Wulfen</i> 1866		104	xii.
— — <i>Arvon'icum</i> , <i>Sm</i> 1863		99	xii.
— — <i>calca'reum</i> , <i>Sm</i> 1846		48	xii.
— — <i>callip'teris</i> , <i>Ehrh</i> 1853		70	xii.
— — <i>Can'bricum</i> , <i>Linn</i>		39	xii.
— — <i>crista'tum</i> , <i>Linn</i> 1853		70	xii.
— — <i>Dryop'teris</i> , <i>Linn</i> 1845		46	xii.
— — var. <i>α</i> , <i>Ledeb</i> 1845		46	xii.
— — var. <i>calca'reum</i> , <i>Gr. &</i> <i>Godr</i> 1846		48	xii.
— — var. <i>Robertia'num</i> , <i>Ruprecht</i> 1846		48	xii.
— — <i>Filix-fe'mina</i> , <i>Linn</i> 1869		108	xii.
— — <i>Filix-mas</i> , <i>Linn</i> 1850		57	xii.
— — <i>flex'ile</i> , <i>Moore</i> 1871		115	xii.
— — <i>fonta'num</i> , <i>Linn</i> 1872		117	xii.
— — <i>frag'ile</i> , <i>Linn</i> 1864-1867		101	xii.
— — <i>fra'grans</i> , <i>Villars</i> 1851		65	xii.
— — <i>hyperbo'reum</i> , <i>Swartz</i> 1863		99	xii.
— — <i>Ilsen'se</i> , <i>Swartz</i> 1862		98	xii.
— — <i>leptophyll'um</i> , <i>Linn</i> 1843		42	xii.
— — <i>loba'tum</i> , <i>Huds</i> 1860		92	xii.
— — <i>Lonchi'tis</i> , <i>Linn</i> 1859		90	xii.
— — <i>monta'num</i> , <i>Lam</i> 1868		106	xii.
— — <i>Vogler</i> 1849		54	xii.
— — <i>multijlo'rum</i> , <i>Roth</i> 1857		82	xii.
— — <i>myrrhidifo'lium</i> , <i>Villars</i> ... 1868		106	xii.
— — <i>Oreop'teris</i> , <i>Ehrh</i> 1849		54	xii.
— — <i>palus'tre</i> , <i>Salisb</i> 1848		52	xii.
— — <i>Phegop'teris</i> , <i>Linn</i> 1847		50	xii.
— — <i>Rha'ticum</i> 'Pallas,' <i>Fries</i> 1870 & 1871		112	xii.
— — <i>re'gium</i> , <i>Linn.</i> ?..... 1866		101, 104	xii.
— — <i>rig'idum</i> , <i>Hoffm</i> 1851		65	xii.
— — <i>Robertia'num</i> , <i>Hoffm</i> 1846		48	xii.
— — "setif'erum, <i>Forsk</i> ." 1861		95	xii.
— — <i>spinulo'sum</i> , <i>Muller</i> 1855		77	xii.
— — <i>thelyp'teris</i> , <i>Linn</i> 1843		52	xii.
— — VULGARE, <i>Linn</i> 1842		38	xii.
— — var. <i>cam'bricum</i> , <i>Willd</i>		39	xii.
— — var. <i>crena'tum</i> , <i>Woll</i>		41	xii.
— — var. <i>omnilac'erum</i> , <i>Moore</i> 41		xii.	
— — var. <i>serra'tum</i> , <i>Willd</i>		39	xii.
— Polypody, Common 1842		38	xii.

	PLATE	PAGE	VOL.
Polypody, Limestone	1846	48	xii.
— Mountain	1847	50	xii.
POLYPO'GON			
— <i>Lagas'cæ</i> , R. & S.	1714	41	xi.
— LITTORALIS, Sm.	1714	41	xi.
— MONSPELIENSIS, Desf.	1713	40	xi.
POLYS'TICHUM			
— <i>abbreviatum</i> , DC.	61	xii.	
— <i>aculeatum</i> , Roth	1860	92	xii.
— <i>affi'ne</i> , Ledeb.	59	xii.	
— <i>ala'tum</i> , Moore	1861	96	xii.
— ANGULA'RE, Presl	1861	95	xii.
— — var. <i>ala'tum</i> , Moore... ..	96	xii.	
— — var. <i>grac'ile</i> , Wollast.	96	xii.	
— — var. <i>hastula'tum</i> , Kunze ...	96	xii.	
— Braun'ii, Fee.	97	xii.	
— <i>Callipteris</i> , DC.	1853	70	xii.
— <i>crista'tum</i> , Roth	1853	70	xii.
— <i>Filiz-mas</i> , Roth	1850	57	xii.
— — var. <i>abbreviatum</i> , Gren. & Godr.	1850	61	xii.
— — var. <i>grac'ile</i> , Wollaston	1861	96	xii.
— — <i>hastula'tum</i> , Kunze	1861	96	xii.
— LOBA'TUM, Presl	1860	92	xii.
— — var. <i>aculea'tum</i> , Syme	93	xii.	
— LONCHITIS, Roth	1859	90	xii.
— <i>montanum</i> , Roth	1849	54	xii.
— <i>multiflorum</i> , Roth	1857	82	xii.
— <i>Oreopteris</i> , DC.	1849	54	xii.
— <i>palus'tre</i> , Salisb.	1848	52	xii.
— <i>rig'idum</i> , DC.	1851	65	xii.
— <i>spinosum</i> , Roth	1855	77	xii.
— <i>spinulosum</i> , var. <i>dilatatum</i> , Koch.	1857	82	xii.
— — var. <i>vulga're</i> , Koch ...	1855	77	xii.
— <i>strigosum</i> , Roth	1851	65	xii.
— <i>tanacetifolium</i> , DC.	84	xii.	
— <i>Thelypteris</i> , Roth	1848	52	xii.
<i>Pomeranzenblumiges Habichtskraut</i> (Ger.)	167	v.	
Pond-Sedge, Greater	1679	176	x.
— Lesser	1678	166	x.
Pondweed, Curled	1413	44	ix.
— Fan-like	1421	53	ix.
— Fennel-leaved	1422	54	ix.
— Flat-stemmed	1418	49	ix.
— Floating	1399	27	ix.
— Grassrack-leaved... ..	1415	46	ix.
— Grassy	1417	48	ix.
— Great, var. α	1408	38	ix.
— — var. β	1409	39	ix.
— Hair-leaved	1420	52	ix.
— Lanceolate	1405	35	ix.
— Long-leaved	1410	41	ix.
— Long-stalked	1411	42	ix.
— Oblong-leaved	1400	29	ix.
— Opposite-leaved	1414	45	ix.
— Perfoliate	1412	43	ix.
— Plantain-leaved	1401	30	ix.
— Reddish	1402	31	ix.

	PLATE	PAGE	VOL.
Pondweed, Ribbon-leaved	1403	32	ix.
— — Sharp-leaved	1416	47	ix.
— — Shining	1407	37	ix.
— — Slender-leaved	1424	55	ix.
— — Small	1419	50	ix.
— — Various-leaved	1406	36	ix.
— — Willow-leaved	1404	34	ix.
Poor Man's Parmacete	152	212	i.
— — Pepper	153	213	i.
— — Rhubarb	2	4	i.
Poplar, Black	1302	199	viii.
— — Grey	1300	195	viii.
— — White	1299	193	viii.
Poppy, Common Garden	57	84	i.
— Common Red	58	88	i.
— Corn	58	88	i.
— Mongrel	62	93	i.
— Opium	57	84	i.
— Prickly-headed	61	92	i.
— Red Horn	65	97	i.
— Round Prickly-headed... ..	62	93	i.
— Sleep-bearing	57	84	i.
— Smooth-headed	60	91	i.
— Violet Horn	64	96	i.
— Welsh	63	94	i.
— White	57	84	i.
— Yellow	63	94	i.
— — Horn	66	98	i.
<i>Populage des marais</i> (Fr.)	52	i.	
POPULUS			
— <i>alba</i> , Auct. Pl.	1299	192	viii.
— AL'BA, Linn. ...	1299 & 1300	192	viii.
— — var. α , Bromf.	1299	192	viii.
— — var. β , Bromf.	1300	194	viii.
— <i>Bachhof'jii</i> , Wierzb.	194	viii.	
— [<i>balsamifera</i> , Linn.] (excluded) ..	262	viii.	
— [<i>can'dicans</i> , Ait.] (excluded) ...	262	viii.	
— <i>canes'cens</i> , Reich	196	viii.	
— — Sm.	1300	194	viii.
— [<i>dilatata</i> , Ait.] (excluded)	261	viii.	
— eu-al'ba	1299	192	viii.
— <i>hyb'rida</i> , M. B.	1300	194	viii.
— [<i>monilif'era</i> , Ait.] (excluded)	262	viii.	
— NI'GRA, Linn.	1302	198	viii.
— TREMU'LA, Linn.	1301	196	viii.
— — var. <i>glabra</i> , Syme ...	196	viii.	
— — var. <i>villosa</i> , Syme ...	196	viii.	
— <i>villosa</i> , Lange	196	viii.	
<i>Porcelle à longues racines</i> (Fr.)	130	v.	
— — <i>glabre</i> (Fr.)	129	v.	
— — <i>tachée</i> (Fr.)	130	v.	
Portland Spurge	1264	111	viii.
<i>Portulakartige Keilmelde</i> (Ger.)	37	viii.	
POTAMOGE'TON			
— <i>acuminatus</i> , Schum.	38	ix.	
— ACUTIFOLIUS, Link... ..	1416	46	ix.
— <i>alpinus</i> , Balb.	1402	30	ix.
— <i>coloratus</i> , Wallr.	1401	29	ix.
— <i>compressus</i> , Fries.	1415	45	ix.

	PLATE	PAGE	VOL.
POTAMOGETON			
— <i>compressus</i> , Sm.	1418	48	ix.
— <i>cornutum</i> , Presl	38		ix.
— CRISPUS , L.	1413	43	ix.
— <i>cuspidatus</i> , Sm.	1415	45	ix.
— <i>decipiens</i> , Nolte	1409	39	ix.
— DENSUS , L.	1414	44	ix.
— <i>eu-pectinata</i> , Syme 1422 & 1423	53		ix.
— FILIFORMIS , Nolte ...	1424	55	ix.
— <i>flabella'tus</i> , Bab.	1421	53	ix.
— [flu'tians, Roth] (excluded)	63		ix.
— Sm.	1402	30	ix.
— [grad'ilis, Fries] (excluded),	64		ix.
— <i>gramin'cus</i> , Fries	1406	35	ix.
— Sm.	1417	47	ix.
HETEROPHYLLUS ,			
— Schreb.	1406	35	ix.
— <i>Horneman'ni</i> , Meyer	1401	29	ix.
— <i>Kirk'ii</i> , Syme	1403	31	ix.
— <i>lanceola'tus</i> , Reich.	1404	33	ix.
— LANCEOLA'TUS , Sm.	1405	34	ix.
— LONCHITIS , (?) Tuck ...	1404	33	ix.
— LONGIFOLIUS , Gay ...	1410	40	ix.
— <i>lu'cens</i> , Auct. Pl.	1408	38	ix.
— LU'CENS , Linn. ... 1408 & 1409	38		ix.
— var. <i>acumina'tus</i> ,			
— Syme.	38		ix.
— var. <i>decipiens</i> , Syme	39		ix.
— <i>macrophyllus</i> , Wolfg.	1410	40	ix.
— <i>marin'us</i> , Linn.	1424	55	ix.
— <i>marin'us</i> , Huds.	1423	54	ix.
— <i>monogynus</i> , Gay	1420	51	ix.
— MUCRONA'TUS , Schrad. 1418	48		ix.
— NA'TANS , Auct.	1399	26	ix.
— <i>nigres'cens</i> , (?) Fr.	1405	34 & 43	ix.
— NITENS , Web.	1407	36	ix.
— <i>oblongus</i> , Viv.	1400	27	ix.
OBTUSIFOLIUS , M. &			
— K.	1417	47	ix.
— <i>Oe'deri</i> , Meyer	1418	48	ix.
— <i>pectina'tus</i> , Bab.	1422	53	ix.
— PECTINA'TUS , L. 1821-1823	52		ix.
— var. <i>α</i> , Hook. & Arn. 1422	53		ix.
— var. <i>β</i> , Hook. & Arn. 1421	53		ix.
— var. <i>dichot'omus</i> ,			
— Wallr.	1421	53	ix.
— var. <i>scopa'rius</i> , Wallr. 1423	54		ix.
— PERFOLIA'TUS , L.	1412	42	ix.
— PLANTAGIN'EUS , Duer. 1401	29		ix.
POLYGONIFOLIUS ,			
— Pourr.	1400	27	ix.
— var. <i>ericeto'rum</i> , Syme	28		ix.
— var. <i>pseudo-flu'tians</i> ,			
— Syme.	28		ix.
— PRÆLONGUS , Wulf. ...	1411	41	ix.
— PUSILLUS , L.	1419	49	ix.
— <i>pusill'us</i> , var. <i>ma'jor</i> ,			
— Fries.	1418	48	ix.
— var. <i>tenuis'simus</i> ,			
— Fries	50		ix.

	PLATE	PAGE	VOL.
POTAMOGETON			
— RUFES'CENS , Schrad. ...	1402	30	ix.
— — var. <i>homophyllus</i> ,			
— Syme.	31		ix.
— <i>salicifo'lius</i> , (?) Wolfg.	1404	33	ix.
— <i>serra'tus</i> , Huds.	44		ix.
SPARGANIFOLIUS ,			
— Bab.	1403	31	ix.
— — Bab. (ex parte)	1404	33	ix.
— — <i>Lästad</i>	32		ix.
— TRICHOIDES , Cham. ...	1420	51	ix.
— <i>tubercula'tus</i> , Ten. & Guss. 1420	51		ix.
— <i>Vaillan'tii</i> , R. & S.	1421	53	ix.
— <i>zoster'a'ceus</i> , Bab. (<i>olim</i>) ...	1421	53	ix.
ZOSTERIFOLIUS ,			
— Schum.	1415	45	ix.
<i>Potamo'to' foliis acuminées</i>			
— (Fr.)	47		ix.
<i>capillaires</i>			
— (Fr.)	52		ix.
<i>obtusés</i> (Fr.)			
— <i>crépu</i> (Fr.)	44		ix.
— <i>en dents de peigne</i> (Fr.)	54		ix.
— <i>flexueuse</i> (Fr.)	42		ix.
— <i>flu'et</i> (Fr.)	51		ix.
— <i>luisant</i> (Fr.)	40		ix.
— <i>nageant</i> (Fr.)	27		ix.
— <i>perfolié</i> (Fr.)	43		ix.
— <i>plantain</i> (Fr.)	30		ix.
— <i>rousâtre</i> (Fr.)	31		ix.
— <i>serré</i> (Fr.)	45		ix.
POTENTILLA			
— [al'ba, Linn.] (excluded)	260	iii.	
— ALPES'TRIS , Hall. fil. ...	429	145	iii.
— ANSERINA , Linn.	433	149	iii.
— <i>au'rea</i> , Smith	429	145	iii.
— ARGENTEA , Linn.	435	151	iii.
— COMARUM , Nestl.	437	153	iii.
— <i>eu-Tormentilla</i> , Syme.	430	146	iii.
FRAGARIAS'TRUM ,			
— Ehrh.	427	143	iii.
— FRUTICOSA , Linn.	436	152	iii.
— [interme'dia, Nest.] (ex-			
— cluded)	260	iii.	
— <i>mix'ta</i> , Nolte	148	iii.	
— [opa'ca, Sm.] (excluded) ...	260	iii.	
— <i>palus'tris</i> , Scop.	437	153	iii.
— <i>procumbens</i> , Sibth.	431	147	iii.
— REP'TANS , Linn.	432	148	iii.
— RUPESTRIS , Linn.	434	150	iii.
— <i>salisburgen'sis</i> , Hänke	429	145	iii.
— SIBBAL'DI , Hall f. (by			
— error P. Sibbaldia)	426	142	iii.
— <i>ster'ilis</i> , Garcke.	427	143	iii.
— <i>sylves'tris</i> , Neck.	430	146	iii.
TORMENTILLA , Schenk.			
— 430 & 431	146	iii.	
— Sibth.	430	146	iii.
— var. <i>α</i> , Hook. & Arn. 430	146	iii.	
— var. <i>β</i> , Hook. & Arn. 431	147	iii.	

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
POTENTILLA				PRIMULA			
— [tridentata, Sm.] (excluded).....	260	iii.		— <i>ve'ris</i> , var. <i>ela'tior</i> , Linn....	1131	135	vii.
— VER'NA, Linn.	428	144	iii.	— — var. <i>officina'lis</i> , Linn.	1130	133	vii.
— var. Benth.	429	145	iii.	— VULGAR'IS, Huds.	1129	131	vii.
<i>Potentille alpe'stre</i> (Fr.).....	145	iii.		— — var. <i>caules'cens</i> , Bab.	1132	136	vii.
— <i>argentée</i> (Fr.).....	152	iii.		— — var. <i>variabilis</i> , Bab.	1132	136	vii.
— <i>couchée</i> (Fr.)	148	iii.		Privet, Common.....	904	60	vi.
— <i>des rochers</i> (Fr.)	151	iii.		— Hawk-moth	61	vi.	
— <i>du printemps</i> (Fr.) ...	145	iii.		PRUNELLA			
— <i>fraisier</i> (Fr.).....	144	iii.		— VULGAR'IS, Linn.	1059	46	vii.
— <i>ligneuse</i> (Fr.).....	152	iii.		<i>Prunier à grappes</i> (Fr.).....	124	iii.	
POTERIUM				— <i>cerise</i> (Fr.)	123	iii.	
— <i>dictyocar'pum</i> , Spach	419	133	iii.	— <i>domestique</i> (Fr.)	118	iii.	
— Magno'lii, Spach	135	iii.		— <i>épineux</i> (Fr.)	115	iii.	
— MURICATUM, Spach ...	420	134	iii.	— <i>sauvage</i> (Fr.)	117	iii.	
— var. <i>platylo'phium</i> , Syme.....	135	iii.		PRUNUS			
— var. <i>stenolo'phium</i> , Syme.....	135	iii.		— A'VIUM, Linn.	411	119	iii.
— <i>platylo'phium</i> , Jord.....	420	135	iii.	— CER'ASUS, Linn.	412	122	iii.
— <i>polyg'amum</i> ? W. & K.....	420	134	iii.	— — var. <i>A'vium</i> , Benth....	411	119	iii.
— SANGUISOR'BA, Linn.	419	133	iii.	— COMMUN'IS, Huds....	408-410	114	iii.
— var. <i>murica'tum</i> , Benth.	420	134	iii.	— — var. <i>domes'tica</i> , Bab.	410	118	iii.
— <i>stenolo'phium</i> , Jord.	420	135	iii.	— — var. <i>insitit'ia</i> , Bab. ...	409	117	iii.
<i>Preisselbeere</i> (Ger.)	23	vi.		— — var. <i>spino'sa</i> , Bab. ...	408	114	iii.
PRENANTHES				— <i>domes'tica</i> , Linn.	410	118	iii.
— <i>mura'lis</i> , Linn.	808	150	v.	— <i>insitit'ia</i> , Linn.	409	117	iii.
— [purpu'rea, Linn.] (ex- cluded).....	217	v.		— PA'DUS, Linn.	413	123	iii.
<i>Primevère du printemps</i> (Fr.) ...	132, 134	vii.		— <i>spino'sa</i> , Linn.	408	114	iii.
— <i>farineuse</i> (Fr.).....	138	vii.		— — var. <i>coë'tanea</i> , Syme	115	iii.	
— <i>inodore</i> (Fr.).....	135	vii.		PSAMMA			
Prim-print	904	60	vi.	— ARENA'RIA, R. & S. ...	1722	51	xi.
Primrose, Birdseye.....	1134	138	vii.	— [Bal'tica, R. & S.] (ex- cluded).....	200	xi.	
— Common.....	1129	132	vii.	— <i>littora'lis</i> , P. de B.	1722	51	xi.
— Common Evening.....	508	24	iv.	PSEUDATHYR'UM			
— Scottish Birdseye.....	1135	139	vii.	— <i>alpe'stre</i> , Newm.	1870	113	xii.
— Sweet-scented Evening	509	26	iv.	— <i>jeu'ile</i> , Newm.	1871	115	xii.
PRIMULA				PTARMICA			
— <i>acaulis</i> , Jacq.	1129	131	vii.	— <i>vulgar'is</i> , DC.	730	59	v.
— <i>brevisty'la</i> , DC.	1132	136	vii.	PTERIS			
— <i>ela'tior</i> , Auct. Angl.....	1132	136	vii.	— AQUIL'INA, Linn.....	1886	145	xii.
— ELA'TIOR, Jacq.	1131	135	vii.	— — var. <i>integer'rima</i> , Moore	146	xii.	
— FARINO'SA, Linn.	1134	138	vii.	— <i>cris'pa</i> , Linn.....	1844	44	xii.
— var. Duby	1135	138	vii.	PUCCELL'IA			
— <i>grandilo'ra</i> , Lam.	1129	131	vii.	— <i>dis'tans</i> , Parl.	1755	104	xi.
— <i>intrica'ta</i> , Gren. & Godr.	1132	136	vii.	— <i>marit'ima</i> , Parl.	1754	102	xi.
— OFFICINA'LIS, Jacq. ...	1130	133	vii.	PULEGIUM			
— officina'li-vulgar'is, Syme 1132 & 1133	136	vii.		— <i>vulgar'e</i> , Mill.	1041 & 1042	23	vii.
— SCOT'ICA, Hook.	1135	138	vii.	PULICARIA			
— <i>sylves'tris</i> , Scop.	1129	131	vii.	— <i>dysenter'ica</i> , Gärtn.	770	102	v.
— <i>Thomasi'nii</i> , Gren. & Godr.	1132	136	vii.	— <i>vulgar'is</i> , Gärtn.	771	103	v.
— <i>variabilis</i> , Goupil	1132	136	vii.	<i>Pulmonaire à feuilles étroites</i> (Fr.).....	92	vii.	
— <i>ve'ris</i> , Huds.	1130	133	vii.	— <i>officinale</i> (Fr.)	93	vii.	
— var. <i>a</i> , Benth.	1129	131	vii.	PULMONARIA			
— var. <i>b</i> , Benth.	1130	133	vii.	— ANGUSTIFO'LIA, Linn.	1097	91	vii.
— var. <i>acaulis</i> , Linn....	1129	131	vii.	— <i>azu'rea</i> , Bess.	1097	91	vii.

	PLATE	PAGE	VOL.
PULMONARIA			
— <i>maritima</i> , Linn.	1099	93	vii.
— OFFICINALIS , Linn. ...	1098	92	vii.
— <i>tuberosa</i> , Schrank	92	vii.	
PULSATILLA			
— <i>virgaris</i> , Mill.	9	10	i.
<i>Punktirter Friedlos</i> (Ger.)	147	vii.	
<i>Purgig Buckthoru</i>	318	227	ii.
— <i>Flax</i>	289	181	ii.
<i>Purgir-Lein</i> (Ger.)	181	ii.	
<i>Purpurblauer Steinsame</i> (Ger.)	95	vii.	
<i>Purpurrothe Fetthenne</i> (Ger.) ...	50	iv.	
— <i>Taubnessel</i> (Ger.) ...	73	vii.	
<i>Purpurrothes Knabenkraut</i> (Ger.)	94	ix.	
<i>Purpur Weide</i> (Ger.)	219	viii.	
<i>Purslane</i> , Sea	239	106	ii.
—	1208	37	viii.
— <i>Water-</i>	493	5	iv.
<i>Pyramidenförmige Hundswurz</i> (Ger.)	92	ix.	
<i>Pyramidenförmiger Günsel</i> (Ger.)	79	vii.	
<i>Pyrenäischer Kranichschnabel</i> (Ger.)	197	ii.	
PYRETHRUM			
— <i>inodorum</i> , Sm.	717 & 718	46	v.
— [<i>macrophyllum</i> , Willd.] (excluded)	216	v.	
— <i>maritimum</i> , Sm.	718	46	v.
— <i>Parthenium</i> , Sm.	715	43	v.
PYROLA			
— <i>maritima</i> , Ken.	896	47	vi.
— MEDIA , Sw.	897	48	vi.
— MINOR , Linn.	898	49	vi.
— <i>rosea</i> , Sm.	898	49	vi.
— ROTUNDIFOLIA , Linn. 895 & 896	46	vi.	
— — <i>var. arena'ria</i> , Koch. ...	896	47	vi.
— — <i>var. bracteata</i> , Hook. & Arn.	896	47	vi.
— SECUNDA , Linn.	899	50	vi.
— UNIFLORA , Linn.	900	51	vi.
<i>Pyrole à feuilles rondes</i> (Fr.)	48	vi.	
— <i>à style court</i> (Fr.)	50	vi.	
— <i>uniflore</i> (Fr.)	52	vi.	
— <i>unilatéral</i> (Fr.)	51	vi.	
PYRUS			
— <i>acerba</i> , DC.	489	255	iii.
— <i>Ach'ras</i> , Boreau	488 (Fig. 2)	252	ii.
— ARIA , Hook.	482-485	242	iii.
— — Ehrh. (in part)	482	243	iii.
— — Ehrh. (in part)	483	244	iii.
— — <i>var. β</i> , Hook. & Arn.	485	247	iii.
— — <i>var. γ</i> , Hook. & Arn.	484	245	iii.
— AUCUPARIA , Gärtn. ...	486	248	iii.
— COMMUNIS , Linn.	488	251	iii.
— — <i>pyras'ter</i> , Linn.	488	251	iii.
— DOMESTICA , Sm.	487	250	iii.
— <i>eu-A'ria</i> , Syme	482	243	iii.
— <i>fen'nica</i> , Bab.	485	247	iii.

PYRUS

	PLATE	PAGE	VOL.
— <i>interme'dia</i> , "Ehrh." Lindl.	484	245	iii.
— MA'LUS , Linn. ...	489 & 490	255	iii.
— — DC.	490	256	iii.
— — <i>var. acer'ba</i> , Bab. ...	489	255	iii.
— — <i>var. ad'ida</i> , Wallr. ...	489	255	iii.
— — <i>var. glabra</i> , Koch ...	489	255	iii.
— — <i>var. mi'tis</i> , Wallr. ...	490	256	iii.
— — <i>var. sat'iva</i> , Leight. ...	490	256	iii.
— — <i>var. sylvestris</i> , Leight.	489	255	iii.
— — <i>var. tormentosa</i> , Koch	490	256	iii.
— <i>mi'tis</i> , Syme	490	256	iii.
— <i>pinatifida</i> , "Ehrh." Lindl.	485	247	iii.
— [—"Ehrh." Smith, in part] (excluded)	247 } 261 }	iii.	
— <i>Pyras'ter</i> , Boreau ...	488 (Fig. 1)	251	iii.
— <i>rupicola</i> , Syme	483	244	iii.
— <i>scan'dica</i> , Bab.	484	245	iii.
— [<i>semipinna'ta</i> , Roth] (ex- cluded)	261	iii.	
— TORMINA'LIS , Ehrh. ...	481	241	iii.
<i>Pyrus pommier</i> (Fr.)	256	iii.	
<i>Quaking-grass</i> , Common	1774	131	xi.
— — Small	1775	132	xi.
<i>Queen-of-the-Meadow</i>	415	127	iii.
<i>Queen's Gilliflower</i>	103	151	i.
<i>Quellenranke</i> (Ger.)	478	i.	
QUEL'TIA			
— <i>foetida</i> , Herb.	1502	160	ix.
— <i>incomparabilis</i> , Haw.	1502	160	ix.
<i>Quendel Seide</i> (Ger.)	91, 93	vi.	
<i>Quendelblättriges Sandkraut</i> (Ger.) ...	103	ii.	
<i>Querblättrige Weisswurz</i> (Ger.)	177	ix.	
QUERCUS			
— [C'er'ris, Linn.] (excluded)	261	viii.	
— <i>interme'dia</i> , Don	157	viii.	
— <i>pedunculata</i> , Willd.	1288	145	viii.
— RO'BUR , Linn.	1288 & 1289	145	viii.
— — Sm.	1288	145	viii.
— — Willd.	1289	157	viii.
— — <i>var. sessiliflo'ra</i> , Hook. & Arn.	1289	157	viii.
— <i>sessiliflo'ra</i> , Salish.	1289	157	viii.
— — Don	1289	157	viii.
<i>Querblüthiges Tausendblate</i> (Ger.) ...	32	iv.	
<i>Queue de souris</i> (Fr.)	15	i.	
<i>Quillwort</i> , Lake 1826, 1826*, & 1827	4, 5	xii.	
— — Prickly-spored	1827	7	xii.
— — Spiny	1828	8	xi
<i>Quintefeulle</i> (Fr.)	149	iii.	
<i>Quirblättrige</i> (Ger.)	110	iv.	
<i>Quirblüthige Knospellume</i> (Ger.) ...	181	vii.	

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
Rabbit's-mouth	953	131	vi.	RANUNCULUS			
RADIOLA				— eu-a'cris, <i>Syme</i>	33	38	i.
— <i>linoi'des</i> , Gmel.	288	179	ii.	— eu-Fica'ria, <i>Syme</i>	39	47	i.
— MILLEGRA'NA, <i>Sm.</i> ...	288	179	ii.	— eu-Flam'mula, <i>Syme</i>	29	33	i.
<i>Radiote faux-lin</i> (Fr.)	180		ii.	— FICA'RIA, <i>Linn.</i>	39	47	i.
<i>Radis sauvage</i> (Fr.)	121		i.	— — Jord.	39	48	i.
Radish, Great Water.....	128	182	i.	— — F. Schultz	39	47	i.
— — Sea	82	123	i.	— — var. <i>calthæfolius</i> , Guss. ...	49		i.
— — Small Jagged Water... ..	127	181	i.	— — var. <i>diver'gens</i> , Schultz ..	39	48	i.
— — Wild.....	81	121	i.	— — var. <i>β. incun'bens</i> , F. Schultz	48		i.
Ragged Robin	212	71	ii	— — ficariaefor'mis, <i>F. Schultz.</i>	49		i.
Ragwort, Broad-leaved.....	757	88	v.	— — ficariaefor'des, <i>Bor. & Chant</i>	49		i.
— — Common	755	85	v.	— — <i>filifor'mis</i> , Mich.	30	34	i.
— — Great Fen	758	88	v.	— — FLAMMULA, <i>Sm.</i> ...	21 & 30	33	i.
— — Hoary	754	84	v.	— — — Linn. et Auct. Plur.	29	33	i.
— — Inelegant	753	83	v.	— — — <i>β. Anct. Plur.</i>	30	34	i.
— — Marsh	756	87	v.	— — — <i>δ</i> , <i>Sm.</i>	30	34	i.
<i>Rainfarn</i> (Ger.)	45		v.	— — var. <i>pseudo-rep'tans</i> , <i>Syme</i>	34		i.
<i>Raiponce en épi</i> (Fr.)	7		vi.	— — var. <i>suberec'tus</i> , <i>Syme</i>	34		i.
— — <i>orbiculaire</i> (Fr.)	6		vi.	— — <i>floribun'dus</i> , <i>Bab.</i>	18	20	i.
Rampion Bell-flower.....	872	15	vi.	— — FLU'ITANS, <i>Lam.</i>	16	17	i.
— — Round-headed	864	6	vi.	— — var. <i>Bach'ii</i> , <i>Syme</i> ...	18		i.
— — Spiked	865	7	vi.	— — var. <i>peucedanifo'lius</i> , <i>Syme</i>	16	18	i.
Ramsons	1540	219	ix.	— — <i>fluxia'ntis</i> , "Wigg.," Wall ..	16	17	i.
<i>Ranke</i> (Ger.)	143		i.	— — <i>Friesia'nus</i> , <i>Jordan</i>	39		i.
<i>Rankenblättriger Baldreis</i> (Ger.).....	84		v.	— — <i>Godro'nii</i> , <i>F. Schultz</i>	24		i.
RANUNCULUS				— [grami'neus, <i>Linn.</i>], ex- cluded	70		i.
— A'CRIS, <i>Linn.</i>	33	37	i.	— — HEDERA'CEUS, <i>Linn.</i>	26	29	i.
— — Jord.	33	38	i.	— — heterophyllus, <i>Bab.</i>	19	21	i.
— — Reich.	38		i.	— — HIRSU'TUS, <i>Curt.</i>	36	43	i.
— — var. <i>rec'tus</i> , <i>Syme</i> ..	38		i.	— — LENORMAN'DI, <i>Schaltz</i> ..	25	28	i.
— — var. <i>Steve'ni</i> , <i>Syme</i>	38		i.	— — LIN'GUA, <i>Linn.</i>	31	35	i.
— — var. <i>vulga'tus</i> , <i>Syme</i>	38		i.	— — mari'nus, <i>Fries.</i>	26		i.
— — [alpes'tris, <i>Linn.</i>], excluded.....	70		i.	— — OPHIOGLOSSIFO'LIOUS, <i>Vill.</i>	28	32	i.
— — AQUAT'ILIS, <i>Linn.</i>	17-21	19	i.	— — PARVIFLO'RUS, <i>Linn.</i> ..	37	45	i.
— — Auct. Plur.	17 & 18	19	i.	— — <i>parvulus</i> , <i>L.</i>	44		i.
— — Benth.	15-24	29	i.	— — <i>pelta'tus</i> , <i>Fries.</i>	17 & 18	19	i.
— — <i>γ</i> , <i>Sm.</i>	15	16	i.	— — Bab.	17	19	i.
— — <i>δ</i> , <i>Sm.</i>	16	17	i.	— — "Schränk," Boreau ..	19	21	i.
— — ARVEN'SIS, <i>Linn.</i>	38	46	i.	— — var. <i>floribun'dus</i> , <i>Syme</i>	18	20	i.
— — var. <i>iner'mis</i> , <i>Gr. &</i> <i>Godr.</i>	46		i.	— — var. <i>pseudo-flu'itans</i> , <i>Syme</i>	20		i.
— — AUR'COMUS, <i>Linn.</i>	32	36	i.	— — var. <i>vulga'tris</i> , <i>Syme</i> ..	17	19	i.
— — <i>Bach'ii</i> , <i>Wirtg.</i>	18		i.	— — <i>peucedanifo'lius</i> , <i>Desf.</i>	16	18	i.
— — BAUDO'TII, <i>Godr.</i> ...	22 & 23	24	i.	— — <i>Philono'tis</i> , <i>Ehrh.</i>	36	43	i.
— — Gr. & <i>Godr.</i>	22	25	i.	— — <i>pseudo-flu'itans</i> , <i>Newbould</i>	20		i.
— — var. <i>confu'sus</i> , <i>Syme</i> ..	23	25	i.	— — <i>ra'dians</i> , <i>Rev.</i>	24		i.
— — var. <i>vulga'tris</i> , <i>Syme</i> ..	22	25	i.	— — <i>rec'tus</i> , "Bauh." Boreau ...	38		i.
— — Borœa'nus, <i>Jord.</i>	39		i.	— — REP'ENS, <i>Linn.</i>	34	40	i.
— — BULBO'SUS, <i>Linn.</i>	35	41	i.	— — rep'tans, <i>Linn.</i>	30	34	i.
— — <i>cæno'sus</i> , <i>Gr. & Godr. et</i> <i>Auct. Plur.</i>	25	28	i.	— — Thuill.	34		i.
— — Guss.	26	29	i.	— — <i>sar'dous</i> , <i>Crantz</i>	36	43	i.
— — <i>Caleya'nus</i> , <i>Don</i>	41		i.	— — SCELERA'TUS, <i>Linn.</i> ...	27	31	i.
— — <i>calthæfolius</i> , "Bluff."	48		i.	— — <i>stagna'tis</i> , <i>Wall.</i>	15	16	i.
— — Jord.	49		i.				
— — CIRCINA'TUS, <i>Sib.</i>	15	16	i.				
— — <i>confu'sus</i> , <i>Gr. & Godr.</i> ..	23	25	i.				
— — <i>divarica'tus</i> , <i>Schränk</i>	15	16	i.				
— — Droue'tii, <i>Schultz</i>	20	22	i.				

	PLATE	PAGE	VOL.
RANUNCULUS			
— <i>Stev'eni</i> , "Andrz.," Boreau	23	38	i.
— <i>trichophyllus</i> , <i>Chaix</i>	21	23	i.
— <i>trilobus</i> , <i>Desf.</i>	44	1	i.
— TRIPARTITUS , <i>DC.</i> ...	24	27	i.
— — var. <i>flu'itans</i> , <i>Godr.</i>	27	1	i.
— — var. <i>terres'tris</i> , <i>Godr.</i>	24	27	i.
— <i>vulga'tus</i> , <i>Jord.</i>	38	1	i.
<i>Ranunkel</i> (<i>Ger.</i>)	17	1	i.
<i>Rape</i>	88	134	i.
<i>Rapette couchée</i> (<i>Fr.</i>)	121	vii.	
RAPHANIS'TRUM			
— <i>morit'imum</i> , <i>Reich.</i>	82	122	i.
— <i>seg'etum</i> , <i>Reich.</i>	81	120	i.
RAPHANUS			
— MARITIMUS , <i>Sm.</i>	82	122	i.
— RAPHANIS'TRUM , <i>Linn.</i>	81	120	i.
<i>Rapunzel Glockenblume</i> (<i>Ger.</i>)... ..	12	15	vi.
<i>Rasenantiges Vergissmeinnicht</i>			
(<i>Ger.</i>)	98	vii.	
<i>Rasensimse</i> (<i>Ger.</i>)	56	x.	
<i>Raspberry</i>	442	161	iii.
— <i>Lees'</i>	443	162	iii.
<i>Ranche Saudistel</i> (<i>Ger.</i>)	154	v.	
<i>Rauhaarige Trespe</i> (<i>Ger.</i>).....	158	xi.	
<i>Rauhaariger Eibisch</i> (<i>Ger.</i>)	163	ii.	
<i>Rauhhaariger Schotenweiderich</i>			
(<i>Ger.</i>)	11	iv.	
<i>Rauhaarges Harthen</i> (<i>Ger.</i>).....	158	ii.	
— <i>Veilchen</i> (<i>Ger.</i>).....	18	ii.	
<i>Rauh- or Sand-Hafer</i> (<i>Ger.</i>).....	78	xi.	
<i>Rauhe Nelke</i> (<i>Ger.</i>).....	46	ii.	
<i>Rauher Igellock</i> (<i>Ger.</i>)	124	viii.	
<i>Rauschbeere</i> (<i>Ger.</i>)	24	vi.	
<i>Reed</i> , <i>Common</i>	1727	58	xi.
<i>Renoucle</i> (<i>Fr.</i>)	16-70	i.	
— <i>à feuilles de lierre</i> (<i>Fr.</i>).....	30	i.	
— <i>bulbeuse</i> (<i>Fr.</i>)	42	i.	
— <i>flammette</i> (<i>Fr.</i>)	35	i.	
— <i>scélérate</i> (<i>Fr.</i>)	32	i.	
<i>Renouée à feuilles de patience</i> (<i>Fr.</i>) ...	77	viii.	
— <i>amphibie</i> (<i>Fr.</i>)	78	viii.	
— <i>bistorte</i> (<i>Fr.</i>).....	79	viii.	
— <i>des buissons</i> (<i>Fr.</i>).....	63	viii.	
— <i>des petits oiseaux</i> (<i>Fr.</i>)	64	viii.	
— <i>flutte</i> (<i>Fr.</i>)	179	vii.	
— <i>liseron</i> (<i>Fr.</i>)	73	viii.	
— <i>maritime</i> (<i>Fr.</i>)	62	viii.	
— <i>persicaire</i> (<i>Fr.</i>).....	70	viii.	
— <i>persicaire</i> (<i>Fr.</i>).....	75	viii.	
— <i>poivre d'eau</i> (<i>Fr.</i>)	71	viii.	
— <i>sarrasine</i> (<i>Fr.</i>).....	60	viii.	
— <i>vivipare</i> (<i>Fr.</i>)	81	viii.	

	PLATE	PAGE	VOL.
RESE'DA			
— <i>unda'ta</i> , <i>Reich.</i>	163	3	ii.
<i>Réséda gaude</i> (<i>Fr.</i>).....	5	ii.	
— <i>jaune</i> (<i>Fr.</i>)	3	ii.	
— <i>sauvage</i> (<i>Fr.</i>)	3	ii.	
<i>Rest-Harrow</i> , <i>Procumbent</i>	331	18	iii.
— <i>Small Spreading</i>	332	19	iii.
— <i>Upright</i>	330	16	iii.
RHAMNUS			
— CATHARTICUS , <i>Linn.</i>	318	226	ii.
— FRAN'GULA , <i>Linn.</i>	319	228	ii.
<i>Rhinanthe à grandes fleurs</i> (<i>Fr.</i>)	182	vi.	
— <i>à petites fleurs</i> (<i>Fr.</i>)	181	vi.	
RHINAN'THUS			
— <i>angustifolius</i> , <i>Gmel.</i>	999	181	vi.
CRISTA-GAL'LI , <i>Linn.</i>			
— — <i>Sm.</i>	998 & 999	180	vi.
— <i>ma'jor</i> , <i>Ehrh.</i>	998	180	vi.
— — var. <i>ala'tus</i> , <i>Syme</i>	999	181	vi.
— — var. <i>ap'terus</i> , <i>Fries.</i>	182	vi.	
— — var. <i>gla'bra</i> , <i>F. Schultz</i>	999	181	vi.
— <i>mi'nor</i> , <i>Ehrh.</i>	998	180	vi.
— <i>Reichenbac'hii</i> , <i>Drej.</i>	182	vi.	
RHODIOLA			
— <i>ro'sea</i> , <i>Linn.</i>	525	48	iv.
<i>Rhubarb</i> , <i>Monk's</i>	1221	53	viii.
RHYNCHOSPORA			
— AL'BA , <i>Vahl</i>	1582	46	x.
— — var. <i>so'r'dida</i> , <i>Syme</i>	47	x.	
— FUS'CA , <i>Röm. & Schult.</i>	1581	45	x.
<i>Ribbon Grass</i>	1697	20	xi.
— <i>-leaved Pondweed</i>	1303	32	ix.
RIBES			
— ALP'NUM , <i>Linn.</i>	519	40	iv.
— GROSSULA'RIA , <i>Linn.</i>	511	38	iv.
— — var. <i>glandulosum</i> , <i>Syme</i>	518	38	iv.
— — var. <i>Uva-cris'pa</i> , <i>Syme</i>	518	38	iv.
— NI'GRUM , <i>Linn.</i>	523	45	iv.
— <i>petrae'um</i> , <i>Sm.</i>	521	44	iv.
— — <i>Wulfen</i>	45	iv.	
— RU'BRUM , <i>Linn.</i>	520-522	41	iv.
— — <i>Sm.</i>	520	42	iv.
— — var. <i>petrae'um</i> , <i>Auct.</i> <i>Angl.</i>	521	44	iv.
— — var. <i>sati'vum</i> , <i>Reich.</i> ...	520	42	iv.
— — var. <i>spica'tum</i> , <i>Auct.</i> <i>Angl.</i>	522	44	iv.
— — var. <i>sylves'tre</i> , <i>Bromf.</i>	44	iv.	
— — var. <i>sylves'tre</i> , <i>Reich.</i>	521 & 522	43	iv.
— <i>sati'vum</i> , <i>Syme</i>	520	42	iv.
— <i>spica'tum</i> , <i>Robson</i>	522	44	iv.
— <i>sylves'tre</i> , <i>Syme</i>	521 & 522	43	iv.
— — var. <i>Bromfieldia'num</i> , <i>Syme</i>	44	iv.	
— — var. <i>Smithia'num</i> , <i>Syme</i>	521	44	iv.

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
RIBES				ROSA			
— <i>Ura-crispa</i> , Linn.	518	38	iv.	— <i>arven'sis</i> , var. γ , Borrer ...	231	iii.	
<i>Riesen Schwingel</i> (Ger.)	156	xi.		— <i>Bake'ri</i> , <i>Déséglise</i>	473	217	iii.
<i>Rispige Segge</i> (Ger.)	91	x.		— <i>bibractea'ta</i> , <i>Bast.</i>	231	iii.	
<i>Rittersporu</i> (Ger.)	63	i.		— <i>Blondæa'na</i> , <i>Rip.</i>	216	iii.	
<i>Rivin's Knabenkraut</i> (Ger.)	95	ix.		— <i>BOR'RERI</i> , <i>Woods</i>	471	214	iii.
Rock-brakes	1844	44	xii.	— <i>bractes'cens</i> , <i>Woods</i>	472	220	iii.
Rock Cress, Alpine	113	165	i.	— var. β , <i>Woods</i>	221	iii.	
— <i>Bristol</i>	114	166	i.	— <i>cæ'sia</i> , <i>Sm.</i>	473*	218	iii.
— <i>Fringed</i>	117	167	i.	— Borrer (in part)	223	iii.	
— <i>Hairy</i>	116	167	i.	— <i>canes'cens</i> , <i>Baker.</i>	222	iii.	
— <i>Hutchinsia.</i>	151	210	i.	— <i>canina</i> , <i>Déséglise.</i>	226	iii.	
— <i>Rose</i> , <i>Bractless Spotted</i> ...	165	8	ii.	— <i>Linn.</i>	472-474	215	iii.
— <i>Brewer's Spotted</i> ...	166	8	ii.	— <i>Woods</i>	226	iii.	
— <i>Common</i>	168	11	ii.	— var. γ , <i>Woods</i>	219	iii.	
— <i>Hoary.</i>	167	10	ii.	— [<i>cinnamo'mia</i> , <i>Linn.</i>] (ex-			
— <i>White</i>	169	11	ii.	cluded)	261	iii.	
— <i>Sapphire</i>	606	143	iv.	— <i>celera'ta</i> , <i>Baker</i>	220	iii.	
— <i>Sedge</i>	1613	82	x.	— <i>coll'i'ua</i> , <i>Sm.</i>	475	230	iii.
— <i>Spleenwort</i> , <i>Smooth.</i>	1872	117	xii.	— β , <i>Woods</i>	474	225	iii.
— <i>Stone-crop</i>	806	59	iv.	— <i>cordifo'lia</i> , <i>Baker</i>	205	iii.	
— <i>White-beam</i>	483	245	iii.	— <i>coriifo'lia</i> , <i>Fries</i>	472	220	iii.
— <i>Whitlow Grass</i>	137	194	i.	— <i>corona'ta</i> , <i>Crepin</i>	465	207	iii.
Rocket Base	162	3	ii.	— <i>Crepinia'na</i> , <i>Déséglise</i>	222	iii.	
— <i>Great Water</i>	128	182	i.	— <i>CRYPTOPO'DA</i> , <i>Baker.</i>	212	iii.	
— <i>Intermediate Yellow</i> ...	123	175	i.	— [<i>Dicks'o'ni</i> , <i>Lindl.</i>] (ex-			
— <i>London</i>	99	146	i.	cluded)	261	iii.	
— <i>Purple Sea.</i>	97	118	i.	— <i>Doni'ua</i> , <i>Woods</i>	465	207	iii.
— <i>Reichenbach's Yellow.</i> ...	121	173	i.	— <i>duma'tis</i> , <i>Bechst.</i>	225	iii.	
— <i>Small-flowered Yellow</i> ...	122	174	i.	— <i>dumeto'rum</i> , " <i>Thuill.</i> " <i>Woods</i> ...	223	iii.	
— <i>Small Sand</i>	95	142	i.	— <i>Sm.</i>	471	214	iii.
— <i>Wall</i>	93	140	i.	— <i>eu-hiber'nica</i> , <i>Baker</i>	463	205	iii.
— <i>Water.</i>	126	180	i.	— <i>Forste'ri</i> , <i>Sm.</i>	474	225	iii.
— <i>Yellow</i>	120	171	i.	— <i>gl'a'bra</i> , <i>Baker</i>	205	iii.	
Roebuck-berry	440	158	iii.	— <i>grac'ilis</i> , <i>Woods</i>	207	iii.	
—	441	160	iii.	— <i>HIBER'NICA</i> , <i>Sm.</i>	463	205	iii.
RŒMERIA				— <i>inodo'ra</i> , <i>Borrer</i>	471	214	iii.
— <i>HYB'RIDA</i> , <i>DC.</i>	64	95	i.	— <i>involu'ta</i> , <i>Sm.</i>	207	iii.	
<i>Roggen Trespe</i> (Ger.)	166	xi.		— <i>JUNDZILLIA'NA</i> , <i>Besser</i>	213	iii.	
<i>Röhrige Pferdesaat</i> (Ger.)	125	iv.		— [<i>lu'cida</i> , <i>Ehrh.</i>] (excluded)	261	iii.	
<i>Roman Nettle</i>	1280 & 1281	130	viii.	— <i>lutetia'na</i> , <i>Lem.</i>	226	iii.	
<i>Römische Kamille</i> (Ger.)	54	v.		— <i>MICRAN'THA</i> , <i>Sm.</i>	469	211	iii.
ROMULE'A				— <i>mol'lis</i> , <i>Sm.</i>	466	208	iii.
— <i>Colum'næ</i> , <i>S. & M.</i>	1492	140	ix.	— <i>MOLLIS'SIMA</i> , <i>Fries</i> ...	466	208	iii.
<i>Romulee de Columna</i> (Fr.)	141	ix.		— <i>platyphyl'la</i> , <i>Rau.</i>	224	iii.	
<i>Ronce</i> (Fr.)	158	iii.		— <i>platyphylloides</i> , <i>Rip.</i>	225	iii.	
— <i>bleuâtre</i> (Fr.)	197	iii.		— [<i>pomif'era</i> , <i>Herm.</i>] (ex-			
— <i>commune</i> (Fr.)	163	iii.		cluded)	209, 261	iii.	
— <i>des rochers</i> (Fr.)	160	iii.		— <i>pruino'sa</i> , <i>Baker</i>	223	iii.	
— <i>framboisier</i> (Fr.)	161	iii.		— <i>re'pens</i> , <i>Scop.</i>	476	231	iii.
<i>Roquette</i> (Fr.)	171	i.		— <i>Robertso'ni</i> , <i>Baker</i>	207	iii.	
RORIPA				— <i>RUBEL'LA</i> , <i>Sm.</i>	462	204	iii.
— <i>amphib'ia</i> , <i>Linn.</i> , <i>Sm.</i>	128	181	i.	— <i>RUBIGNO'SA</i> , <i>Linn.</i> ...	468	210	iii.
— <i>nasturtioi'des</i> , <i>Spach</i>	127	180	i.	— <i>SABI'NI</i> (<i>Woods</i>) <i>Baker</i>	465	206	iii.
— <i>rustica'na</i> , <i>Gr. & Godr.</i> ...	129	183	i.	— <i>Woods</i>	207	iii.	
ROSA				— <i>sarmenta'cea</i> , <i>Woods</i>	225	iii.	
— <i>Andegaven'sis</i> , <i>Bast.</i>	219	iii.		— <i>scabrius'cula</i> , <i>Sm.</i>	209	iii.	
— <i>arvat'ica</i> , <i>Puget.</i>	217	iii.		— <i>SE'PIUM</i> , <i>Thuill.</i> (<i>Lindley</i>)	470	212	iii.
— <i>ARVEN'SIS</i> , <i>Huds.</i>	476	231	iii.	— <i>SPINOSIS'SIMA</i> , <i>Linn.</i>	461	203	iii.

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
ROSA				<i>Rothe Cornelle, or Hartriegel</i> (Ger.) ...	187	187	iv.
— <i>suberista'ta, Baker</i>		221	iii.	— <i>Johannisbeere</i> (Ger.)	42	42	iv.
— <i>subglobo'sa, Sm.</i>		209	iii.	— <i>Lichtnelke</i> (Ger.)	70	70	ii.
— SYSTYLA, Woods	475	230	iii.	— <i>Schuppenmie're</i> (Ger.)	129	129	ii.
— <i>tomentel'la, Lem.</i>		217	iii.	— <i>Sporubium</i> (Ger.)	234	234	iv.
— TOMENTO'SA, Sm.	467	208	iii.	— <i>Weide</i> (Ger.)	222	222	viii.
— var. γ , <i>Woods</i>		321	iii.	<i>Rother Fingerhut</i> (Ger)	127	127	vi.
— <i>uncinell'a, Bess.</i>		224	iii.	— <i>Gäns-fuss</i> (Ger).....	23	23	viii.
— <i>ur'bica, Leman</i>	474	225	iii.	— <i>Schwingel</i> (Ger).....	148	148	xi.
— <i>verticillucan'tha, Mer.?</i> ..		219	iii.	<i>Roths Zymbelkraut</i> (Ger.)	128	128	ix.
— <i>vina'cea, Baker</i>		218	iii.	<i>Rothgelber Fuchsschcuz</i> (Ger.)	24	24	xi.
— <i>villo'sa, Auct. Angl.</i>	466	208	iii.	<i>Röthliche Sommerwurz</i> (Ger.) ...	195	195	vi.
— WILSON'I, Borrer	464	206	iii.	<i>Röthliches Saunkraut</i> (Ger.)	31	31	ix.
— <i>Watso'ni, Baker</i>		221	iii.	ROTTBOEL'LIA			
<i>Rose-Bay</i>	495 & 496	10	iv.	— <i>jilifor'mis, Roth</i>	1818	189	xi.
— <i>Borrer's</i>	471	215	iii.	— <i>incurva'ta, Sm.</i>	1818	189	xi.
— <i>Common Burnet</i>	461	204	iii.	<i>Rout, Meadow</i>	41	52	i.
— <i>Guelder</i>	639	203	iv.	<i>Royal Fern</i>	1838	32	xii.
— <i>Corn</i>	58	88	i.	<i>Rubanie'r flottant</i> (Fr.)		8	ix.
— <i>Dog</i>	474	226	iii.	— <i>rameux</i> (Fr.)		6	ix.
— <i>Downy-leaved</i>	467	209	iii.	— <i>simple</i> (Fr.)		7	ix.
— <i>flowered Bramble</i>	182	182	iii.	<i>Rüben Kohl</i> (Ger)	134, 136	136	i.
— <i>Irish Burnet</i>	463	206	iii.	<i>Rübenstengelige Sommerwurz</i> (Ger.) ...	194	194	iv.
— <i>Jundzil's</i>	214	214	iii.	RU'BIA			
— <i>of Heaven</i>	212	71	ii.	— <i>PEREGR'INA, Linn.</i> ...	645	211	iv.
— <i>Red-fruited Burnet</i>	462	205	iii.	RU'BUS			
— <i>root</i>	525	49	iv.	— <i>aff'nis, W. & N.</i>	167	167	iii.
— <i>Sabine's</i>	465	207	iii.	— <i>althæifo'lius, Host.</i>	193	193	iii.
— <i>Short-pedicelled</i>	213	213	iii.	— <i>amplifica'tus, Lees</i>	178	178	iii.
— <i>Soft-leaved</i>	466	208	iii.	— <i>apicula'tus, W.?</i>	184	184	iii.
— <i>White-flowered Trailing</i> ...	576	232	iii.	— [<i>arcticus, Linn.</i>] (excluded) ..	260	260	iii.
— <i>Wild</i>	1383	31	vi.	— <i>Babingto'nii, Bell Salt.</i> ...	182	182	iii.
— <i>Willow, var. γ</i>	1321	222	viii.	— <i>Balfouria'nus, Blox</i>	192	192	iii.
— <i>Wilson's</i>	464	206	iii.	— <i>Bellar'di, W.</i>	454	191	iii.
<i>Rose de Jundzil</i> (Fr.).....		214	iii.	— <i>Bloxa'mi, Lees</i>	180	180	iii.
— <i>des haies</i> (Fr.)		212	iii.	— <i>Bor'reri, Bell Salt</i>	179	179	iii.
<i>Roseau commun</i> (Fr.).....		59	xi.	— <i>ca'sius, Linn.</i>	456	195	iii.
<i>Rosemary Wild</i>	1383	31	vi.	— var. <i>agres'tis, W. & N.</i>	195	195	iii.
<i>Rosenförmige Schmiele</i> (Ger.) ...		65	xi.	— var. <i>aqua'ticus, W. & N.</i> ...	195	195	iii.
<i>Rosenrother Schotenweiderich</i> (Ger.)...	15	15	iv.	— var. <i>his'pidus, Bab.</i>	196	196	iii.
<i>Rosenwurz</i> (Ger.)	49	49	iv.	— var. <i>interme'dius, Bab.</i>	196	196	iii.
<i>Rosier à cotonne en massue</i> (Fr.)	231	231	iii.	— var. <i>ulnifo'lius, Bab.</i>	196	196	iii.
— <i>à feuilles odorantes</i> (Fr.)	210	210	iii.	— <i>calca'tus, Blox</i>	175	175	iii.
— <i>cotonneux</i> (Fr.)	209	209	iii.	— <i>carpinifo'lius, W. & N.</i> ...	175	175	iii.
— <i>des champs</i> (Fr.).....	232	232	ii.	— <i>carpinifo'lius, Borrer</i>	449	173	iii.
— <i>églantier</i> (Fr.).....	226	226	iii.	— CHAMEMORUS, Linn.	440	158	iii.
— <i>très épineux</i> (Fr.)	204	204	iii.	— <i>Coleman'ni, Bab.</i>	174	174	iii.
— <i>velu</i> (Fr.)	208	208	iii.	— <i>cordifo'lius, W. & N.</i>	168	168	iii.
<i>Rosmarinblättrige Weide</i> (Ger.)	250	250	viii.	— <i>corylifo'lius, Sm.</i>	455	192	iii.
<i>Rosmarinblättriger Schotenweide-</i> <i>rich</i> (Ger.)		7	iv.	— var. <i>conjun'gens, Bab.</i>	193	193	iii.
<i>Rossolis à feuilles orales</i> (Fr.) ...	33	33	ii.	— var. <i>purpu'reus, Bab.</i>	193	193	iii.
— <i>rondes</i> (Fr.) ...	31	31	ii.	— <i>dis'color, W. & N.</i>	447	171	iii.
— <i>à longues feuilles</i> (Fr.)...	33	33	ii.	— <i>diversif'lius, Lind.</i>	187	187	iii.
<i>Roth Buche</i> (Ger.)	165	viii.	viii.	— <i>dumeto'rum, Blox.</i>	194	194	iii.
— <i>Klee</i> (Ger.).....	39	39	iii.	— <i>fis'sus, Lind.</i>	165	165	iii.
<i>Rothbeerige Zaunrübe</i> (Ger.).....	36	36	iv.	— <i>folio'sus, W.</i>	190	190	iii.
<i>Rothblütiger Augentrost</i> (Ger.)	175	175	vi.	— FRUTICO'SUS, Linn. 445-456	162	162	iii.
<i>Rothbrauner Kranichschuabel</i> (Ger.)...	193	193	ii.	— <i>Sm.</i>	447	171	iii.
<i>Röthe</i> (Ger.)	212	212	iv.	— <i>fusco-a'ter, W.</i>	186	186	iii.

	PLATE	PAGE	VOL.
RUMEX			
— SANGUINEUS, Koch....	1211	41	viii.
— — Linn.	42	viii.	
— — var. viridis, Koch ...	1211	41	viii.
— SCUTATUS, Linn.	1222	54	viii.
— Stein'ii, Beck	1213	43	viii.
— sylvestris, Wallr.	47	viii.	
— viridis, Sibth.	1211	41	viii.
Rundblättrige Glockenblume (Ger.)....	13	vi.	
— Käsepappel (Ger.)	170	ii.	
— Minze (Ger.)	4	vii.	
Rundblättriger Friedlos (Ger.)... ..	149	vii.	
— Kranichschnabel			
— (Ger.)	200	ii.	
— — Sonnenblau (Ger.)	31	ii.	
Rundblättriges Hasenöhrchen (Ger.)... ..	120	iv.	
— Wintergrün (Ger.)	48	vi.	
Runder Lauch (Ger.).....	206	ix.	
Rundlöffiger Lauch (Ger.)	209	ix.	
— Teufelskrallen (Ger.) ...	6	vi.	
Rundliche Segge (Ger.)	89	x.	
RUPPIA			
— Greater	1427	59	ix.
— Lesser	1428	60	ix.
— maritima, Auct. Pl.	1427	58	ix.
— MARITIMA, Linn. 1427, 1428	58	ix.	
— — var. α, Hook. & Arn. 1427	58	ix.	
— — var. β, Hook. & Arn. 1428	59	ix.	
— rostellata, Koch	1428	59	ix.
— spira'lis, Hartm.	1427	58	ix.
Ruppie maritime (Fr.)	59	ix.	
Ruprechts Kraut (Ger.).....	205	ii.	
Rupturewort, Ciliated	1152	180	vii.
— Glabrous.....	1171	178	vii.
RUSCUS			
— ACULEATUS, Linn. ...	1516	184	ix.
Rush, Blunt-flowered	1564	28	x.
— Capitate	1571	34	x.
— Clustered	1555	15	x.
— Common	1560	20	x.
— Diffuse.....	1562	25	x.
— Dutch	1894	162	xii.
— Greater, Sea	1558	18	x.
— Hard.....	1563	26	x.
— Heath	1576	39	x.
— Lesser Jointed	1270	33	x.
— — Sea	1559	19	x.
— Mud	1574	37	x.
— Northern	1564	27	x.
— Round-fruited.....	1575	38	x.
— Sharp-flowered	1567	30	x.
— Shiny-fruited	1568	32	x.
— Soft	1561	21	x.
— Thread.....	1565	27	x.
— Three-flowered	1556	16	x.
— —leaved	1554	14	x.
— Toad, var. α.....	1572	36	x.
— — var. β	1573	36	x.
— Two-flowered	1557	17	x.
Rüster (Ger.)	139	viii.	

	PLATE	PAGE	VOL.
Rüsterblättrige Linde (Fr.)	174,177	ii.	
Rye Brome-grass.....	1800 & 1801	166	xi.
Rye-grass, Common	1814	186	xi.
— Italian	1815	187	xi.
Saat Wucherblume (Ger.)	40	v.	
— Wicke (Ger.)	96	iii.	
Sablina à feuilles de serpolet (Fr.)	103	ii.	
— ciliée (Fr.).....	105	ii.	
— trinervée (Fr.)	101	ii.	
Sabot de la Vierge (Fr.)	136	ix.	
SABULINA			
— cæspitosa, Reich.	109	ii.	
— Gerardii, Reich.	109	ii.	
— tenuifolia, Reich.	243	112	ii.
— ver'na, Reich.	241	109	ii.
— viscosa, Reich.	114	ii.	
Saffron Meadow.....	1544	225	ix.
— Spring-flowering	1545	225	ix.
Safran printanier (Fr.).....	154	ix.	
Sagesse des chirurgiens (Fr.).....	145	i.	
SAGINA			
— ambigua, Lloyd	119	ii.	
— APETALA, Linn.	246	118	ii.
— cerastoides, Smith	218	78	ii.
— CILIATA, Fries	247	119	ii.
— del'ilis, Jord.	117	ii.	
— den'sa, Jord.	117	ii.	
— depressa, Schultz.....	119	ii.	
— erecta, Linn.	217	77	ii.
— filicaul'lis, Jord.	119	ii.	
— Linna'ii, Benth.	249 & 250	123	ii.
— — Presl.....	249	122	ii.
— MARITIMA, Don	245	117	ii.
— — Jord.....	245	117	ii.
— — var. alpi'na, Syme ...	117	ii.	
— — var. deb'ilis, Syme ...	117	ii.	
— — var. den'sa, Syme ...	117	ii.	
— NIVALIS, Fries.....	250 (bis)	124	ii.
— NODO'SA, E. Meyer	251	125	ii.
— pat'ula, Jord.	119	ii.	
— PROCUMBENS, Linn.	248	120	ii.
— SAXATILIS, Wimm. ...	249	122	ii.
— stric'ta, Fries	245	117	ii.
— SUBULATA, Wimm. ...	250	122	ii.
— — B. nival'lis, Hook. & Arn.	250 (bis)	124	ii.
Sagine apétale (Fr.)	119	ii.	
— couchée (Fr.)	121	ii.	
— maritime (Fr.)	118	ii.	
Sagittaire flèche d'eau (Fr.)	69	ix.	
SAGITTARIA			
— SAGITTIFOLIA, Linn.	1436	68	ix.
Sainfoin Vespareet (Fr.)	82	iii.	
Saint Dabec's Heath	885	34	vi.
Sainfoin	381	32	iii.
Salad Burnet, Common.....	409	131	iii.
— — Muricated	420	136	iii.

	PLATE	PAGE	VOL.
<i>Salicaire à feuilles d'hyssope</i> (Fr.).....		4	iv.
— <i>commune</i> (Fr.)		3	iv.
<i>Salicorne herbacée</i> (Fr.).....		7	viii.
— <i>radicante</i> (Fr.)		8	viii.

SALICORNIA

— <i>an'naa</i> , Sm.	1181	6	viii.
— <i>fruticosa</i> , Sm.	1183	7	viii.
— HERBA'CEA, <i>Linn.</i> 1181 & 1182		6	viii.
— <i>herba'cea</i> , var. Benth.	1183	7	viii.
— var. <i>aceta'ria</i> , <i>Moq.</i> ...	1181	6	viii.
— var. <i>proctum'bens</i> , <i>Syme</i>	1182	6	viii.
— <i>proctum'bens</i> , Sm.	1182	6	viii.
— RADICANS, <i>Sm.</i>	1183	7	viii.

SALIX

— ACUMINA'TA, <i>Sm.</i>	1326	229	viii.
— var. <i>rugosa</i> , <i>Sm.</i>		228	viii.
— ACUTIFO'LIA, <i>Willd.</i> ...	1366	250	viii.
— AL'BA, <i>Linn.</i>	1309-1311	210	viii.
— <i>Sm.</i>	1039	211	viii.
— var. <i>α</i> , <i>Sm.</i>	1039	211	viii.
— var. <i>cerulea</i> , <i>Syme</i>	1310	211	viii.
— var. <i>vir'idis</i> , <i>Wahl.</i> ...	1308	207	viii.
— var. <i>vitelli'na</i> , <i>Koch.</i> ..	1311	211	viii.
— AMBIG'UA, <i>Ehrh.</i>	1355	244	viii.
— var. <i>ma'jor</i> , <i>Syme</i>		245	viii.
— var. <i>spathula'ta</i> , <i>Syme</i> ..		245	viii.
— var. <i>undula'ta</i> , <i>Syme</i>		245	viii.
— <i>amygdal'na</i> , <i>Linn.</i>	1315	216	viii.
— <i>Anderson'iana</i> , <i>Sm.</i>	1351	242	viii.
— <i>angustifo'lia</i> , <i>Wulf.</i>	1364	249	viii.
— <i>aquat'ica</i> , <i>Sm.</i>	1328	231	viii.
— ARBUS'CU'LA, <i>Linn.</i>		1371-1374	254
— <i>Sm.</i>		1364	249
— var. <i>carina'ta</i> , <i>Syme</i>		1371	254
— var. <i>prunifo'lia</i> , <i>Syme</i> ..		1372	255
— var. <i>vaccinifo'lia</i> , <i>Syme</i>		1374	255
— var. <i>venulo'sa</i> , <i>Syme</i>		1373	255
— <i>arenaria</i> , <i>Linn.</i> , <i>Hook.</i> & <i>Arn.</i>		1368-1370	252
— <i>Sm.</i>		1368	252
— <i>argentea</i> , <i>Linn.</i>		1362	248
— <i>ascendens</i> , <i>Sm.</i>		1359	247
— AURI'TA, <i>Linn.</i>		1330	232
— var. <i>mi'nor</i> , <i>Syme</i>		233	viii.
— <i>aur'ito-re'pens</i> , <i>Wimm.</i> ...		1355	245
— <i>bi'color</i> , <i>Hook.</i>		1354 (bis)	243
— <i>Sm.</i>		1333	235
— <i>Borreria'na</i> , <i>Sm.</i>		1344	239
— <i>cerulea</i> , <i>Sm.</i>		1310	211
— <i>Caloden'dron</i> , <i>Wimm.</i>		1326	229
— CAPRE'A, <i>Linn.</i>		1331 & 1332	233
— <i>Sm.</i>		1331	234
— <i>capre'a-cine'rea</i> , <i>Wimm.</i> ...		1328	231
— <i>capre'a-dasycla'dos</i> , <i>Wimm.</i>		1326	229
— <i>capre'a-rimind'lis</i> , <i>Wimm.</i>		1324	226
— <i>capre'a-Weigelia'na</i> , <i>Wimm.</i>		1333	235

SALIX

	PLATE	PAGE	VOL.
— <i>caprea</i> , var. <i>sphacela'ta</i> , <i>Syme</i>	1332	234	viii.
— <i>carina'ta</i> , <i>Sm.</i>	1371	254	viii.
— CINE'REA, <i>Linn.</i> ... 1327-1329		230	viii.
— <i>Sm.</i>	1327	231	viii.
— var. <i>aquat'ica</i> , <i>Syme</i>	1328	231	viii.
— var. <i>latifo'lia</i> , <i>Anders.</i>	1328	231	viii.
— var. <i>oleifo'lia</i> , <i>Syme</i>	1329	231	viii.
— <i>cine'rea-rimind'lis</i> , <i>Wimm.</i>	1325	228	viii.
— <i>contor'ta</i> , <i>Croze</i>		216	viii.
— <i>cotonifo'lia</i> , <i>Sm.</i>	1348	242	viii.
— <i>Crowea'na</i> , <i>Sm.</i>	1338	238	viii.
— CUSPIDA'TA, <i>Schultz.</i>		1304 & 1305	204
— <i>Damasc'e'na</i> , <i>Forbes</i>	1352	243	viii.
— <i>dasycla'dos</i> , <i>Anders.</i>	1326	229	viii.
— [<i>Wimm.</i>] (excluded)		262	viii.
— <i>Davallia'na</i> , <i>Sm.</i>	1335	238	viii.
— <i>decip'iens</i> , <i>Hoffm.</i>	1307	207	viii.
— <i>Dicksonia'na</i> , <i>Sm.</i>	1339	238	viii.
— DONIA'NA, <i>Sm.</i>	1365	219	viii.
— FERRUGIN'EA, <i>Anders.</i>	1325	228	viii.
— <i>Borrer</i>	1325	228	viii.
— var. <i>rugosa</i> , <i>Syme</i>		228	viii.
— <i>fis'sa</i> , <i>Hoffm.</i>	1320	221	viii.
— <i>floribun'da</i> , <i>Forbes</i> ... 1354 (bis)		243	viii.
— <i>fo'e'tida</i> , var. <i>ascen'dens</i> , <i>Sm.</i>	1359	247	viii.
— var. <i>parvifo'lia</i> , <i>Sm.</i>	1360	247	viii.
— <i>Forby'na</i> , <i>Sm.</i>	1321	221	viii.
— <i>Forsteria'na</i> , <i>Sm.</i>	1349	242	viii.
— FRAG'ILIS, <i>Linn.</i> 1306 & 1307		205	viii.
— <i>Sm.</i>	1306	206	viii.
— var. <i>decip'iens</i> , <i>Syme</i>	1307	206	viii.
— var. <i>Russellia'na</i> , <i>Hook.</i> & <i>Arn.</i>	1308	207	viii.
— <i>frag'ilis-al'ba</i> , <i>Wimm.</i>	1308	207	viii.
— [<i>Friesia'na</i> , <i>Anders.</i>] (ex- cluded)		250	viii.
— <i>fus'ca</i> , <i>Hook.</i> & <i>Arn.</i>		1356-1362	246
— <i>Linn.</i>		1357	246
— <i>glau'ca</i> , <i>Sm.</i>	1370	253	viii.
— GRA'HAMI, <i>Baker</i>	1377	257	viii.
— [<i>grandifo'lia</i> , <i>Ser.</i>] (ex- cluded).....		262	viii.
— [<i>hasta'ta</i> , <i>Linn.</i>] (excluded).....		262	viii.
— <i>He'lix</i> , <i>Sm.</i>	1319	221	viii.
— HERBA'CEA, <i>Linn.</i>	1378	259	viii.
— <i>hippohai'jo'lia</i> , <i>Thuill.</i> ...		214	viii.
— <i>hir'ta</i> , <i>Sm.</i>	1354	243	viii.
— <i>Hoffmannia'na</i> , <i>Sm.</i>	1314	215	viii.
— <i>holoseri'ca</i> , <i>Hook.</i>		228	viii.
— <i>incuba'cea</i> , <i>Linn.</i>	1361	247	viii.
— <i>Lambertia'na</i> , <i>Sm.</i>	1308	218	viii.
— LANA'TA, <i>Linn.</i>	1367	251	viii.
— <i>lanicola'ta</i> , <i>Sm.</i>	1312	213	viii.
— LAPPONUM, <i>Linn.</i> 1368-1370		252	viii.
— var. <i>pseudo-glau'ca</i> , <i>Syme</i>		1370	253

	PLATE	PAGE	VOL.
SALIX			
— Lappo'num, var. Stuartia'na, Syme.....	1369	253	viii.
— LAURINA, Sm.....	1333	235	viii.
— — var. propin'qua, Bab.	1342	239	viii.
— — var. tenuifo'lia, Hook. & Arn.	1346	240	viii.
— — var. tenu'ior, Hook. & Arn.	1340	239	viii.
— laxiflo'ra, Anders.	1341	239	viii.
— liv'ida, Sm.	1374	255	viii.
— — Wimm.	1336	238	viii.
— Maid'lis, Wimm.	1346	240	viii.
— [malifo'lia, Sm.] (ex- cluded).....		262	viii.
— Meyeria'na, Willd. 1304 & 1305		204	viii.
— mollis'sima, Ehrh.		214	viii.
— — Sm.	1324	226	viii.
— MYRSINITES, Lbm. 1375 & 1376		256	viii.
— — Sm.	1375	256	viii.
— — var. arbutifo'lia, Syme		257	viii.
— — var. procumbens, Syme.....	1376	257	viii.
— — var. serra'ta, Syme ...	1375	256	viii.
— myrtillo'ides, Sm.	1339	238	viii.
— NIG'RICANS, Fries. 1347-1354 (bis)		241	viii.
— — Sm.	1347	242	viii.
— — var. Andersonia'na, Syme.....	1351	242	viii.
— — var. cotinifo'lia, Syme	1348	242	viii.
— — var. damasce'na, Syme	1352	243	viii.
— — var. floribun'da, Syme 1354 (bis)		243	viii.
— — var. Forsteria'na, Syme	1349	242	viii.
— — var. hir'ta, Syme	1354	243	viii.
— — var. petra'ea, Syme ...	1353	243	viii.
— — var. propin'qua, Hook. & Arn.....	1342	239	viii.
— — var. rupest'ris, Syme	1350	242	viii.
— nig'ricans-Weigelia'na, Wimm.....	1343	239	viii.
— nitens, Anders.....	1337	238	viii.
— oleifo'lia, Sm.	1329	231	viii.
— parvifo'lia, Sm.	1360	247	viii.
— pentan'dra, De Bray	1303	202	viii.
— PENTAN'DRA, Linn. ...	1303	202	viii.
— pentan'dra-frag'ilis, Wimm. 1304 & 1305		204	viii.
— [petiold'ris, Sm.] (excluded) ...		262	viii.
— petra'ea, Anders.	1353	243	viii.
— phillyreifo'lia, Borrer	1345	240	viii.
— PHYLICIFOLIA, "Linn.," Fries.....	1334-1346	237	viii.
— — Sm.	1334	237	viii.
— — var. β, Linn. ...	1347-1354	241	viii.
— — var. Borreria'na, Syme	1344	239	viii.
— — var. Crowea'na, Syme	1338	238	viii.

	PLATE	PAGE	VOL.
SALIX			
— phylicifo'lia, var. Davallia'na, Syme.....	1335	238	viii.
— — var. Dieksonia'na, Syme.....	1339	238	viii.
— — var. laxiflo'ra, Syme	1341	239	viii.
— — var. nit'ens, Syme ...	1337	238	viii.
— — var. phillyreifo'lia, Syme.....	1345	240	viii.
— — var. propin'qua, Syme	1342	239	viii.
— — var. radi'eans, Syme	1334	237	viii.
— — var. tenuifo'lia, Syme	1346	240	viii.
— — var. tenu'ior, Syme ...	1340	239	viii.
— — var. tet'rapla, Syme...	1343	239	viii.
— — var. Weigelia'na, Syme	1336	238	viii.
— — nig'ricans, Wimm.	1343	239	viii.
— polyan'dra, De Bray	1303	202	viii.
— [Pontedera'na, Willd.] (ex- cluded).....		262	viii.
— procumbens, Forbes	1376	257	viii.
— propin'qua, Borrer	1342	239	viii.
— prostra'ta, Sm.	1358	247	viii.
— pruinosa, Wendl.	1366	250	viii.
— pruinifo'lia, Sm.	1372	255	viii.
— PURPUREA, Linn. 1316-1318		217	viii.
— — Sm.	1316	217	viii.
— — var. Helix, Bab.	1319	221	viii.
— — var. Lambertia'na, Syme.....	1318	218	viii.
— — var. sericea, Reich.	1365	219	viii.
— — var. Woolgaria'na, Syme.....	1317	218	viii.
— radi'eans, Sm.	1334	237	viii.
— ramulosa, Borrer	1307	218	viii.
— REPENS, Auct.	1356-1362	246	viii.
— — Linn.....	1356	246	viii.
— — var. argen'tea, Syme	1362	248	viii.
— — var. ascen'dens, Syme	1359	247	viii.
— — var. fus'ea, Syme.....	1357	246	viii.
— — var. incubacea, Syme	1361	247	viii.
— — var. parvifo'lia, Syme	1360	247	viii.
— — var. prostra'ta, Syme	1358	247	viii.
— — var. rosmarinifo'lia, Wimm.....	1363	248	viii.
— — re'pens-purpu'rea, Wimm.	1365	219	viii.
— RETICULATA, Linn. ...	1379	260	viii.
— [retu'sa, Linn.] (excluded)		263	viii.
— ROSMARINIFO'LIA, Linn.....	1363 & 1364	248	viii.
— — Sm.	1363	249	viii.
— — var. angustifo'lia, Syme.....	1364	249	viii.
— RUBRA, Huds.....	1319-1321	220	viii.
— — Sm.	1320	221	viii.
— — var. Forbya'na, Syme	1321	221	viii.
— — var. He'lix, Syme ...	1319	221	viii.
— — rugosa, Leese		228	viii.
— — rupest'ris, Sm.	1350	242	viii.
— — Russellia'na, Sm.	1308	207	viii.
— — Silesi'aca? Wimm.	1332	234	viii.

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
SA'LIX				Saltwort, Prickly	1180	5	viii.
— SMITHIA'NA, Willd. ...	1324	226	viii.	<i>Salveiblättriger Gamander</i> (Ger.)	86		vii.
— — var. <i>a</i> , Bab.	1324	226	viii.	SAL'VIA			
— — var. <i>ferruginea</i> , Bab.	1325	228	viii.	— CLANDESTINA,			
— — var. <i>rugo'sa</i> , Bab. ...	.....	228	viii.	— <i>Linn.</i> (?)	1057	43	vii.
— — var. <i>stipularis</i> , <i>Syme</i> .....	.....	227	viii.	— <i>horminol'des</i> , Pour.	1057	43	vii.
— <i>spathulata</i> , Willd. ....	.....	245	viii.	— <i>multifida</i> , Sibth. & Sm. ...	1057	43	vii.
— <i>sphacelata</i> , Sm.	1332	234	viii.	— <i>pallidiflora</i> , St. Amans ...	1057	43	vii.
— <i>stipularis</i> , Anders. ....	.....	227	viii.	— <i>præcox</i> , Savi.	1057	43	vii.
— STIPULA'RIS, Sm.	1323	225	viii.	— PRATEN'SIS, <i>Linn.</i>	1058	44	vii.
— <i>Stuartiana</i> , Sm.	1369	253	viii.	— VERBENA'CA, <i>Linn.</i> ...	1056	42	vii.
— <i>tenuifolia</i> , Sm.	1346	240	viii.	— — var. <i>multifida</i> , Vis.	1057	43	vii.
— — Sm. E. B.	1354 (bis)	243	viii.	— — var. <i>sinuata</i> , Vis. ...	1056	42	vii.
— <i>tenuior</i> , Borrer	1340	239	viii.	<i>Salzburgischer Gäuserich</i> (Ger.)	145		iii.
— <i>tel'rapla</i> , Walker	1343	239	viii.	<i>Salz-Schuppenmiere</i> (Ger.) .....	.....	131	ii.
— <i>Trevirani</i> , Spreng. ....	.....	214	viii.	SAMBU'CUS			
— TRIAN'DRA, <i>Koch</i> 1313-1315	.....	215	viii.	— EB'ULUS, <i>Linn.</i>	638	201	iv.
— — <i>Linn.</i>	1313	215	viii.	— NI'GRA, <i>Linn.</i>	637	199	iv.
— — var. <i>amygdali'na</i> ,				— — var. <i>laciniata</i> , <i>Syme</i> .....	.....	199	iv.
— — <i>Syme</i>	1315	216	viii.	— — var. <i>rotundifolia</i> ,			
— — var. <i>Hoffmanniana</i> ,				— <i>DC.</i> .....	.....	199	iv.
— — <i>Syme</i>	1314	215	viii.	SAM'OLUS			
— <i>trian'dra-alba</i> , Wimm. ...	1312	213	viii.	— VALERAN'DI, <i>Linn.</i> ...	1151	155	vii.
— <i>trian'dra-viminalis</i> , var.				Samphire, Common Marsh.	1181	6	viii.
— — <i>undulata</i>	1312	213	viii.	— — var. <i>β</i>	1182	7	viii.
— UNDULA'TA, <i>Ehrh.</i>	1312	213	viii.	— — Creeping Marsh	1183	8	viii.
— <i>vaccinifolia</i> , Walk. & Sm.	1374	255	viii.	— — Golden	769	101	v.
— <i>venulosa</i> , Sm.	1373	255	viii.	— — Rock	606	143	iv.
— <i>versifolia</i> , Sm.	1355	245	viii.	— — Sea Prickly	628	173	iv.
— VIMINA'LIS, <i>Linn.</i>	1322	223	viii.	<i>Sand Haargras</i> (Ger.) .....	.....	191	xi.
— — var. <i>intricata</i> , <i>Leefe</i> .....	.....	224	viii.	— — <i>-Hafer</i> (Ger.) .....	.....	78	xi.
— <i>viminalis-dasyclados</i> ,				— — <i>Sommerwurz</i> (Ger.) .....	.....	192	vi.
— — Wimm.	1323	225	viii.	— — <i>-Segge</i> (Ger.) .....	.....	87	x.
— <i>viminalis-purpurea</i> ,				— — <i>-Veilchen</i> (Ger.) .....	.....	236	ii.
— — Wimm.	1319-1321	220	viii.	<i>Sandhalm Ostsee</i> (Ger.) .....	.....	41	xi.
— [<i>viminalis-repens</i> , Lasch.]				Sandwort, Alpine	242	112	ii.
— (excluded) .....	.....	250	viii.	— — Bog	244	116	ii.
— <i>violacea</i> , Anders.	1366	250	viii.	— — Fine-leaved	243	114	ii.
— VIR'IDIS, <i>Fries</i>	1308	207	viii.	— — Fringed	238	105	ii.
— <i>vitellina</i> , <i>Linn.</i>	1311	211	viii.	— — Level-topped	243 (bis)	115	ii.
— <i>Weigeli'na</i> , Borrer	1336	238	viii.	— — Norwegian	237	104	ii.
— — Willd.	1334-1346	237	viii.	— — Spurrey, Field.	254	129	ii.
— <i>Woolgaria'na</i> , Borr.	1307	218	viii.	— — Greater Sea	257	132	ii.
— <i>Wulfenia'na</i> , Sm.	1336	238	viii.	— — Lesser Sea	255	131	ii.
Sallow, Ambiguous	1355	246	viii.	— — Rock Sea ...	256	133	ii.
— Common, var. <i>a</i>	1327-1329	231	viii.	— — Three-nerved	234	101	ii.
— Dark-leaved ...	1347-1354 (bis)	243	viii.	— — Thyme-leaved	236	103	ii.
— Great, var. <i>a</i>	1331 & 1332	234	viii.	— — Vernal	241	110	ii.
— Intermediate	1333	237	viii.	SANGUISOR'BA			
— Long-leaved	1326	230	viii.	— [me'dia, <i>Linn.</i>] (excluded) .....	.....	260	iii.
— Tea-leaved	1334-1346	241	viii.	— OFFICINA'LIS, <i>Linn.</i> ...	421	132	iii.
— Wrinkled-leaved	1330	233	viii.	<i>Sanguisorbe officinale</i> (Fr.) .....	.....	132	iii.
<i>Salomonssiegel</i> (Ger.) .....	.....	180	ix.	<i>Sanicle l'Europe</i> (Fr.) .....	.....	93	iv.
<i>Salsifis à feuilles de poireau</i> (Fr.) .....	.....	141	v.	<i>Sanicle, Wood</i>	568	93	iv.
— — <i>des prés</i> (Fr.) .....	.....	140	v.	SANIC'ULA			
Salsify	801	141	v.	— EUROPÆ'A, <i>Linn.</i>	568	92	iv.
SAL'SOLA				SANTOLI'NA			
— <i>fruticosa</i> , <i>Linn.</i>	1178	2	viii.	— <i>maritima</i> , <i>Linn.</i>	725	55	v.
— KA'LI, <i>Linn.</i>	1180	4	viii.				
Saltwort, Black	1150	154	vii.				

	PLATE	PAGE	VOL.
<i>Santoline</i> (Fr.)		55	v.
<i>Saponaire officinale</i> (Fr.)		53	ii.
SAPONARIA			
— <i>hybrida</i> , Linn.	53	ii.	
— <i>OFFICINALIS</i> , Linn. ...	197	53	ii.
<i>Saracenscher Baldreis</i> (Ger.)... ..	88	v.	
SARTHAMNUS			
— <i>communis</i> , "Wimm." Fries. 329	11	iii.	
— <i>SCOPARIUS</i> , Koch 329	11	iii.	
— <i>vulgaris</i> , "Wimm." Godr. 329	11	iii.	
<i>Sarrette des teinturiers</i> (Fr.).....	29	v.	
SATYRIUM			
— <i>albidum</i> , Linn..... 1461	103	ix.	
— <i>Epipogium</i> , Linn. 1486	131	ix.	
— <i>hirenum</i> , Linn. 1448	90	ix.	
— <i>maculatum</i> , Desf. 1465	108	ix.	
— <i>repens</i> , Linn. 1475	118	ix.	
— <i>viride</i> , Linn..... 1462	105	ix.	
Sauce Alone	100	147	i.
<i>Sauer Ampfer</i> (Ger.)	55	viii.	
<i>Sauerlorn</i> (Ger.)	72	i.	
<i>Sauerkirsche</i> (Ger.)	123	iii.	
<i>Sauge clandestine</i> (Fr.)..... 44	vii.		
— <i>des prés</i> (Fr.)	45	vii.	
— <i>verveine</i> (Fr.)	43	vii.	
<i>Saule à cinq étamines</i> (Fr.)	{203}	viii.	
	{205}		
— <i>à feuilles d'arbusier</i> (Fr.)	257	viii.	
— <i>de rosemarin</i> (Fr.) ... 250	viii.		
— <i>à grandes stípules</i> (Fr.) ... 226	viii.		
— <i>à longues feuilles</i> (Fr.) ... 224	viii.		
— <i>à trois étamines</i> (Fr.)	216	viii.	
— <i>à une étamine</i> (Fr.)..... 219	viii.		
— <i>ambiguë</i> (Fr.)	246	viii.	
— <i>blanc</i> (Fr.)	212	viii.	
— <i>blanc de neige</i> (Fr.)..... 253	viii.		
— <i>cedré</i> (Fr.)	232	viii.	
— <i>fragile</i> (Fr.)	207	viii.	
— <i>glabre</i> (Fr.)	256	viii.	
— <i>herbacé</i> (Fr.)..... 260	viii.		
— <i>marceau</i> (Fr.)	235	viii.	
— <i>monadelphie</i> (Fr.)..... 222	viii.		
— <i>noireissant</i> (Fr.)	244	viii.	
— <i>oléâtre</i> (Fr.)	214	viii.	
— <i>philia</i> (Fr.)	241	viii.	
— <i>rampant</i> (Fr.)	248	viii.	
— <i>réticulé</i> (Fr.)..... 261	viii.		
— <i>ridé</i> (Fr.)	233	viii.	
SAUSSUREA			
— <i>ALPINA</i> , DC. 703	27	v.	
<i>Saussurée des Alpes</i> (Fr.)	28	v.	
Saw-wort, Alpine	703	28	v.
— Common..... 704 & 704 (bis)	29	v.	
SAXIFRAGA			
— <i>affinis</i> , Don	560	81	iv.
— <i>AIZOIDES</i> , Linn..... 551	73	iv.	
— <i>ANDREW'SII</i> , Hurr..... 549	71	iv.	
— <i>autumnalis</i> , Linn. 551	73	iv.	

	PLATE	PAGE	VOL.
SAXIFRAGA			
— <i>CÆSPITOSA</i> , Linn..... 556	78	iv.	
— Koch..... 557	80	iv.	
— var. <i>incurvifolia</i> , Bab. 558	82	iv.	
— <i>CERNUA</i> , Linn..... 554	76	iv.	
— [cotyle'don, Linn.] (ex- cluded)	87	iv.	
— <i>DECIP'IENTS</i> , Ehrh. 557	80	iv.	
— <i>elegans</i> , Mack. 545	68	iv.	
— eu-hypnoï'des, Syme 561 & 562	82	iv.	
— <i>GE'UM</i> , Linn..... 543-545	68	iv.	
— var. <i>crena'ta</i> , Syme ... 543	68	iv.	
— var. <i>elegans</i> , Syme... 545	68	iv.	
— var. <i>serra'ta</i> , Syme ... 544	68	iv.	
— <i>GRANULA'TA</i> , Linn. ... 555	77	iv.	
— groenlan'dica, DC. 79	iv.		
— <i>HIR'CUSULUS</i> , Linn. 550	72	iv.	
— <i>HIRSU'TA</i> , Linn. 546	69	iv.	
— Gr. & Godr. 543-545	68	iv.	
— <i>hir'ta</i> , Don..... 559	81	iv.	
— Syme	558-560	81	iv.
— var. <i>affinis</i> , Syme ... 560	81	iv.	
— var. <i>incurvifolia</i> , Syme	558	82	iv.
— <i>HYPNOIDES</i> , Linn....558-562	81	iv.	
— Gr. & Godr..... 562	83	iv.	
— var. <i>gemmifera</i> , Syme 562	83	iv.	
— var. <i>platypet'ala</i> , Syme 561	83	iv.	
— <i>incurvifolia</i> , Don..... 560	82	iv.	
— <i>Gratia'na</i> , F. Schultz 79	iv.		
— [muscoï'des, Wulf.] (ex- cluded)..... 87	iv.		
— <i>NIVA'LIS</i> , Linn..... 541	66	iv.	
— <i>OPPOSITIFO'LIA</i> , Linn. 540	65	iv.	
— <i>palma'ta</i> , Sm. 557	80	iv.	
— [pedatif'ida, Sm.] (excluded) ...	87	iv.	
— <i>platypet'ala</i> , Sm. 561	83	iv.	
— <i>pubes'cens</i> , Sternb. 557	80	iv.	
— <i>RIVULA'RIS</i> , Linn. 553	75	iv.	
— [rotundifo'lia, Linn.] (ex- cluded)..... 87	iv.		
— [Sibthorp'i, Boiss. & Spr.] (ex- cluded)..... 87	iv.		
— <i>STELLA'RIS</i> , Linn. 542	67	iv.	
— <i>TRIDACTYLI'TES</i> , Linn. 552	74	iv.	
— <i>UMBROSA</i> , Linn. 547 & 548	70	iv.	
— var. <i>puncta'ta</i> , Harv. 70	iv.		
— var. <i>serratifo'lia</i> , Syme 548	70	iv.	
<i>Saxifrage à feuilles opposées</i> (Fr.).....	75	iv.	
— <i>à trois doigts</i> (Fr.) ... 69	iv.		
— <i>benoite</i> (Fr.)	67	iv.	
— <i>des neiges</i> (Fr.)..... 67	iv.		
— <i>étoilée</i> (Fr.)	68	iv.	
— <i>faux aizoon</i> (Fr.)..... 74	iv.		
— <i>grenue</i> (Fr.)	78	iv.	
— <i>œil-de-bouc</i> (Fr.)	73	iv.	
— <i>ombragée</i> (Fr.)	71	iv.	
— <i>velue</i> (Fr.)..... 70	iv.		
Saxifrage, Alpine Brook..... 553	76	iv.	
— Alpine clustered..... 511	67	iv.	

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
Saxifrage, Alternate-leaved Golden				<i>Scheuchzerie des marais</i> (Fr.) ...	67	ix.	
———— Common Burnet	564	85	iv.	<i>Schierlingsblättriger Reiherschna-</i>			
———— Drooping Alpine.....	585	116	iv.	<i>bel</i> (Ger.).....	207	ii.	
———— Great Burnet	554	77	iv.	<i>Schildblättriger Ampfer</i> (Ger.)... ..	54	viii.	
———— Mossy	586	116	iv.	<i>Schildfrüchtiger Ehrenpreis</i> (Ger.) ...	168	vi.	
———— Mountain Meadow ...	558-562	80	iv.	<i>Schlaffes Rispengras</i> (Ger.)	117	xi.	
———— Opposite-leaved Golden	602	138	iv.	<i>Schlamm-Segge</i> (Ger.)	120	x.	
————	563	84	iv.	<i>Schlangenlauch</i> (Ger.)	208	ix.	
———— Palmate-leaved Mossy	557	81	iv.	<i>Schlankhärlige Segge</i> (Ger.).....	142	x.	
———— Purple Mountain- ...	540	65	iv.	<i>Schlanke Erve</i> (Ger.).....	87	iii.	
———— Rue-leaved	552	75	iv.	<i>Schlankes Wollgras</i> (Ger.)	75	x.	
———— Starry	542	68	iv.	<i>Schlehen Pflaume</i> (Ger.)	115	iii.	
———— Tufted	556	79	iv.	<i>Schlingenlose Erve</i> (Ger.).....	89	iii.	
———— White Meadow-	555	78	iv.	<i>Schlitzeblättriger Krauchelschnabel</i>			
———— Yellow Marsh.....	550	73	iv.	(Ger.)	201	ii.	
———— Yellow Mountain- ...	551	74	iv.	<i>Schmalblättrige Distel</i> (Ger.)	6	v.	
<i>Scabieuse colombaire</i> (Fr.)	252	iv.		<i>Schmalblättrige Alsine</i> (Fr.).....	114	ii.	
———— <i>des champs</i> (Fr.)	253	iv.		<i>Berle</i> (Ger.).....	119	iv.	
———— <i>succise</i> (Fr.)	250	iv.		<i>Wicke</i> (Ger.)	98	iii.	
SCABIOSA				<i>Schmalblättriger Schotenweiderich</i>			
—— <i>ARVEN'SIS</i> , Linn.....	679	252	iv.	(Ger.)	10	iv.	
—— <i>COLUMBARIA</i> , Linn. ...	678	251	iv.	<i>Schmalblättriges Kolbenrohr</i> (Ger.) ...	4	ix.	
—— <i>SUCCISA</i> , Linn.	677	250	iv.	<i>Wollgras</i> (Ger.).....	74	x.	
<i>Scabiosenartige Flockenblume</i> (Ger.)... ..	33	v.		<i>Lungenkraut</i> (Ger.)... ..	92	vii.	
Scabious, Devil's-bit	677	250	iv.	<i>Schmale Rohrkolbe</i> (Ger.).....	4	ix.	
Field	679	253	iv.	<i>Schnabelfrüchtige Ruppie</i> (Ger.)	60	ix.	
-leaved Hawk's-beard	820	162	v.	<i>Schnee Steinbrech</i> (Ger.)	67	iv.	
Small	678	252	iv.	<i>Schnüttlauch</i> (Ger.)	216	ix.	
Scale-fern, Common	1883	139	xii.	SCHOBERIA			
SCAN'DIX				—— <i>fruticosa</i> , Mey.	1178	2 viii.	
—— <i>Anthriscus</i> , Linn.....	622	166	iv.	—— <i>maritima</i> , Mey.	1179	3 viii.	
—— <i>Cerefolium</i> , Linn.....	623	167	iv.	SCHÆNUS			
—— <i>odorata</i> , Linn.	626	170	iv.	—— <i>albus</i> , Linn.	1582	46 x.	
—— <i>Pecten</i> , Hook.	627	171	iv.	—— Black.....	1579	43 x.	
—— PECTEN-VENERIS ,				—— <i>compresus</i> , Linn.	1583	48 x.	
Linn.	627	171	iv.	—— <i>fusus</i> , Linn.	1581	45 x.	
<i>Scandix peigne de Venus</i> (Fr.)... ..	172	iv.		—— <i>Marisus</i> , Linn.	1580	44 x.	
<i>Schabenkraut</i> (Ger.)	117	vi.		—— <i>monoëus</i> , Sm.	1600	77 x.	
<i>Schafgarbe</i> (Ger.)	57	v.		—— NIGRICANS , Linn.	1579	43 x.	
<i>Schaf Schwingel</i> (Ger.).....	145	xi.		—— <i>ru'fus</i> , Huds.....	1584	48 x.	
<i>Scharbocks-Kraut</i> (Ger.)	49	i.		<i>Schönes Harthen</i> (Ger.).....	157	ii.	
<i>Scharbockshül</i> (Ger.).....	185	i.		<i>Schopfförmiger Hufeisenklee</i> (Ger.) ...	80	iii.	
<i>Scharfe Dürreurz</i> (Ger.)	109	v.		<i>Schutt-Pfefferkraut</i> (Ger.).....	214	i.	
<i>Fetthenne</i> (Ger.)	55, 56	iv.		<i>Schwachbittere Genziane</i> (Ger.)	76	vi.	
<i>Schaumkraut</i> (Ger.)	156	i.		<i>Schwallenkraut</i> (Ger.)	100	i.	
SCHEDONORUS (Fr.)				<i>Schwarzbraunes Cyperus</i> (Ger.)	41	x.	
—— <i>asper</i> , Fr.	1795	156	xi.	<i>Schwarze Bilsenkraut</i> (Ger.)	107	vi.	
—— <i>erectus</i> , Fr.	1796	159	xi.	<i>Schwarze Flockenblume</i> (Ger.)... ..	32	v.	
—— <i>sterilis</i> , Fr.	1799	163	xi.	<i>Johannisbeere</i> (Ger.)... ..	45	iv.	
SCHEDONORUS (P. de B.)				<i>Krähenbeere</i> (Ger.)	94	viii.	
—— <i>calamarius</i> , R. & S. 1787 & 1788	148	xi		<i>Platterbse</i> (Ger.)	112	iii.	
—— <i>dal'tior</i> , R. & S. ... 1789 & 1790	150	xi.		<i>Schwarzer Gottesvergess</i> (Ger.)... ..	53	vii.	
—— <i>lolia'ceus</i> , R. & S.....	1792	153	xi.	<i>Holunder</i> (Ger.)	200	iv.	
—— <i>pratensis</i> , R. & S.	1791	153	xi.	<i>Nachtschatten</i> (Ger.)	98	vi.	
<i>Scheidenförmiges Wollgras</i> (Ger.).....	72	x.		<i>Senf</i> (Ger.)	127	i.	
SCHUECHZERIA				<i>Schwarzes Wollkraut</i> (Ger.).....	115	vi.	
—— Marsh	1435	67	ix.	<i>Schwärzliche Segge</i> (Ger.).....	105	x.	
—— PALUS'TRIS , Linn.	1435	67	ix.	<i>Schwärzliches Habichtskraut</i> (Ger.) ...	176	v.	
				<i>Kopfried</i> (Ger.)... ..	43	x.	

	PLATE	PAGE	VOL.
<i>Schwarzpappel</i> (Ger.)	199	viii.	
<i>Schwarzwehdende Weide</i> (Ger.)	244	viii.	
<i>Schwarzwurz</i> (Ger.)	67	i.	
<i>Schwedische Cornelle</i> (Ger.).....	186	iv.	
<i>Schwertblättriges Zymbelkraut</i> (Ger.)	129	ix.	
<i>Schwertel</i> (Ger.).....	144	ix.	
<i>Schwimmender Froschlöffel</i> (Ger.).....	74	ix.	
<i>Schwimmendes Samkrautgewächse</i> (Ger.)	27	ix.	
SCILLA			
— <i>AUTUMNALIS</i> , Linn....	1526	198	ix.
— [<i>bifolia</i> , Linn.] (excluded)	226	ix.	
— <i>NU'TANS</i> , Sm.	1528	200	ix.
— <i>umbellata</i> , Ram.	1527	199	ix.
— <i>VER'NA</i> , Huds.	1527	199	ix.
<i>Scille d'automne</i> (Fr.)	199	ix.	
— <i>du printemps</i> (Fr.)	200	ix.	
— <i>penchée</i> (Fr.).....	201	ix.	
<i>Scirpe à Tabernæmontani</i> (Fr.)	64	x.	
— <i>à têtes rondes</i> (Fr.).....	62	x.	
— <i>à tiges nombreuses</i> (Fr.)... ..	54	x.	
— <i>à une valve</i> (Fr.).....	53	x.	
— <i>caréné</i> (Fr.).....	65	x.	
— <i>de savi</i> (Fr.)	59	x.	
— <i>des bois</i> (Fr.)	70	x.	
— <i>des lacs</i> (Fr.)	63	x.	
— <i>des marais</i> (Fr.).....	52	x.	
— <i>épingle</i> (Fr.)	51	x.	
— <i>flottant</i> (Fr.)	58	x.	
— <i>gazonnant</i> (Fr.)	56	x.	
— <i>maritime</i> (Fr.)	69	x.	
— <i>piquant</i> (Fr.)	67	x.	
— <i>sétacé</i> (Fr.)	60	x.	
— <i>triangulaire</i> (Fr.)	66	x.	
SCIRPIDIUM			
— <i>aciculare</i> , Nees	1585	50	x.
SCIRPUS			
— <i>ACICULARIS</i> , Linn. ...	1585	50	x.
— <i>Bæothry'on</i> , Ehrh.	1589	54	x.
— <i>bifolius</i> , Wallr.....	1584	48	x.
— <i>CÆSPITOSUS</i> , Linn. ...	1590	55	x.
— <i>caric'nus</i> , Schrad.	1583	48	x.
— <i>Car'icis</i> , Retz	1583	48	x.
— <i>carinata's</i> , Sm.	1598	64	x.
— <i>compressus</i> , Pers.....	1583	48	x.
— <i>Dural'ii</i> , Hoppe	1598	64	x.
— <i>eu-lacus'tris</i> , Syme	1596	63	x.
— <i>eu-palus'tris</i> , Syme	1586	51	x.
— <i>FLUITANS</i> , Linn.....	1592	57	x.
— <i>glau'cus</i> , Sm.	1597	64	x.
— <i>HOLOSCHÆNUS</i> , Linn.	1595	61	x.
— <i>hum'ilis</i> , Wallr.....	1591	56	x.
— <i>lacus'tris</i> , Auct.....	1593	63	x.
— <i>LACUSTRIS</i> , Linn.	1596-1598	62	x.
— — var. <i>d'gynus</i> , Godr.	1597	64	x.
— — var. <i>genu'nus</i> , Gr. & Godr.	1596	63	x.

SCIRPUS

	PLATE	PAGE	VOL.
— <i>MARITIMUS</i> , Linn.....	1601	68	x.
— — var. <i>compactus</i> , Krock.....	68	x.	
— — var. <i>umbellatus</i> , Reich. ...	68	x.	
— <i>MULTICAULIS</i> , Sm. ...	1588	53	x.
— <i>PALUSTRIS</i> , Linn. 1586 & 1587	51	x.	
— — Sm.	1586	51	x.
— <i>PARVULUS</i> , Röm. & Schult.	1591	56	x.
— <i>PAUCIFLORUS</i> , Lightf.	1589	54	x.
— <i>Pollich'ii</i> , Gren. & Godr....	1599	65	x.
— — <i>Valh</i>	1600	66	x.
— <i>Roth'ii</i> , Hoppe	1600	66	x.
— <i>rufus</i> , Schrad.	1584	48	x.
— <i>SA'VII</i> , Seb. & Maur.	1593	58	x.
— — var. <i>monostachys</i> , Syme... ..	59	x.	
— <i>SETACEUS</i> , Linn.	1594	60	x.
— <i>SYLVATICUS</i> , Linn. ...	1602	69	x.
— <i>Tabernæmontanæ</i> , Gmel....	1597	64	x.
— <i>tenuiflorus</i> , DC.	1600	66	x.
— <i>TRIQUE'TER</i> , Linn.....	1599	65	x.
— — var. <i>conglomeratus</i> , Reich.	66	x.	
— — var. <i>vulgaris</i> , Reich.	66	x.	
— <i>unigu'nis</i> , Link	1587	52	x.
— — var. <i>Watsoni</i> , Syme... ..	52	x.	
SCLERANTHUS			
— <i>AN'NUUS</i> , Linn. 1174 & 1175	181	vii.	
— — var. <i>bien'nis</i> , Syme... ..	1175	182	vii.
— <i>bien'nis</i> , Reuter	1175	182	vii.
— <i>PERENNIS</i> , Linn.	1176	182	vii.
SCLEROCHLOA			
— <i>Bo'reri</i> , Bab.	1756	105	xi.
— <i>distans</i> , Bab.	1755	104	xi.
— — var. <i>obtusa</i> , Parn.	104	xi.	
— [<i>du'ra</i> , P. de B.] (excluded).....	200	xi.	
— <i>LOLIA'CEA</i> , Woods.	1759	110	xi.
— <i>MARITIMA</i> , Lindl.	1754	102	xi.
— — var. <i>flex'a</i> , Syme... ..	103	xi.	
— <i>MULTICUL'MIS</i> , Syme 1755 & 1756	103	xi.	
— <i>PROCUMBENS</i> , P. de B. 1757	107	xi.	
— <i>RIG'IDA</i> , Link	1758	108	xi.
SCLEROPOA			
— <i>lolia'cea</i> , Gren. & Godr. ...	1759	110	xi.
— <i>procumbens</i> , Parl.	1757	107	xi.
— <i>rig'ida</i> , Griseb.....	1758	108	xi.
SCOLOPENDRIUM			
— <i>alternifolium</i> , Roth.....	1881	136	xii.
— <i>C'eterach</i> , Symons.....	1883	139	xii.
— <i>officinale</i> , DC.	1884	141	xii.
— <i>officinatum</i> , Swartz.....	1884	141	xii.
— <i>Phyll'itis</i> , Roth.....	1884	141	xii.
— <i>Ruta-mur'ria</i> , Roth	1880	135	xii.
— <i>septentrionalis</i> , Roth	1882	138	xii.
— <i>VULGARE</i> , Symons.....	1884	141	xii.
SCORODONIA			
— <i>heteromall'a</i> , Mönch	1093	85	vii.
— <i>Scotch Crocus</i>	1497	150	ix.

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
Scotch Fir	1380	265	viii.	Sea Purslane	1208	37	viii.
— Thistle	680	3	v.	— Radish	82	123	i.
<i>Scrophularia à feuilles de sauge</i>	125	vi.		— Rocket, Purple	79	118	i.
— <i>aquatique</i> (Fr.)	121	vi.		— Rush, Greater	1558	18	x.
— <i>noueuse</i> (Fr.)	124	vi.		— Lesser	1559	19	x.
— <i>printanière</i> (Fr.)	126	vi.		— Sandwort-Spursey, Greater	257	132	ii.
SCROPHULARIA				— Lesser	255	131	ii.
— <i>alata</i> , "Gilb."?	948	122	vi.	— Rock	256	133	ii.
— AQUATICA, <i>Linn.</i>	947	120	vi.	— Sedge	1618	87	x.
— <i>aquat'ica</i> , <i>Fries.</i>	948	122	vi.	— Spleenwort	1876	129	xii.
— <i>Balbis'ii</i> , <i>Hornem.</i>	947	120	vi.	— Spurge	1263	109	viii.
— EHRHARTI, <i>Steer.</i>	948	122	vi.	— Stock, Great	104	152	i.
— <i>Nees'ii</i> , <i>Wirtg.</i>	123	vi.		— Stork's-bill	369	209	ii.
— NODO'SA, <i>Linn.</i>	949	123	vi.	— Vetch, Smooth-podded	390	94	iii.
— SCORODONIA, <i>Linn.</i>	950	124	vi.	— Wormwood, var. α	734	65	v.
— <i>umbrosa</i> , <i>Dum.</i> ?	948	122	vi.	— var. β	735	66	v.
— VERNALIS, <i>Linn.</i>	951	125	vi.	Seablite, Annual	1179	4	viii.
Scurvy-Grass, Common	130	185	i.	— Shrubby	1178	3	viii.
— Hastate-leaved	132	187	i.	<i>Sechsmänniger Sämel</i> (Ger.)	141	ii.	
— Long-leaved	133	188	i.	Sedge, Axillary	1628	98	x.
— Mountain	131	186	i.	— Black	1635	105	x.
SCUTELLARIA				— Bladder	1682	171	x.
— GALERICULATA, <i>Linn.</i>	1060	47	vii.	— Bönninghausen's	1629	99	x.
— [hastifolia, <i>Linn.</i>] (excluded)	86	vii.		— Bottle	1680	169	x.
— MINOR, <i>Linn.</i>	1061	48	vii.	— Bracteated Marsh	1616	85	x.
Sea Barley	1813	197	xi.	— Broad-leaved Mud	1648	119	x.
— Beet	1184	9	viii.	— Capillary	1662	139	x.
— Bindweed	925	88	vi.	— Close-headed Alpine	1636	107	x.
— Bladder Campion	200	58	ii.	— Common	1643	116	x.
— Buckthorn	1245	83	viii.	— Creeping Dioecious	1610	79	x.
— Cabbage	87	130	i.	— Curved	1615	84	x.
— Carrot	615	157	iv.	— Cyperus-like	1684	164	x.
— Charlock	82	123	i.	— Distant-spiked	1627	97	x.
— Club-rush	1601	69	x.	—	1668	150	x.
— Colewort	87	130	i.	— Dotted-fruited	1671	151	x.
— Conch-grass, Decumbent	1812	183	xi.	— Downy-fruited	1656	131	x.
— Erect	1811	181	xi.	— Dwarf Silvery	1651	125	x.
— Green Whitlow Grass	138	195	i.	— Elongated	1630	100	x.
— Hard-grass	1818	189	xi.	— Fen	1580	45	x.
— Heath, Smooth	190	43	ii.	— Few-flowered	1614	83	x.
— Hog's-Fennel	690	149	iv.	— Fingered	1650	123	x.
— Holly	569	95	iv.	— Flea	1612	81	x.
— Kale	80	119	i.	— Glaucous Heath	1644-1646	118	x.
— Knotgrass	1233	70	viii.	— Graham's	1684	173	x.
— Lavender, Great	1156 & 1157	161	vii.	— Great	1623	92	x.
— Lesser	1159 & 1160	165	vii.	— Great Pendulous	1660	140	x.
— Matted	1161	166	vii.	— Greater Panicle	1622	91	x.
— Remote-flowered	1157	163	vii.	— Pond	1679	167	x.
— Lovage	603	139	iv.	— Prickly	1624	93	x.
— Meadow-grass, Creeping	1754	103	xi.	— Green-ribbed	1667	148	x.
— Orache, Frosted	1207	35	viii.	— Grey	1625	94	x.
— Grass-leaved, var. α	1200	27	viii.	— Hammer	1677	163	x.
— var. β	1201	28	viii.	— Hare's-foot	1633	101	x.
— Stalk-fruited	1209	38	viii.	— Hoary	1637	108	x.
— Pansy	180	27	ii.	— Involute-leaved	1681	170	x.
— Pea	405	110	iii.	— Lesser Panicle, var. α	1619	88	x.
— Pearlwort	245	118	ii.	— var. β	1620	88	x.
— Plantain	1166, var. γ , & 1168	175	vii.	— Pond	1678	166	x.
— Prickly Samphire	628	173	iv.	— -like Kobresia	1609	77	x.
— Purslane	239	106	ii.	— Little Prickly	1626	95	x.
				— Long-bracteated	1675	156	x.

	PLATE	PAGE	VOL.
Sedge, Loose-flowered Mud.....	1649	122	x.
—— spiked Wood.....	1661	142	x.
—— Mountain	1652	126	x.
—— Narrow-leaved Mud.....	1647	120	x.
—— Oler's	1674	158	x.
—— Oval-spiked	1634	104	x.
—— Pale.....	1657	133	x.
—— Paradoxical	1621	90	x.
—— Pendulous Wood	1665	145	x.
—— Pink-leaved	1658	134	x.
—— Rock	1613	82	x.
—— Round-headed	1653	127	x.
—— Russet.....	1683	174	x.
—— Scorched Alpine	1663	137	x.
—— Sea	1618	87	x.
—— Short Brown-spiked.....	1659	135	x.
—— Silvery Heath	1654	129	x.
—— Slender-leaved	1676	161	x.
—— spiked	1639	111	x.
—— Smooth-stalked.....	1668	147	x.
—— Soft Brown.....	1617	86	x.
—— Starved Wood	1664	144	x.
—— Stiff Mountain	1640	112	x.
—— Tawny	1669 & 1670	154	x.
—— Tufted	1638	109	x.
—— Diœcious	1611	80	x.
—— Vernal.....	1655	130	x.
—— Water	1641 & 1642	113	x.
—— White, var. α	1631	102	x.
—— var. β	1632	103	x.
—— Yellow	1672 & 1673	160	x.

SEDUM

—— A'CRE, <i>Linn.</i>	532	55	iv.
—— albes'cens, <i>Haw.</i>	535	58	iv.
—— ALBUM, <i>Linn.</i>	529	52	iv.
—— var. α , Bab.....	529, fig. 1	52	iv.
—— var. β , Bab.....	529, fig. 2	53	iv.
—— ANG'LICUM, <i>Huds.</i>	531	54	iv.
—— [auop'et'atum, <i>DC.</i>] (excluded)...	63	iv.	
—— au'reum, <i>Wirt.</i>	537	59	iv.
—— <i>Bolont'ise</i> , <i>Lois.</i>	533	56	iv.
—— [Cepæ'a, <i>Linn.</i>] (excluded)	63	iv.	
—— DASYPHYLLUM, <i>Linn.</i>	530	53	iv.
—— el'egans, <i>Lej.</i>	536	58	iv.
—— var. maj'us, <i>Syme</i> ..	59	iv.	
—— var. mi'nus, <i>Syme</i> ..	59	iv.	
—— eu-al'bum, <i>Syme</i>	529	52	iv.
—— eu-reflex'um, <i>Syme</i>	534	57	iv.
—— Faba'ria, <i>Koch.</i>	527	50	iv.
—— <i>Forsteria'num</i> , <i>Leight.</i>	59	iv.	
—— Sm.	537	59	iv.
—— glau'eum, Sm.	535	58	iv.
—— mieran'thum, <i>Bast.</i>	529, fig. 2	53	iv.
—— purpuras'cens, <i>Koch</i>	526	49	iv.
—— purpu'reum, <i>Tausch.</i>	527	50	iv.
—— REFLEX'UM, <i>Linn.</i>	534 & 535	56	iv.
—— Sm.	534	57	iv.
—— var. α , Bab.	534	57	iv.
—— β , albes'cens, Bab. ...	535	58	iv.
—— RHODIOLA, <i>DC.</i>	525	48	iv.

SEDUM

	PLATE	PAGE	VOL.
—— RUPES'TRE, <i>Huds.</i>	536 & 537	58	iv.
—— Sm.	536	58	iv.
—— septangula're, <i>Haw.</i>	57	iv.	
—— SENANGULA'RE, <i>Linn.</i>	533	56	iv.
—— [stella'tum, <i>Linn.</i>] (excluded) ...	63	iv.	
—— TELEPHIUM, <i>Linn.</i>	526 & 527	49	iv.
—— Sm.	526	49	iv.
—— var. α , <i>Hook. & Arn.</i>	526	49	iv.
—— var. β , <i>Hook. & Arn.</i>	527	50	iv.
—— teretifo'lium, <i>Haw.</i>	529, fig. 1	52	iv.
—— VILLO'SUM, <i>Linn.</i>	528	51	iv.
<i>Sedum à feuilles épaisses</i> (Fr.)... ..	54	iv.	
—— à six angles (Fr.)	56	iv.	
—— acre (Fr.)	55	iv.	
—— blanc (Fr.).....	52	iv.	
—— d'Angleterre (Fr.).....	54	iv.	
—— régléchi (Fr.)	57	iv.	
—— velu (Fr.)	51	iv.	
<i>See Meersen</i> (Ger.).....	118	i.	
<i>Seesimse</i> (Ger.).....	63	x.	
<i>Seitenständige Segge</i> (Ger.)	98	x.	

SELAGINELLA

—— [Helvet'ica, <i>Link</i>] (ex-cluded)	11	xii.	
—— SELAGINOIDES, <i>Gray</i>	1829	10	xii.
—— spinulo'sa, <i>A. Braun</i>	1829	10	xii.
Self-heal	1059	47	vii.

SELINUM

—— palus'tre, <i>Linn.</i>	610	149	iv.
----------------------------------	-----	-----	-----

SEMPERVIVUM

—— TECTORUM, <i>Linn.</i>	538	60	iv.
---------------------------------	-----	----	-----

SENEBIE'RA

—— CORONOPUS, <i>Poir.</i>	160	221	i.
—— DID'YMA, <i>Pers.</i>	159	220	i.
—— pinnatif'ida, <i>DC.</i>	159	220	i.
<i>Sénébière à silicules jumelles</i> (Fr.).....	221	i.	
—— corne de cerf (Fr.).....	222	i.	

SENECIO

—— AQUATICUS, <i>Huds.</i>	756	86	v.
—— Reich.	756	86	v.
—— var. pinnatif'idus, <i>Gr. & Godr.</i>	86	v.	
—— barbaraj'of'ius, <i>Reich.</i> ..	86	v.	
—— CAMPESTRIS, <i>DC.</i> ...	760	89	v.
—— var. marit'ima, <i>Syme</i>	90	v.	
—— chrysanthemif'of'ius, <i>Poir.</i>	751	83	v.
—— [errat'icus, <i>Bertol.</i>] (ex-cluded).....	217	v.	
—— ERUCIFOLIUS, <i>Linn.</i>	754	84	v.
—— JACOBÆA, <i>Linn.</i>	755	85	v.
—— liv'idus, Sm.	751	81	v.
—— PALUDOSUS, <i>Linn.</i> ...	758	88	v.
—— PALUDOSUS, <i>DC.</i>	759	89	v.
—— saliceto'rum, <i>Godr.</i>	757	87	v.
—— SARACENTICUS, <i>Linn.</i>	757	87	v.
—— SQUALIDUS, <i>Linn.</i>	753	83	v.

	PLATE	PAGE	VOL.
SENECIO			
— SYLVATICUS, <i>Linn.</i>		750 & 751	81 v.
— — Sm.		750	81 v.
— — var. auriculatus, <i>W.</i>			
<i>Meyer</i>	751		81 v.
— tenuifolius, <i>Jacq.</i>	754		84 v.
— VISCO'SUS, <i>Linn.</i>	752		82 v.
— VULGARIS, <i>Linn.</i>	749		80 v.
— — var. radiatus, <i>Syme.</i>		749, fig. β	80 v.
<i>Senecion à feuilles de Leucanthème</i>			
(Fr.).....	83		v.
— de roquette (Fr.).....	84		v.
— commun (Fr.)	80		v.
— de Veau (Fr.)	87		v.
— de marais (Fr.)	88		v.
— des bois (Fr.)	82		v.
— des prés (Fr.)	90		v.
— Jacobée (Fr.)	85		v.
— scarrasin (Fr.)	88		v.
— visqueux (Fr.)	82		v.
SERAPIAS			
— cusifolia, <i>Linn.</i>	1484		128 ix.
— grandiflora, <i>Lightf.</i>	1485		129 ix.
— latifolia, <i>Linn.</i>	1480		124 ix.
— Louchophyllum, <i>Linn. fil.</i>	1485		129 ix.
— longifolia, <i>Linn.</i>	1482		126 ix.
— palustris, <i>Lightf.</i>	1482		126 ix.
— rubra, <i>Linn.</i>	1483		127 ix.
— Xiphophyllum, <i>Linn. fil.</i> ...	1484		128 ix.
SERRAFALCUS			
— arvensis, <i>Parl.</i>	1806		171 ix.
— commutatus, <i>Bab.</i>	1802		168 xi.
— hordeaceus, <i>G. & G.</i>	170		10 xi.
— Lloydia-nus, <i>G. & G.</i>	1805		170 xi.
— mollis, <i>G. & G.</i>	1804		170 xi.
— mollis, <i>Parl.</i>	1804 & 1805		169 xi.
— racemosus, <i>Parl.</i>	1803		167 xi.
— secalinus, <i>Bab.</i> ...	1800 & 1801		165 xi.
<i>Serrafalcus confondu</i> (Fr.)			169 xi.
— des champs (Fr.) ..			172 xi.
— seigle (Fr.).....			166 xi.
SERRATULA			
— alpeana, <i>Linn.</i>	703		27 v.
— arvensis, <i>Linn.</i>	693 & 694		17 v.
— monticola, <i>Bor.</i>	704 (bis)		29 v.
— TINCTORIA, <i>Linn.</i>			
704 & 704 (bis)			28 v.
— tinctoria, <i>Bor.</i>	704		29 v.
— — var. monticola, <i>Syme</i>			
704 (bis)			29 v.
Service-tree	487		150 iii.
— Wild	481		242 iii.
SESSELI			
— LIBANOTIS, <i>Koch</i>	602		137 iv.
<i>Sesélie libanotide</i> (Fr.)			138 iv.
SESLERIA			
— CÆRULEA, <i>Scop.</i>	1710		36 xi.

SETARIA

	PLATE	PAGE	VOL.
— [glauca, <i>P. de B.</i>] (excluded) ...	199		xi.
— [italica, <i>P. de B.</i>] (excluded) ...	199		xi.
— VERTICILLATA, <i>P. de B.</i>		1694	14 xi.
— VIRIDIS, <i>P. de B.</i>	1693		13 xi.
<i>Setaria vert</i> (Fr.)			14 xi.
Shanrock	337		25 iii.
Shave-grass.....	1894		162 xii.
Sheep's-bit, Annual	863		5 vi.
— Fescue-grass	1783 & 1784		144 xi.
— Sorrel	1224		57 viii.
Shepherd's Cress	150		209 i.
— Purse, Alpine.....			205 i.
— Perfoliate ..	145		204 i.
<i>Shérarde arvensis</i> (Fr.).....			232 iv.
SHERARDIA			
— ARVEN'SIS, <i>Linn.</i>	663		231 iv.
Shield-fern, Bennett's	1856		80 xii.
— Broad	1857		82 xii.
— Crested	1853		70 xii.
— Lloyd's	1854		73 xii.
— Male	1850		57 xii.
— Narrow	1855		76 xii.
— Remote	1852		67 xii.
— Rigid	1851		65 xii.
Shore-weed, Plantain	1150		175 vii.
Shrew-ash	902		58 vi.
SIBBALDIA			
— procumbens, <i>Linn.</i>	426		142 iii.
— Procumbent	426		143 iii.
<i>Sibbaldie couchée</i> (Fr.)			143 iii.
SIBTHORPIA			
— EUROPÆA, <i>Linn.</i>	969		147 vi.
<i>Sibthorpie d'Europe</i> (Fr.).....			148 vi.
<i>Sichelförmiger Schneckenklee</i> (Ger.) ...			24 iii.
<i>Sichelförmiges Hasenöhrlchen</i> (Ger.)...			123 iv.
SIEGLINGIA			
— decumbens, <i>Bernh.</i>	1745		87 xi.
SILAUUS			
— PRATEN'SIS, <i>Bess.</i>	604		139 iv.
<i>Silauus des prés</i> (Fr.)			140 iv.
<i>Silber Pappel</i> (Ger.)			193 viii.
<i>Silberweiser Günseric</i> (Ger.) ...			152 iii.
SILENE			
— ACAULIS, <i>Linn.</i>	205		62 ii.
— [alpestris, <i>Linn.</i>] (excluded) ...			134 ii.
— anglica, <i>Linn.</i>	202		60 ii.
— — var. β, <i>Auet. Angl.</i> ...	203		60 ii.
— — var. stricta, <i>Brouf.</i>	61		ii.
— ARMERIA, <i>Linn.</i>	204		61 ii.
— brachicata, <i>Jord.</i>			57 ii.
— cerastioides, <i>DC.</i>			61 ii.
— CONICA, <i>Linn.</i>	201		58 ii.
— conoidea, <i>Reich.</i>	201		58 ii.
— DIUR'NA, <i>Gren. & Godr.</i>	211		69 ii.
— cæsea'pa, <i>All.</i>			63 ii.
— GAL'LICA, <i>Koch</i> 201 & 203			59 ii.

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
SILENE				<i>Sisymbre Sophie</i> (Fr.)	145	i.	
— gal'lica, <i>Linn.</i>	61	ii.		SISYMBRIUM			
— var. β , <i>Auct. Plur.</i> ...	202	60	ii.	— ALLIA'RIA, <i>Scop.</i>	100	146	i.
— INFLA'TA, <i>Sm.</i>	199	56	ii.	— <i>amphib'ium</i> , <i>Linn.</i>	128	181	i.
— Benth.	199 & 200	57	ii.	— YR'IO, <i>Linn.</i>	99	145	i.
— var. <i>puber'ula</i> , <i>Syme</i>	56	ii.		— <i>monese</i> , "Linn.," <i>Sm.</i> ...	91	138	i.
— ITALICA, <i>Pers.</i>	208	65	ii.	— <i>maria'le</i> , <i>Linn.</i>	91	140	i.
— <i>lusitan'ica</i> , <i>Linn.</i>	61	ii.		— <i>Nasturt'ium</i> , <i>Linn.</i>	125	176	i.
— MARIT'IMA, <i>Nitth.</i>	200	57	ii.	— OFFICINA'LE, <i>Scop.</i> ...	96	143	i.
— NOCTIFLO'RA, <i>Linn.</i> ...	209	66	ii.	— POLYCERA'TIUM, <i>Linn.</i>	97	144	i.
— NU'TANS, <i>Linn.</i>	207	64	ii.	— SOPH'IA, <i>Linn.</i>	98	145	i.
— <i>olera'cea</i> , <i>Bor.</i>	57	ii.		— <i>sylvestre</i> , <i>Linn.</i>	126	179	i.
— OTIT'ES, <i>Linn.</i>	206	63	ii.	— <i>tenuifol'ium</i> , <i>Linn.</i>	93	139	i.
— <i>paradoxa</i> , <i>Sm.</i>	65	ii.		— <i>terrestre</i> , <i>Sm.</i>	127	180	i.
— <i>patens</i> , <i>Peete</i>	208	65	ii.	— <i>thalia'num</i> , <i>Gaud.</i>	115	163	i.
— PRATEN'SIS, <i>Gren. & Godr.</i>	210	67	ii.	— <i>vi'mineum</i> , <i>Linn.</i>	95	142	i.
— <i>puber'ula</i> , <i>Jord.</i>	57	ii.		SISYRHHIN'CHIUM			
— <i>quinque-vul'nera</i> , <i>Linn.</i> ...	203	60	ii.	— <i>an'ceps</i> , <i>Bab.</i>	1491	138	ix.
— <i>sylvestris</i> , <i>Schott</i>	203	60	ii.	— BERMUDIA'NA, <i>Linn.</i> ...	1491	138	ix.
— <i>tridentata</i> , <i>DC.</i>	61	ii.		— Blue	1491	139	ix.
— <i>vesicaria</i> , <i>Schrad.</i>	57	ii.		— <i>mucrona'tum</i> , <i>Michx.</i>	139	ix.	
<i>Silene à calice enflé</i> (Fr.)	57	ii.		SI'UM			
— à courte tige (Fr.)	63	ii.		— ANGUSTIFOLIUM,			
— à petites fleurs (Fr.)	64	ii.		— <i>Linn.</i>	588	118	iv.
— <i>armérie</i> (Fr.)	62	ii.		— LATIFOLIUM, <i>Linn.</i> ...	587	117	iv.
— <i>conique</i> (Fr.)	59	ii.		— <i>nodiflorum</i> , <i>Linn.</i>	573	100	iv.
— <i>d'Angleterre</i> (Fr.)	60	ii.		— <i>repens</i> , <i>Sm.</i>	574	100	iv.
— <i>italique</i> (Fr.)	66	ii.		Skull-cap, Common	1060	48	vii.
— <i>maritime</i> (Fr.)	58	ii.		— Lesser	1061	49	vii.
— <i>noctiflore</i> (Fr.)	67	ii.		Sleep-bearing Poppy	57	84	i.
— <i>penché</i> (Fr.)	65	ii.		Sloe, Blackthorn	408	115	iii.
Silver-weed	433	150	iii.	SMILACINA			
<i>Silybe chardon marie</i> (Fr.)	5	v.		— BIFOLIA, <i>Desf.</i>	1510	175	ix.
SILYBUM				— Two-leaved	1510	176	ix.
— MARIA'NUM, <i>Gärtn.</i> ...	681	4	v.	<i>Smith Weide</i> (Ger.)	227	viii.	
SIME'THIS				<i>Smyrenkraut</i> , or <i>Pferdseppich</i>			
— BICOLOR, <i>Kunth</i>	1541	220	ix.	(Ger.)	177	iv.	
— <i>planifolia</i> , <i>Woods</i>	1541	220	ix.	SMYRN'IUM			
— Variegated	1541	221	ix.	— OLUSA'TRUM, <i>Linn.</i> ...	631	177	iv.
SINA'PIS				— Snapdragon, Common	953	131	vi.
— <i>alba</i> , <i>Linn.</i>	84	125	i.	— Corn	954	132	vi.
— <i>arvensis</i> , <i>Linn.</i>	83	124	i.	Sneeze-wort Yarrow	730	60	v.
— <i>Cheiran'thus</i> , <i>Koch</i>	92	139	i.	Snowdrop, Common	1507	167	ix.
— <i>incana</i> , <i>Linn.</i> ?	86	129	i.	Snowflake, Spring	1506	166	ix.
— <i>ni'gra</i> , <i>Linn.</i>	85	126	i.	— Summer	1505	165	ix.
— <i>tenuifolia</i> , <i>Sm.</i>	93	139	i.	Soapwort, Common	197	53	ii.
<i>Singrün</i> (Ger.)	63	vi.		Soft Rush	1561	21	x.
SISON				<i>Sohl oder Saal Weide</i> (Ger.) ..	235	viii.	
— AMOMUM, <i>Linn.</i>	578	106	iv.	SOLIDA'NUM			
— <i>inunda'tum</i> , <i>Linn.</i>	575	102	iv.	— DULCAMARA, <i>Linn.</i> ...	930	95	vi.
— <i>seg'etum</i> , <i>Linn.</i>	577	105	iv.	— var. <i>marit'ium</i> , <i>Syme</i>	95	vi.	
— <i>verticilla'tum</i> , <i>Linn.</i>	581	110	iv.	— <i>minia'tum</i> , <i>Bernh.</i>	972	93	vi.
<i>Sison amome</i> (Fr.)	107	iv.		— NI'GRUM, <i>Linn.</i>	931 & 932	96	vi.
<i>Sisymbre</i> (Fr.)	143	i.		— Sm.	931	97	vi.
— <i>alliaire</i> (Fr.)	147	i.		— var. <i>minia'tum</i> , <i>Syme</i>	932	97	vi.
— <i>corniculé</i> (Fr.)	144	i.		Soldier, Water	1445	80	ix.
— <i>iris</i> (Fr.)	146	i.		SOLIDA'GO			
— <i>officinal</i> (Fr.)	144	i.		— <i>Cambrica</i> , <i>Huds.</i>	779	113	v.

	PLATE	PAGE	VOL.
SOLIDA'GO			
— [lanceola'ta, <i>Linn.</i>] (ex- cluded).....		217	v.
— VIR'GA-AUREA, <i>Linn.</i> 778 & 779		113	v.
— — var. angustifo'lia, <i>Koch</i> ...		113	v.
— — var. cam'brica, <i>Sm.</i>	779	113	v.
Solomon's Seal, Angular-stemmed	1512	180	ix.
— Common	1513	177	ix.
— Whorled-leaved	1511	177	ix.
<i>Sommer-Knotenblume</i> (Ger.).....		165	ix.
— <i>Wendeloreche</i> (Ger.)		117	ix.
SON'CHUS			
— alp'i'nus, <i>Linn.</i>	809	152	v.
— ARVEN'SIS, <i>Linn.</i>	813	154	v.
— ASPER, <i>Hoffm.</i> ...	811 & 812	154	v.
— ceru'leus, <i>Cam.</i>	809	152	v.
— fall'ax, <i>Wallr.</i>	811 & 812	154	v.
— OLERA'CEUS, <i>Linn.</i> ...	810	153	v.
— — α . and β . le'vis, <i>Linn.</i>	810	153	v.
— — γ . and δ . as'per, <i>Linn.</i> 811 & 812		154	v.
— PALUS'TRIS, <i>Linn.</i>	814	155	v.
<i>Sonnenweide Flockenblume</i> (Ger.).....		38	v.
<i>Sonnenwendige Wolfsmilche</i> (Ger.) ...	100	viii.	
<i>Soque tertinaire</i> (Fr.)	48	vii.	
<i>Sorbier domestique</i> (Fr.)	250	iii.	
SORBUS			
— A'ria, <i>Crantz</i>	482	243	iii.
— — var. salicifo'lia, <i>Myr.</i>	483	244	iii.
— Aucupa'ria, <i>Linn.</i>	486	248	iii.
— domestica, <i>Linn.</i>	487	250	iii.
— fen'nicia, <i>Fries</i>	485	247	iii.
— hybrida, <i>Fries</i>	485	247	iii.
— [— Willd. (?)] (ex- cluded)		261	iii.
— latifo'lia, <i>Pers.</i>	242	iii.	
— oblongifo'lia, <i>Reich</i>	483	244	iii.
— scan'dica, <i>Fries</i>	484	245	iii.
— torminalis, <i>Crantz</i>	481	241	iii.
Sorrel, Common	1223	55	viii.
— French	1222	54	viii.
— Kidney-shaped Mountain	1225	58	viii.
— Procumbent Yellow	311	214	ii.
— Sheep's	1224	57	viii.
— Upright Yellow	312	215	ii.
— Wood	310	211	ii.
<i>Souchet brun</i> (Fr.)	41	x.	
— long (Fr.)	42	x.	
<i>Soude epineuse</i> (Fr.)	5	viii.	
Southernwood, Field	1233	65	v.
Sow-thistle, Blue	809	152	v.
— Corn	813	155	v.
— Marsh.....	814	157	v.
— Rough	811 & 812	154	v.
— Smooth	810	153	v.
SOYERIA			
— paludo'sa, Gr. & Godr.....	821	163	v.
Spanish Catchfly	206	64	ii.

SPARGANIUM

	PLATE	PAGE	VOL.
— AFFINE, <i>Schneitzl</i>	1389	7	ix.
— erectum, var. α , <i>Linn.</i>	1387	5	ix.
— — var. β , <i>Linn.</i>	1388	6	ix.
— longifo'lium, <i>Don.</i>	1389	7	ix.
— MINIMUM, <i>Fries</i>	1390	8	ix.
— na'tans, <i>Bab.</i>	1389	7	ix.
— — <i>Linn.</i>	1390	8	ix.
— RAMO'SUM, <i>Huds.</i>	1387	5	ix.
— SIMPLEX, <i>Huds.</i>	1388	6	ix.
— — var. Benth.	1389	7	ix.
<i>Spargoute des champs</i> (Fr.)	128	ii.	
— en alène (Fr.)	124	ii.	
— — nodeuse (Fr.)	126	ii.	
<i>Sparrige Binse</i> (Ger.)	39	x.	
<i>Sparriger Alant</i> (Ger.).....	99	v.	
<i>Spartain à balais</i> (Fr.).....	11	iii.	
SPARTINA			
— ALTERNIFLO'RA, <i>Lois.</i> 1683		5	xi.
— STRICTA, <i>Roth.</i>	1687	4	xi.
— — var. alternifo'ra, A. Gray	1688	5	xi.
<i>Spartine roide</i> (Fr.)	5	xi.	
SPARTIUM			
— scopari'um, <i>Linn.</i>	329	11	iii.
Spear Mint	1023	8	vii.
— Thistle	686	11	v.
Spearwort, Adder's-tongue-leaved	28	33	i.
— Greater	31	36	i.
— Lesser	30	35	i.
SPECULARIA			
— hybrida, A. DC.	874	17	vi.
— [spec'ulum, A. DC.] (ex- cluded).....		19	vi.
Speedwell, Blue Rock	981	161	vi.
— Brooklime	990	170	vi.
— Buxbaum's	973	153	vi.
— Common	984 & 985	164	vi.
— Erect Alpine	980	159	vi.
— Greenmander	986	165	vi.
— Green Procumbent... ..	972	152	vi.
— Grey Procumbent	971	151	vi.
— Ivy-leaved	970	150	vi.
— leaved Whitlow Grass	135	192	i.
— Marsh	988	168	vi.
— Mountain	987	167	vi.
— Smooth Annual	977	157	vi.
— Perennial	978	158	vi.
— Prostrate	979	158	vi.
— Spiked	982 & 983	162	vi.
— Trifid	974	154	vi.
— Vernal	975	155	vi.
— Wall	976	156	vi.
— Water	989	169	vi.
<i>Speierling</i> (Ger.)	250	iii.	
SPERGELLA			
— nodo'sa, <i>Reich.</i>	251	125	ii.
— sagino'des, <i>Reich.</i>	249	122	ii.
— subula'ta, <i>Reich.</i>	250	122	ii.

SPERGULA

	PLATE	PAGE	VOL.
— ARVEN'SIS, Linn....	252 &	253	126 ii.
— Reich.	252	127	ii.
— var. sati'va, Syme ...	252	127	ii.
— var. vulga'ris, Syme	253	127	ii.
— nival'is, Lindblom ...	250 (bis)	124	ii.
— nodosa, Linn.	251	125	ii.
— [pentan'dra, Linn.](excluded) ...	134		ii.
— Sm.	253	127	ii.
— saginoid'es, Linn.	249	122	ii.
— β. nival'is, Lind.	250 (bis)	124	ii.
— sati'va, Bönningh.	252	127	ii.
— subula'ta, Swartz.....	250	122	ii.
— stric'ta, Swartz.....	244	115	ii.
— vulga'ris, Bönningh.....	253	127	ii.
<i>Spergulaire des rochers</i> (Fr.) ...	133		ii.
— marine (Fr.)	132		ii.
— négligé (Fr.)	131		ii.
— rouge (Fr.).....	129		ii.

SPERGULARIA

— MARGINA'TA, Syme ...	257	131	ii.
— mari'na, Gareke	255	129	ii.
— var. α, Hook. & Arn.	255	129	ii.
— var. β, Hook. & Arn.	257	131	ii.
— me'dia, Gareke	257	131	ii.
— β. margina'ta, Fenzl.	257	131	ii.
— NEGLEC'TA, Syme	255	129	ii.
— var. me'dia, Syme ...	130		ii.
— var. sali'na, Syme ...	130		ii.
— RU'BRA, Fenzl.	254	129	ii.
— RUPESTRIS, Lebel	256	132	ii.
— rupi'cola, Lebel	256	133	ii.
— sali'na, Presl	130		ii.
<i>Sperrfrüchtige Segge</i> (Ger.)	93		x.
<i>Spider Orchis</i> , Early, var. α.....	1469	112	ix.
— var. β ...	1470	113	ix.
— Late	1468	112	ix.
<i>Spiegelndes Samkraut</i> (Ger.) ...	40		ix.
<i>Spierapfel</i> (Ger.)	250		iii.
<i>Spießblättrige Melde</i> (Ger.)	32		viii.
<i>Spießblättriger Frauenflachs</i> (Ger.) ...	135		vi.
<i>Spießförmiger Löwenzahn</i> (Ger.)	133		v.
<i>Spikenard</i> , Ploughman's	767	99	v.
<i>Spindle-tree</i>	317	225	ii.
<i>Spinnen Frauenthräne</i> (Ger.) ...	112		ix.
<i>Spinnenähnliche Frauenthräne</i> (Ger.)	113		ix.

SPIRÆA

— FILIPEN'DULA, Linn.	416	128	iii.
— SALICIFOLIA, Linn. ...	414	125	iii.
— ULMARIA, Linn.	415	126	iii.
<i>Spiræa</i> , Willow-leaved	414	126	iii.
<i>Spiranthe automnale</i> (Fr.).....	116		ix.
— d'été (Fr.)	117		ix.

SPIRAN'THES

— ÆSTIVA'LIS, Rich.	1473	116	ix.
— AUTUMNA'LIS, Rich. ...	1472	115	ix.
— cer'nua, Bab.....	1474	117	ix.
— GEMMIP'ARA, Lindl. ...	1474	117	ix.
— Romanzoffia'na, Cham.....	1474	117	ix.

	PLATE	PAGE	VOL.
<i>Spirée à feuilles de saule</i> (Fr.)... ..	126		iii.
<i>Spirée filipendule</i> (Fr.).....	129		iii.
<i>Spirée reine des prés</i> (Fr.)	127		iii.
SPIRODE'LA			
— polyrrhi'za, Schleid.	1397	23	ix.
<i>Spitzblättrige Weide</i> (Ger.)	251		viii.
<i>Spitzblättriges Samkraut</i> (Ger.)	47		ix.
<i>Spitziger Weizen</i> (Ger.).....	183		xi.
<i>Spitzkantige Segge</i> (Ger.).....	111		x.
<i>Spitzkeimender Knöterich</i> (Ger.)	81		viii.
<i>Spleenwort</i>	1876	127	xii.
— Alternate-leaved ...	1881	136	xii.
— Black	1874 &	1875	{ 122, } xii.
— Forked	1882	138	xii.
— Green	1877	129	xii.
— Lady Clermont's ...	1879	132	xii.
— Lanceolate	1873	119	xii.
— Maidenhair	1878	131	xii.
— Smooth Rock.....	1872	117	xii.
<i>Sprössende Felsnelke</i> (Ger.)	52		ii.
<i>Spurge</i> , Broad-leaved Worted ...	1255	101	viii.
— Bushy Worted	1256	102	viii.
— Caper	1267	113	viii.
— Coral	1259	105	viii.
— Cyprus	1262	108	viii.
— Downy	1258	104	viii.
— Dwarf	1266	112	viii.
— Irish	1257	103	viii.
— Laurel	1247	87	viii.
— Leafy-branched	1261	107	viii.
— Petty	1265	111	viii.
— Portland	1264	111	viii.
— Purple	1253	99	viii.
— Sea.....	1263	109	viii.
— Sun	1254	100	viii.
— Woody	1260	106	viii.
<i>Spurrey</i> , Corn	252	128	ii.
— var. β	253	128	ii.
— Knotted	251	126	ii.
— Red-flowering Field... ..	254	129	ii.
<i>Squats</i>	66	98	i.
<i>Squill</i> , Autumnal	1526	199	ix.
— Vernal	1527	200	ix.
<i>Squinancy-wort</i>	661	229	iv.
<i>St. Barnaby's Thistle</i>	712	38	v.
<i>St. James's Weed</i>	152	212	i.
<i>St. John's Wort</i> , Dotted-leaved	268	149	ii.
— Hairy	274	158	ii.
— Imperforate ...	269	152	ii.
— Large-flowered	267	147	ii.
— Linaria-leaved	272	156	ii.
— Marsh.....	276	160	ii.
— Mountain	275	159	ii.
— Small Upright	273	157	ii.
— Squared-stemmed	270	153	ii.
— Stinking	266	146	ii.
— Tall	265	146	ii.
— Trailing.....	271	155	ii.
— Waved-leaved	270 (bis)	155	ii.

	PLATE	PAGE	VOL.
<i>Stachelbeere</i> (Ger.).....		39	iv.
<i>Stachelspitziges Samkraut</i> (Ger.)		49	ix.
STA'CHYS			
— <i>ambigua</i> , Sm.	1070	58	vii.
— AN'NUA, Linn.	1073	61	vii.
— ARVEN'SIS, Linn.....	1072	60	vii.
— BETON'ICA, Benth.	1067	54	vii.
— GERMAN'ICA, Linn. ...	1068	56	vii.
— [ana'ta, Linn.] (excluded)		86	vii.
— <i>palustrisylvatica</i> , Schiede	1070	58	vii.
— PALUS'TRIS, Linn.	1069	57	vii.
— — var. <i>ambigua</i> , Bab....	1070	58	vii.
— — var. <i>hybrida</i> , Benth.	1070	58	vii.
— SYLVAT'ICA, Linn.	1071	59	vii.
STA'CHYS			
— SYLVAT'ICI-PALUS'TRIS,			
<i>Wirtg.</i>	1070	58	vii.
STAPHYLE'A			
— PINNATA	322	234	ii.
<i>Staphylies ailé</i> (Fr.)		235	ii.
Star of Bethlehem, Common ...	1524	196	ix.
— — Drooping ...	1523	195	ix.
— — Spiked	1525	197	ix.
— — Yellow	1522	194	ix.
Star-Thistle	711	37	v.
— — Rough	710	36	v.
Starch Hyacinth	1529	203	ix.
<i>Stärkerer Schwingel</i> (Ger.)		147	xi.
<i>Starre Segge</i> (Ger.)		112	x.
<i>Starren Schwingel</i> (Ger.)		109	xi.
<i>Starren Habichtskraut</i> (Ger.) ...		202	v.
STATICE			
— <i>Arme'ria</i> , Linn.....	1152 & 1153	157	vii.
— — Sm.	1152	157	vii.
— <i>auriculæfolia</i> , Benth.		1159 & 1160	163 vii.
— — <i>bahusien'sis</i> , <i>Fries</i>		1158	162 vii.
— — <i>Be'hen</i> , <i>Drejer</i>		1156 & 1157	161 vii.
— — var. <i>pyramidalis</i> ,			
<i>Syme</i>	1157	161	vii.
— — <i>bellidifolia</i> , Gouan		1161	165 vii.
— — BINERVO'SA, G. E. Sm.		1159 & 1160	163 vii.
— — — var. <i>Dodar'tii</i> , <i>Syme</i>		1160	164 vii.
— — — var. <i>intermedia</i> , <i>Syme</i>		161	vii.
— — — var. <i>occidentalis</i> ,			
<i>Syme</i>	1159	164	vii.
— — CAS'PIA, <i>Willd.</i>	1161	165	vii.
— — — <i>Dodar'tii</i> , Bab. (olim)		164	vii.
— — — Gir.	1160	164	vii.
— — <i>elongata</i> , var. <i>pubes'cens</i> ,			
Koch (?)	1153	157	vii.
— — <i>Limonium</i> , Gren. & Godr.	1156	161	vii.
— — LIMONIUM, Linn.		1156-1158	{ 160, } vii.
— — — Reich.	1157	161	vii.
— — — Sm.....	1156 & 1157	161	vii.

STATICE

	PLATE	PAGE	VOL.
— — var. <i>Benth.</i>	1158	162	vii.
— — — var. <i>β</i> , Sm.	1159	164	vii.
— — — var. <i>Be'hen</i> , Boiss. ...	1156	161	vii.
— — — var. <i>genu'na</i> , Boiss.	1157	161	vii.
— — — var. <i>Scan'ica</i> , <i>Fries</i>		1156 & 1157	161 vii.
— — <i>mariti'ma</i> , Sm.....	1152	157	vii.
— — <i>occidentalis</i> , Lloyd	1159	164	vii.
— — <i>plantagin'ea</i> , All.	1154	159	vii.
— — <i>Pseudo-Limonium</i> , Reich.	1156	161	vii.
— — <i>rari'flo'ra</i> , <i>Drejer</i>	1158	162	vii.
— — <i>reticulata</i> , M. Bieb.....	1161	165	vii.
— — <i>serotina</i> , Gren. & Godr. (in			
part).....	1157	161	vii.
— — <i>spathulata</i> , Hook.	1159	164	vii.
<i>Statice limonium</i> (Fr.)		162	vii.
<i>Stechende Simse</i> (Ger.)		67	x.
STEENHAMM'ARIA			
— <i>mariti'ma</i> , <i>Fries</i>	1099	93	vii.
STEENHAMM'ERA			
— <i>mariti'ma</i> , Reich.....	1099	93	vii.
<i>Steife Segge</i> (Ger.).....		109	x.
— — <i>Wolfsmilch</i> (Ger.)		102	viii.
<i>Steifer Gänsefuß</i> (Ger.)		20	viii.
— — <i>Sauerklee</i> (Ger.)		215	ii.
<i>Steifes Borstengras</i> (Ger.).....		198	xi.
<i>Steifhaariges Vergissmeinnicht</i>			
(Ger.)		107	vii.
<i>Steigende Waldrebe</i> (Ger.)		3	i.
<i>Steinpeterleinblättrige Rose</i> (Ger.).....		204	iii.
STELLA'RIA			
— AQUAT'ICA, Scop.	227	91	ii.
— <i>Boræ'na</i> , Jord.		94	ii.
— <i>cerastoides</i> , Linn.....	226	90	ii.
— <i>Elizabeth'ina</i> , "F. Schultz"		95	ii.
— GLAU'CA, Nith.	231	97	ii.
— GRAMIN'EA, Linn.	232	98	ii.
— <i>grandiflo'ra</i> , "Tenore," Woods....		95	ii.
— HOLOS'TEA, Linn.	230	96	ii.
— ME'DIA, With.	229	93	ii.
— — Boreau	229	93	ii.
— — var. <i>Boræ'na</i> , <i>Syme</i>		94	ii.
— — var. <i>neglecta</i> , <i>Syme</i>		94	ii.
— — var. <i>umbro'sa</i> , <i>Syme</i>		95	ii.
— — <i>neglecta</i> , <i>Weibe</i>		94	ii.
— NEMORUM, Linn.	228	93	ii.
— <i>pentagyna</i> , Gaud. ...	227	91	ii.
— <i>scapifera</i> , Willd.		99	ii.
— ULIGIN'O'SA, Murr.	233	99	ii.
— <i>umbro'sa</i> , "Opitz," Bab....		95	ii.
<i>Stellaire aquatique</i> (Fr.)		92	ii.
— — <i>des bois</i> (Fr.)		93	ii.
— — <i>glauque</i> (Fr.)		98	ii.
— — <i>grammée</i> (Fr.).....		99	ii.
— — <i>holostée</i> (Fr.)		97	ii.
— — <i>orgeline</i> (Fr.)		95	ii.
<i>Stengellose Eberwurz</i> (Ger.).....		17	v.
<i>Stengelumfassende Taubnessel</i>			
(Ger.)		70	viii.

	PLATE	PAGE	VOL.
<i>Sternförmige Segge</i> (Ger.).....	95		x.
<i>Sternhyacinthe</i> (Ger.)	201		ix.
<i>Stiefmütterchen</i> (Ger.)	25		ii.
<i>Stiel Eiche</i> (Ger.)	146		viii.
<i>Stielfrüchtige Keilmelde</i> (Ger.)... ..	38		viii.
<i>Stinkende Grundfeste</i> (Ger.).....	158		v.
—— <i>Hunds-Kamille</i> (Ger.)	50		v.
—— <i>Niesswurz</i> (Ger.)	59		i.
<i>Stinkender Gänsefuß</i> (Ger.).....	13		viii.
Stinking Goosefoot	1187	13	viii.
—— Groundsel	752	82	v.
—— Hawk's-beard	815	158	v.
—— Hellebore	45	59	i.
—— Mayweed	720	50	v.
—— St. John's Wort.....	266	146	ii.

STIPA

—— [penua'ta, L.] (excluded).....	200		xi.
Stitchwort	229	95	ii.
—— Bog	234	100	ii.
—— Fountain	233	100	ii.
—— Glaucous Marsh	231	98	ii.
—— Greater	230	97	ii.
—— Lesser	232	99	ii.
—— Wood	228	93	ii.
Stock, Great Sea	104	152	i.
—— Hoary Shrubby	105	153	i.
Stone Bramble	441	160	iii.
—— -crop, Biting	532	55	iv.
—— English	531	54	iv.
—— Forster's	537	60	iv.
—— Glaucous	535	58	iv.
—— Hairy	528	51	iv.
—— Insipid	533	56	iv.
—— Rock	536	59	iv.
—— Thick-leaved	530	54	iv.
—— White	529	52	iv.
—— Yellow	534	57	iv.
Stonewort, Glabrous	579	108	iv.
—— Hedge	578	107	iv.
Stork's bill, Common.....	307	207	ii.
—— Musk	308	208	ii.
—— Sea	309	209	ii.
<i>Stramoine à feuilles sinuées</i> (Fr.)	104		vi.
<i>Strand-Aster</i> (Ger.)	111		v.
Strangle-weed.....	928	92	vi.
Strapwort, Sand	1170		vii.
<i>Stratiote aloès</i> (Fr.)	80		ix.

STRATIOTES

—— ALOÏDES, Linn.	1445	80	ix.
<i>Straussartige Brombeere</i> (Ger.)	169		iii.
<i>Straussblüthiger Friedlos</i> (Ger.)	144		vii.
Strawberry, Barren	427	144	iii.
—— Hautbois	439	156	iii.
—— Tree	882	29	v.
—— Wild	438	155	iii.
<i>Stumpfblättriger Ampfer</i> (Ger.)	47		viii.
<i>Stumpfblättriges Samkraut</i> (Ger.).....	48		ix.
<i>Stumpfblüthige Bünse</i> (Ger.) ..	29		x.
<i>Sturshut</i> (Ger.).....	65		i.

STURMIA

	PLATE	PAGE	VOL.
—— <i>Löselii</i> , Reich.	1488	133	ix.
—— <i>min'ima</i> , Hoppe	1689	7	xi.
—— <i>ter'na</i> , Pers.	1689	7	xi.

SUÆDA

—— FRUTICO'SA, Forsk.....	1178	2	viii.
—— MARIT'IMA, Dumort. ...	1179	3	viii.
—— var. ascen'dens, Syme		3	viii.
—— var. procum'bens, Syme ...		3	viii.
<i>Subulaire aquatique</i> (Fr.).....		201	i.

SUBULARIA

—— AQUA'TICA, Linn.	143	201	i.
--------------------------	-----	-----	----

SUCCISA

—— <i>pratensis</i> , Mönch.....	677	250	iv.
Succory, Swine's	788	127	v.
—— Wild	786	123	v.
<i>Suéla ligneuse</i> (Fr.)		3	viii.
—— <i>maritime</i> (Fr.).....		4	viii.
Sulphur -wort.....	609	149	iv.
—— Meadow	604	140	iv.
—— Water-Dropwort... ..	595	127	iv.
<i>Sumpf Baldgriess</i> (Ger.).....		88	v.
—— <i>Blutauge</i> (Ger.)		153	iii.
—— <i>Dotterblume</i> (Ger.)		52	i.
—— <i>Dreizack</i> (Ger.)		66	ix.
—— <i>Glockenheide</i> (Ger.)		38	vi.
—— <i>Harthen</i> (Ger.)		160	ii.
—— <i>Herzblatt</i> (Ger.)		86	iv.
—— <i>Holtonie</i> (Ger.)		180	vii.
—— <i>Isnardie</i> (Ger.)		27	iv.
—— <i>Kratzdistel</i> (Ger.)		13	v.
—— <i>Labkraut</i> (Ger.)		222	iv.
—— <i>Läusekraut</i> (Ger.)		179	vi.
—— <i>Platterbse</i> (Ger.).....		109	iii.
—— <i>Ruhrkraut</i> (Ger.)		73	v.
—— <i>Saudistel</i> (Ger.)		157	v.
—— <i>Schmiele</i> (Ger.)		69	xi.
—— <i>Schotenweiderich</i> (Ger.)... ..		19	iv.
—— <i>Segge</i> (Ger.)		166	x.
—— <i>Strandling</i> (Ger.).....		175	vii.
—— <i>Toljeldie</i> (Ger.)		224	ix.
—— <i>Weichkraut</i> (Ger.).....		135	ix.
—— <i>Veilchen</i> (Ger.)		14	ii.
—— <i>Vergissmeinnicht</i> (Ger.)		100	vii.
—— <i>Vogelkraut</i> (Ger.)		100	ii.
—— <i>Ziest</i> (Ger.)		57	vii.
<i>Sumpfbünse</i> (Ger.)		33	x.
<i>Sumpfried</i> (Ger.)		52	x.
<i>Sumpfscheuchzeri</i> (Ger.)		67	ix.
Sundew, English	183	33	ii.
—— Intermediate	184	33	ii.
—— Larger Long-leaved ...	183	33	ii.
—— Lesser Long-leaved ...	184	33	ii.
—— Round-leaved	182	31	ii.
Sun-Rose.....	165	8	ii.
—— Spurge	1254	100	viii.
<i>Sureau noir</i> (Fr.)		200	iv.
<i>Sureau Yéble</i> (Fr.).....		201	iv.
<i>Suron-Terroise</i> (Fr.)		114	iv.

	PLATE	PAGE	VOL.
<i>Süßholzblüttrige Büreuschote</i> (Ger.) ...	76	100	iii.
Swallow-wort	67	100	i.
Swedish Turnip.....	89	135	i.
Sweet Alyssum	140	198	i.
— Chestnut	1290	159	viii.
— Cicely	626	170	iv.
— Flag	1391	11	ix.
— Milk Vetch	377	76	iii.
— -scented Coltsfoot	781	118	v.
— Evening Primrose	509	26	iv.
— Vernal-grass	1696	18	xi.
— Violet	171	15	ii.
— Woodruff	660	228	iv.
Sweetbriar, Common	468	210	iii.
— Small-flowered	469	212	iii.
— leaved	470	212	iii.
SWERTIA			
— [peren'nis, <i>Linn.</i>] (excluded) ...	81	vi.	
Swine's Cress	160	222	i.
— Succory	788	127	v.
Sycamore	320	231	ii.
SYMPHORICARPUS			
— [racemo'sus, <i>Mich.</i>] (excluded)...	210	iv.	
SYMPHYTUM			
— [asper'rimum, <i>M. Bieb.</i>] (excluded)	121	vii.	
— OFFICINA'LE, <i>Linn.</i> 1115 & 1116	114	vii.	
— — var. pa'tens, <i>Syme</i> ...	1116	vii.	
— [Orienta'le, <i>Linn.</i>] (excluded) ...	121	vii.	
— pa'tens, <i>Sibth.</i>	1116	vii.	
— [Tau'ricum, <i>Willd.</i>] (ex- cluded).....	121	vii.	
— TUBEROSUM, <i>Linn.</i> ...	1117	vii.	
<i>Tabernämontan's Simse</i> (Ger.)... ..	64	x.	
<i>Tabouret des Alpes</i> (Fr.)	205	i.	
— des champs (Fr.).....	203	i.	
— perfolié (Fr.)	204	i.	
Tamarisk, English	261	139	ii.
<i>Tamarisque</i> (Fr.)	139	ii.	
TAMARIX			
— ANGLICA, <i>Webb</i>	261	139	ii.
— gal'lica, <i>Sm</i>	261	139	ii.
<i>Tamtsier commun</i> (Fr.).....	171	ix.	
TAMUS			
— COMMUNIS, <i>Linn.</i>	1508	170	ix.
— cre'tica, <i>Linn.</i>	171	ix.	
— e'dulis, <i>Lowe</i>	171	ix.	
TANACE'TUM			
— <i>Leucan'themum</i> , Reich. fil. 714	41	v.	
— Parthe'nium, C. H. Schultz. 715	43	v.	
— vulga're, <i>Linn.</i>	716	44	v.
<i>Tanaisie commune</i> (Fr.)	45	v.	
Tausy, Common	716	45	v.
— leaved Yarrow	728	58	v.

TARAX'ACUM

	PLATE	PAGE	VOL.
— <i>Dens-leo'nis</i> , Desf.	802	142	v.
— erythrosp'er'mum, Andr. ...	803	142	v.
— læviga'tum, DC.	143	v.	
— OFFICINA'LE, <i>Wigg.</i> 802-804	142	v.	
— — Gr. & Godr.	802	142	v.
— — var. erythrosp'er'mum, <i>Syme</i>	803	142	v.
— — var. glauc'es'cens, <i>Koch</i>	803	142	v.
— — var. læviga'tum, <i>Syme</i>	143	v.	
— — var. liv'idum, <i>Koch</i>	804	143	v.
— — var. palus'tre, <i>Syme</i>	804	143	v.
— — var. taraxaco'i'des, <i>Koch</i>	143	v.	
— palus'tre, DC.	804	143	v.
— 'idum, <i>Jord.</i>	144	v.	
Tare, Four-seeded Slender	383	86	iii.
— Hairy	382	84	iii.
— Many-seeded Slender	384	87	iii.
<i>Täschelkraut</i> (Ger.)	212	i.	
<i>Taube Trespe</i> (Ger.)	164	xi.	
<i>Tauben-Skabiöse</i> (Ger.).....	252	iv.	
<i>Taubenkropp</i> (Ger.)	111	i.	
<i>Taunel Lolch</i> (Ger.)	188	xi.	
<i>Tausch</i> (Ger.)	162	v.	
<i>Tausendgüldenkrant</i> (Ger.)	68	vi.	
<i>Tausendkörniger Zwerg-Lein</i> (Ger.) ...	180	ii.	
TAXUS			
— bacea'ta, <i>Lindl.</i>	1384	277	viii.
— BACCA'TA, <i>Linn.</i>	1384	277	viii.
— — var. fastigia'ta, <i>Syme</i>	277	viii.	
— fastigia'ta, <i>Lindl.</i>	277	viii.	
Tea-plant.....	933	99	vi.
Teasel, Cultivated	675	247	iv.
— -headed Trefoil.....	350	43	iii.
— Small	676	249	iv.
— Wild	674	246	iv.
TEESDA'LIA			
— <i>Ibe'ris</i> , DC.	150	209	i.
— NUDICAULIS, <i>R. Brown</i>	150	209	i.
— petra'ea, Reich.	151	210	i.
<i>Teesdalie irrégulière</i> (Fr.)	209	i.	
TELMATOPHA'CE			
— gil'ba, <i>Schleid.</i>	1396	22	ix.
TERA'CHIA			
— German'ica, <i>Presl</i>	1881	136	xii.
— Ruta-mura'ria, <i>Presl</i>	1880	135	xii.
<i>Terrenoiz commune</i> (Fr.)	113	iv.	
TEUCRIUM			
— BO'TRYS, <i>Linn.</i>	1091	81	vii.
— CHAMÆ'DRYS, <i>Linn.</i> ...	1094	84	vii.
— [re'gium, <i>Schreb.</i>] (excluded) ...	87	vii.	
— scordi'o'des, <i>Bab.</i>	83	vii.	
— [<i>Schreb.</i>] (excluded)	87	vii.	
— SCOR'DIUM, <i>Linn.</i>	1092	82	vii.
— SCORODONIA, <i>Linn.</i> ...	1093	85	vii.
<i>Teufels Abtiss</i> (Ger.).....	250	iv.	

	PLATE	PAGE	VOL.
THALIC'TRUM			
— ALPINUM, Linn.	2	4	i.
— <i>collinum?</i> Wall.	7	8	i.
— <i>cuminus</i> , Syme.	4	5	i.
— FLAVUM, Linn.	8	9	i.
— — Reich.	8 a	9	i.
— — var. <i>Morisoni</i> , Syme	8 γ	9	i.
— — var. <i>riparium</i> , Syme	8 β	9	i.
— — var. <i>sphaerocarpum</i> , Syme.	8 a	9	i.
— flexuosum, Bernh.	5	6	i.
— KOCH'II, Fries	6	7	i.
— <i>major</i> , Sm.	5	6	i.
— MINUS, Linn.	3-5	4	i.
— — Auct. Plur.	3 & 4	5	i.
— — (in part), Benth., &c.	5	6	i.
— — γ, Hook. & Arn.	7	8	i.
— — var. <i>maritimum</i> , Syme.	3	5	i.
— — var. <i>montanum</i> , Syme	4	5	i.
— — <i>montanum</i> , Wallr.	4	5	i.
— — <i>Morisoni</i> , Reich.	8 γ	9	i.
— — <i>riparium</i> , Jord.	8 β	9	i.
— — <i>saxatile</i> , Bab.	6	7	i.
— — SAXATILE, Schleich. ...	7	8	i.
THELYP'TERIS			
— <i>palustris</i> , Schott	1848	52	xii.
<i>Thésion</i> (Fr.)		88	viii.
THESIUM			
— <i>divaricatum</i> , var. <i>Angli-</i> <i>cum</i> , Alph. DC.	1248	88	viii.
— — var. <i>Gallicum</i> , Alph. DC.		88	viii.
— — var. <i>gracile</i> , Alph. DC.		88	viii.
— HUMIFUSUM, DC.	1248	88	viii.
— [hu'mile, Vahl] (excluded)		89	viii.
— [intermediūm, Schrad.] (ex- cluded)		89	viii.
— <i>linophyllum</i> , Sm.	1248	88	viii.
Thistle. Carline	698	22	v.
— Creeping Plume- ...	693 & 694	19	v.
— Dwarf	692 & 692 (bis)	17	v.
— Marsh	688	13	v.
— Meadow	690	15	v.
— Melancholy	691	16	v.
— Milk	681	5	v.
— Musk	683	7	v.
— Scotch	680	3	v.
— Slender-flowered	682	6	v.
— Spear-	686	11	v.
— St. Barnaby's	712	38	v.
— Tuberos	689	14	v.
— Welled	684	9	v.
— Woolly-headed.	687	12	v.
THLASPI			
— ALPESTRE, Linn. ...	146-148	204	i.
— <i>alpestre</i> , Gr. & Godr., & Reich.	146	205	i.
— — Sm.	148	206	i.

	PLATE	PAGE	VOL.
THLASPI			
— <i>alpestre</i> , var. a, Bab.	146	205	i.
— — var. β, Bab.	147	206	i.
— — var. γ, Hook. & Arn.	148	206	i.
— ARVEN'SE, Linn.	144	202	i.
— <i>Bursa-pastoris</i> , Linn.	152	211	i.
— <i>calaminare</i> , "Lej.," Crépin	148	206	i.
— <i>campestre</i> , Linn.	156	216	i.
— <i>erratium</i> , Jord.		204	i.
— <i>hirtum</i> , Sm.	157	217	i.
— <i>occitanum</i> , Jord.	147	206	i.
— PERFOLIATUM, Linn.	145	203	i.
— <i>sylvestre</i> , Jord.	146	205	i.
— <i>virens</i> , Jord.	148	206	i.
Thorn-apple, Common	935	104	vi.
Thorough-wax	589	120	iv.
Thread Rush	1565	27	x.
Thrift, Common	1152 & 1153	158	vii.
— Hybrid	1155	159	vii.
— Plantain-leaved	1154	159	vii.
THRIN'CIA			
— <i>hirta</i> , Roth	792	131	v.
<i>Thrinice hérissée</i> (Fr.)		132	v.
Throat-wort, Great.	867	10	vi.
Thrum Wort	1442	75	ix.
<i>Thym serpolet</i> (Fr.)		26	vii.
Thyme, Basil	1048	33	vii.
— Creeping Wild	1043	26	vii.
— Larger Wild	1044	28	vii.
— leaved Sandwort	236	103	ii.
THYMUS			
— <i>Acinos</i> , Linn.	1048	32	vii.
— <i>Calamintha</i> , Sm. ...	1050 & 1051	34	vii.
— Chamædryes, Fries	1044	27	vii.
— eu-Serpyllum, Syme	1043	26	vii.
— <i>Nepeta</i> , Sm.	1049	33	vii.
— <i>Serpyllum</i> , Fries.	1043	26	vii.
— SERPYLLUM, Linn. 1043, 1044		25	vii.
— — var. α, Hook. & Arn.	1043	26	vii.
— — var. β, Hook. & Arn.	1044	27	vii.
— — var. <i>Chamædryes</i> , Koch.	1044	27	vii.
THYSSELI'NUM			
— <i>palustre</i> , Hoffm.	610	149	iv.
TILIA			
— <i>corallina</i> , Sm.	173	ii.	
— <i>europæa</i> , Benth.	285-287	177	ii.
— — Sm.	286	173	ii.
— GRANDIFOLIA, Ehrh.	285	172	ii.
— INTERMEDIA, DC.	286	173	ii.
— <i>microphylla</i> , Willd.	287	176	ii.
— PARVIFOLIA, Ehrh. ...	287	176	ii.
— — var. <i>intermedia</i> , Koch	286	173	ii.
— — var. <i>polyantha</i> , Koch	287	176	ii.
— <i>platyphylla</i> , Gren. & God.	285	172	ii.
— <i>platyphylos</i> , Scop.	285	172	ii.
— <i>rubra</i> , DC.		173	ii.
— <i>sylvestris</i> , Desf.	287	176	ii.
— <i>vulgaris</i> , Hayn.	286	173	ii.

	PLATE	PAGE	VOL.
TILLÆA			
— Mossy	524	47	iv.
— MUSCO'SA, Linn.	524	47	iv.
<i>Tillée mousse</i> (Fr.)	47		iv.
<i>Tilleul à grandes feuilles</i> (Fr.) ..	173		ii.
— à petites feuilles (Fr.) ...	177		ii.
— officinal (Fr.)	174		ii.
<i>Timothee-Gras</i> (Ger.)	33		xi.
Timothy-grass, Alpine	1705		31
— Common 1706 & 1707	32		xi.
— Purple-stalked	1708		34
— Sand	1709		35
TINÆA			
See TINEA .			
TINÆA			
— <i>cylindracea</i> , Biv.	1465	108	ix.
TITHYMALUS			
— <i>auriculatus</i> , Lam.	1253	98	viii.
— <i>helioscopius</i> , Lam.	1254	99	viii.
— <i>maritimus</i> , Lam.	1263	109	viii.
Toadflax, Decumbent	958	137	vi.
— Ivy-leaved	955	134	vi.
— Jersey	959	138	vi.
— Least	965 & 966	144	vi.
— Purple	960	139	vi.
— Striped	961	140	vi.
— Yellow	962-964	142	vi.
— (see <i>Fluellin</i>) ...	956 & 957	135-6	
Toad Rush, var. <i>a</i>	1572	36	x.
— var. <i>β</i>	1573	36	x.
TOFIEL'DIA			
— PALUS'TRIS, Huds.	1543	223	ix.
<i>Tofieldie à collerette</i> (Fr.)	224		ix.
<i>Tollkirsche</i> (Ger.)	100		vi.
TOLYPELLA			
— <i>glomerata</i> , Leonh.	1905	186	xii.
— <i>intricata</i> , Leonh.	1907	188	xiii.
— [<i>nidif'ica</i> , Leonh.] (ex- cluded)	191		xiii.
— <i>prolif'era</i> , Leonh.	1908	189	xii.
Tongue-under-Tongue	376	75	iii.
Toothwort	107	157	i.
—	1006	190	vi.
<i>Toque naine</i> (Fr.)	49		vii.
Torch-blade	937	111	vi.
<i>Tordyle élevé</i> (Fr.)	156		iv.
TORDYLIUM			
— <i>Anthriscus</i> , Linn.	620	163	iv.
— MAXIMUM, Linn.	614	155	iv.
— <i>nodosum</i> , Linn.	621	164	iv.
— [<i>officina'le</i> , Linn.] (excluded) ...	179		iv.
TORLIS			
— <i>Anthriscus</i> , Gmel.	620	163	iv.
— <i>Helvet'ica</i> , Gmel.	619	162	iv.
— <i>infesta</i> , Spr.	619	162	iv.
— <i>nodosa</i> , Gärtn.	621	164	iv.
Tormentil, Common	430	147	iii.
— Creeping	431	148	iii.

TORMENTILLA

	PLATE	PAGE	VOL.
— <i>erecta</i> , Linn.	430	146	iii.
— <i>officina'lis</i> , Sm.	430	146	iii.
— <i>rep'tans</i> , Linn.	431	147	iii.
<i>Tormentille</i> (Fr.)	147		iii.
<i>Tormentillwur</i> (Ger.)	147		iii.
Tower Mustard, Hairy	116	166	i.
— Turkey Pod	118	169	i.
— Wall Cress	118	169	i.
— Smooth	119	170	i.

TRACHYNO'TIA

— <i>alternifl'ora</i> , DC.	1688	5	xi.
— <i>stric'ta</i> , DC.	1687	4	xi.

TRAGOPO'GON

— <i>mi'nor</i> , Fries	799	139	v.
— <i>orientalis</i> , Linn.?	800	139	v.
— PORRIFO'LIUS, Linn.	801	140	v.
— var. <i>parviflorus</i> , <i>Syme</i>	801	141	v.
— var. <i>sativus</i> , <i>Syme</i> ...	801	141	v.
— PRATEN'SIS, Linn.	798-800	138	v.
— <i>pratensis</i> , Fries	798	138	v.
— Sm. E. B.	800	139	v.
— var. <i>grandiflorus</i> , <i>Syme</i>	800	139	v.
— var. <i>mi'nor</i> , <i>Syme</i>	799	139	v.
Translucent Nitella	1901	180	xii.
<i>Trauben-Eiche</i> (Ger.)	157		viii.
— <i>Gamander</i> (Ger.)	82		vii.
— <i>Kranichschnabel</i> (Ger.)	202		ii.
<i>Traubenblühiger Steinbrech</i> (Ger.)	74		iv.
<i>Traubenförmige Trespe</i> (Ger.) ...	169		xi.
<i>Traubige Bisamhyacinthe</i> (Ger.)	203		ix.
Traveller's Joy	1	3	i.
Treacle Mustard	102	149	i.
Tree Mallow	279	165	ii.
— Meal	640	204	iv.
— Wayfaring	640	204	iv.
<i>Trèfle aggloméré</i> (Fr.)	51		iii.
— <i>couché</i> (Fr.)	61		iii.
— <i>de Balbi</i> (Fr.)	46		iii.
— <i>de Boccone</i> (Fr.)	47		iii.
— <i>des champs</i> (Fr.)	47		iii.
— <i>des prés</i> (Fr.)	39		iii.
— <i>étoilé</i> (Fr.)	44		iii.
— <i>étouffé</i> (Fr.)	52		iii.
— <i>filiforme</i> (Fr.)	64		iii.
— <i>fraîsier</i> (Fr.)	59		iii.
— <i>hybride</i> (Fr.)	54		iii.
— <i>incarnat</i> (Fr.)	45		iii.
— <i>intermédiaire</i> (Fr.)	41		iii.
— <i>jaunâtre</i> (Fr.)	42		iii.
— <i>maritime</i> (Fr.)	43		iii.
— <i>raide</i> (Fr.)	53		iii.
— <i>rampant</i> (Fr.)	55		iii.
— <i>renversé</i> (Fr.)	60		iii.
— <i>scabre</i> (Fr.)	49		iii.
— <i>southernain</i> (Fr.)	37		iii.
Trifol, Balbi's	353	46	iii.

	PLATE	PAGE	VOL.
Trifolium , Boccone's	355	47	iii.
— Common Bird's-foot ...	368	66	iii.
— Dense-flowered	359	52	iii.
— Hare's-foot	354	47	iii.
— Honeysuckle	347	39	iii.
— Hop	365	61	iii.
— Least Yellow	367	64	iii.
— Lesser Yellow	366	63	iii.
— Long-podded Small			
Bird's foot	371	69	iii.
— Marsh Bird's-foot	370	68	iii.
— Reversed-flowered	364	60	iii.
— Rough Rigid	357	49	iii.
— Short-podded Small			
Bird's-foot	372	70	iii.
— Slender Bird's-foot	369	67	iii.
— Smooth Round-headed	358	51	iii.
— Soft-knotted	356	48	iii.
— Starry-headed	351	44	iii.
— Strawberry-headed	363	59	iii.
— Subterranean	346	37	iii.
— Sulphur-coloured	349	42	iii.
— Teasel-headed	350	43	iii.
— Upright Round-headed	360	53	iii.
— Zigzag	348	41	iii.
TRICHODIUM			
— <i>caninum</i> , Scrad.	1718	46	xi.
— <i>setaceum</i> , R. & S.	1717	45	xi.
TRICHOMANES			
— <i>alatum</i> , Hook	1839	33	xii.
— <i>brevisetum</i> , R. Br.	1839	33	xii.
— <i>pellatum</i> , Poiret	1841	36	xii.
— pyxidiferum, Linn.	1839	33	xii.
— RADICANS, Swartz	1839	33	xii.
— var. Andrew'sii, Syme	33	xii.	
— <i>speciosum</i> , Willd.	1839	33	xii.
— <i>Tunbridgen'se</i> , Linn.	1840	35	xii.
TRICHONEMA			
— <i>Bulbocodium</i> , Sm.	1492	140	ix.
— COLUMNÆ, Reich.	1492	140	ix.
— Columna's	1492	141	ix.
TRICHOPHORUM			
— <i>alpinum</i> , Pers.	1603 (70)	176	x.
— <i>cæspitosum</i> , Hartm.	1590 (55)	176	x.
<i>Trientalis d'Europe</i> (Fr.)	142		vii.
TRIENTALIS			
— EUROPEA, Linn.	1139	142	vii.
TRIFOLIUM			
— <i>agrarium</i> , Huds.	365	60	iii.
— arenivagum, Jord.	47	ii.	
— ARVENSE, Linn.	354	46	iii.
— Boccioni, Savi	355	47	iii.
— <i>elegans</i> , Savi.	53	iii.	
— eu-incarnatum, Syme	352	44	iii.
— FILIFORME, Linn.	367	63	iii.
— <i>filiforme</i> , Koch.	366	62	iii.
— FRAGIFERUM, Linn.	363	58	iii.
— GLOMERA'TUM, Linn.	358	50	iii.
— gracile, Jord.	47	iii.	

TRIFOLIUM

	PLATE	PAGE	VOL.
— HYBRIDUM, Linn.	361	53	iii.
— <i>hybridum</i> , Koch	361	53	iii.
— var. <i>elegans</i> , Syme.	53	iii.	
— INCARNATUM, Linn.	352 & 353	44	iii.
— Bor.	352	44	iii.
— var. α , Auct. Plur.	352	44	iii.
— var. β , Auct. Plur.	353	45	iii.
— <i>lævigatum</i> , Desf.	360	52	iii.
— <i>macrorrhizum</i> , W. & K.	341	29	iii.
— MARITIMUM Huds.	350	42	iii.
— MEDIUM, Linn.	348	40	iii.
— <i>Melilotus indica</i> , Linn. ?	344	33	iii.
— <i>officinallis</i> , var. β , Linn.	342	31	iii.
— var. γ , Linn.	341	29	iii.
— <i>ornithopodioides</i> , Linn.	345	34	iii.
— <i>micranthum</i> , Koch	367	63	iii.
— MINUS, Rehan	366	62	iii.
— Moline'rii, Balb.	353	45	iii.
— OCHROLEUCUM, Linn.	349	41	iii.
— <i>officinale</i> , Sm.	341	29	iii.
— <i>ornithopodioides</i> , Sm. E.B.	345	34	iii.
— [parviflorum, Ehrh.] (ex- cluded)	112	iii.	
— PRATEN'SE, Linn.	347	37	iii.
— Reich.	347	38	iii.
— var. <i>parviflorum</i> , Syme	38	iii.	
— var. <i>sativum</i> , Syme.	38	iii.	
— var. <i>sylvestre</i> , Syme	348	33	iii.
— PROCUMBENS, Linn.	365	60	iii.
— <i>procumbens</i> , Huds.	366	62	iii.
— REPENS, Linn.	362	54	iii.
— RESUPINATUM, Linn.	364	59	iii.
— <i>rubellum</i> , Jord.	47	iii.	
— <i>sativum</i> , Mill.	38	iii.	
— SCABRUM, Linn.	357	49	iii.
— STELLATUM, Linn.	351	43	iii.
— STRIATUM, Linn.	356	48	iii.
— STRIATUM, Waldst. & Kit.	360	52	iii.
— SUBTERRANEUM, Linn.	346	36	iii.
— SUFFOCATUM, Linn.	359	51	iii.
TRIGLOCHIN			
— MARITIMUM, Linn.	1434	66	ix.
— PALUSTRE, Linn.	1433	65	ix.
TRIGONELLA			
— ORNITHOPODIOIDES, DC.	345	34	iii.
<i>Trigonelle pied d'oiseau</i> (Fr.) ...	35	iii.	
TRINIA			
— <i>glauca</i> , Reich.	107	iv.	
— [Kitaibe'lii, Bieb.] (ex- cluded)	179	iv.	
— <i>pu'illa</i> , Reich.	579	107	iv.
— VULGARIS, DC.	579	107	iv.
<i>Trinie</i> (Fr.)	108	iv.	

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
TRIO'DIA				Tulip, Wild.....	1520	191	ix.
— DECUM'BENS, <i>P. de B.</i>	1745	87	xi.	TUL'IPA			
TRIPLEUROSPE'RUM				— SYLVES'TRIS, <i>Linn.</i> ...	1520	190	ix.
— <i>inodo'rum</i> , C. H. Schultz	717 & 718	46	v.	<i>Tulipe sauvage</i> (Fr.)	190	ix.	
— — Koch.....	717	46	v.	Tunbridge Filmy Fern	1840	35	xii.
— <i>marit'imum</i> , Koch	718	46	v.	TURGE'NIA			
TRIPOLIUM				— <i>latifo'lia</i> , Koch	618	161	iv.
— <i>vulga're</i> , Nees	776	110	v.	<i>Türkenbund Lilie</i> (Fr.)	188	ix.	
TRISE'TUM				Turkey Pod.....	115	164	i.
— <i>flaves'cens</i> , <i>P. de B.</i>	1736	73	xi.	— Tower.....	118	169	i.
— <i>præ'cox</i> , <i>Dum.</i>	1735	71	xi.	Turnip	90	136	i.
— <i>pratens'e</i> , <i>Dum.</i>	1738 & 1739	75	xi.	— Swedish	89	135	i.
— — Pers.	1736	73	xi.	TURRI'TIS			
— <i>pubes'cens</i> , <i>R. & S.</i>	1737	74	xi.	— <i>glabra</i> , <i>Linn.</i>	119	169	i.
TRITICUM				— <i>hirsu'ta</i> , <i>Sm.</i>	116	167	i.
— <i>acu'tum</i> , <i>DC.</i>	1812	182	xi.	<i>Tussilage blanchâtre</i> (Fr.).....	119	v.	
— <i>affi'ne</i> , <i>Deth.</i>	1812	182	xi.	— <i>parfumé</i> (Fr.)	118	v.	
— <i>alpi'num</i> , <i>Don</i>	177	xi.		— <i>pas d'âne</i> (Fr.)	116	v.	
— <i>campest're</i> , <i>Gr. & Godr.</i> ...	181	xi.		— <i>pétasite</i> (Fr.)	120	v.	
— CANT'NUM , <i>Huds.</i>	1809	176	xi.	TUSSILA'GO			
— — var. <i>biflor'um</i> , <i>Mitt.</i>	177	xi.		— <i>alba</i> , <i>Linn.</i>	782	118	v.
— [<i>crista'tum</i> , <i>Schreb.</i>] (ex-	202	xi.		— [<i>alp'na</i> , <i>Linn.</i>] (excluded)	217	v.	
cluded)	202	xi.		— FAR'FARA , <i>Linn.</i>	780	115	v.
— <i>eu-re'pens</i> , <i>Syme</i>	1810	178	xi.	— <i>fra'grans</i> , <i>Vill.</i>	781	117	v.
— <i>interme'dium</i> , <i>Host.</i>	181	xi.		— <i>hyb'rida</i> , <i>Linn.</i>	784	119	v.
— JUN'CEUM , <i>L.</i>	1813	183	xi.	— <i>Petasites</i> , <i>Linn.</i>	783	119	v.
— <i>lax'um</i> , <i>Fr.</i>	1812	182	xi.	Tutsan	264	144	ii.
— <i>littora'le</i> , <i>Host.</i>	1811	180	xi.	Tway Blade, Common	1477	121	ix.
— <i>lolia'ceum</i> , <i>Sm.</i>	1759	110	xi.	— Lesser	1476	120	ix.
— <i>pinna'tum</i> , <i>Mönch</i>	1808	175	xi.	TY'PHA			
— <i>pun'gens</i> , <i>Koch</i>	1811	180	xi.	— ANGUSTIFOLIA , <i>Linn.</i> 1386	4	ix.	
— — Pers.	1812	182	xi.	— LATIFOLIA , <i>Linn.</i>	1385	2	ix.
— — var. <i>interme'dium</i> ,	181	xi.		— — var. <i>me'dia</i> , <i>Syme</i>	3	ix.	
<i>Syme</i>	181	xi.		— <i>me'dia</i> , <i>DC.</i>	3	ix.	
— — var. <i>littora'le</i> , <i>Syme</i> ...	180	xi.		— [<i>mi'nor</i> , <i>Sm.</i>] (excluded)... ..	9	ix.	
— — var. <i>pycnan'thum</i> ,	180	xi.		U'DORA			
<i>Syme</i>	180	xi.		— <i>Canaden'sis</i> , <i>Nutt.</i>	1446	81	ix.
— <i>re'pens</i> , <i>Auct. Pl.</i>	1810	178	xi.	<i>Uebersehene Käsepappel</i> (Ger.)	169	ii.	
— RE'PENS , <i>L.</i>	1810-1812	178	xi.	<i>Ufer-Melde</i> (Ger.)	28	viii.	
— — var. γ , <i>Sm.</i>	1811	180	xi.	— <i>-Segge</i> (Ger.).....	168	x.	
— — var. <i>barba'tum</i> , <i>Duval-</i>	179	xi.		U'LEX			
<i>Jouve</i>	179	xi.		— <i>eu-na'nus</i> , <i>Syme</i>	325	7	iii.
— — var. <i>obtu'sum</i> , <i>Syme</i>	179	xi.		— EUROPÆ'US , <i>Linn.</i> ...	323	4	iii.
— — var. <i>littore'um</i> , <i>Bab.</i>	181	xi.		— — var. <i>stric'tus</i> , <i>Syme</i> ...	4	iii.	
— <i>Rottbö'llia</i> , <i>DC.</i>	1759	110	xi.	— — var. <i>vulga'ris</i> , <i>Syme</i>	323	4	iii.
— <i>Se'pium</i> , <i>Lam.</i>	1809	176	xi.	— Gal'lii, <i>Planch.</i>	324	6	iii.
— <i>sylva'ticum</i> , <i>Mönch</i>	1807	173	xi.	— NA'NUS , <i>Forst.</i>	324 & 325	6	iii.
TRIX'AGO				— <i>Planch</i>	325	7	iii.
— <i>visco'sa</i> , <i>Reich.</i>	994	176	vi.	— — var. α , <i>Auct. Pl.</i>	325	7	iii.
<i>Troëne commun</i> (Fr.).....	60	vi.		— — var. <i>Gal'lii</i> , <i>Auct.</i> ...	324	6	iii.
<i>Trollblume</i> (Ger.)	54	i.		— <i>provincia'lis</i> , <i>Legall</i>	324	6	iii.
<i>Trolle globuleuse</i> (Fr.)	54	i.		— <i>stric'tus</i> , <i>Mack</i>	4	iii.	
TROLLIUS				UL'MUS			
— EUROPÆ'US , <i>Linn.</i>	42	53	i.	— <i>campest'ris</i> , <i>Linn.</i>	1285 & 1286	137	viii.
<i>Troscart des marais</i> (Fr.).....	66	ix.		— <i>campest'ris</i> , <i>Linn. Herb.</i> ...	1287	141	viii.
— — <i>maritime</i> (Fr.)	66	ix.		— — <i>Sm.</i>	1285	138	viii.
<i>Trügerisches Samkraut</i> (Ger.) ...	40	ix.					

	PLATE	PAGE	VOL.
ULMUS			
— <i>campestris</i> , var. <i>nu'da</i> , Koch.....	1287	141	viii.
— — var. <i>suberosa</i> , Koch. 1285 & 1286		137	viii.
— <i>carpinifo'lia</i> , Lindl.....	1286	138	viii.
— <i>glabra</i> , Sm.	1286	138	viii.
— <i>glabra</i> , v. <i>latifo'lia</i> , Lindl.	142	viii.	
— <i>ma'jor</i> , Sm.	142	viii.	
— <i>mi'nor</i> , Mill.	1285	138	viii.
— MONTA'NA , <i>Auct.</i>	1287	141	viii.
— — Sm.	1287	142	viii.
— — var. <i>ma'jor</i> , <i>Syme</i> ...	142	viii.	
— — var. <i>nit'ida</i> , <i>Syme</i> ...	142	viii.	
— <i>stric'ta</i> , Lindl.	1286	138	viii.
— <i>stric'ta</i> , Lindl.	1287	141	viii.
— SUBERO'SA , <i>Ehrh.</i> 1285 & 1286		137	viii.
— — Sm.	1285	138	viii.
— — var. <i>ma'jor</i> , <i>Hook. & Arn.</i>		142	viii.
UMBILICUS			
— <i>penduli'nus</i> , DC.	534	62	iv.
<i>Unächter Gänsefuss</i> (Ger.)	18	viii.	
<i>Unterbrochener Windhalm</i> (Ger.)	45	xi.	
URTICA			
— DIO'ICA , <i>Linn.</i>	1279	127	viii.
— <i>Dodar'tii</i> , <i>Linn.</i>	1281	129	viii.
— PILULIF'ERA , <i>Hook. & Arn.</i>	1280 & 1281	129	viii.
— — <i>Linn.</i>	1280	129	viii.
— — var. <i>Dodartii</i> , <i>Syme</i> ... 1281		129	viii.
— U'RENS , <i>Linn.</i>	1282	130	viii.
<i>Utriculaire commune</i> (Fr.)	127	vii.	
— — <i>intermédiaire</i> (Fr.)	129	vii.	
— — <i>naine</i> (Fr.).....	128	vii.	
UTRICULARIA			
— INTERME'DIA , <i>Hayne</i> ... 1127		128	vii.
— <i>ma'jor</i> , <i>Schmidel</i> .....1125 (<i>bis</i>)		127	vii.
— MI'NOR , <i>Linn.</i>	1126	128	vii.
— NEGLEC'TA , <i>Lehm.</i> 1125 (<i>bis</i>)		127	vii.
— VULGA'RIS , <i>Linn.</i>	1125	126	vii.
VACCINIUM			
— [<i>macrocar'pum</i> , <i>Ait.</i>] (excluded) 54		vi.	
— MYRTIL'LUS , <i>Linn.</i>	879	24	vi.
— OXYCOC'COS , <i>Linn.</i>	876	20	vi.
— ULIGINO'SUM , <i>Linn.</i> ...	878	23	vi.
— VITIS-IDÆ'A , <i>Linn.</i>	877	22	vi.
<i>Vaillantie hérisée</i> (Fr.)	225	iv.	
<i>Vaillants Erdrauch</i> (Ger.)	114	i.	
VALAN'TIA			
— [<i>Apari'ne</i> , <i>Linn.</i>] (excluded) ...	232	iv.	
— <i>crucia'ta</i> , <i>Linn.</i>	647	213	iv.
<i>Valerian</i> , Cut-leaved	665	235	iv.
— Great Wild	666	237	iv.
— Greek	922	82	vi.

	PLATE	PAGE	VOL.
<i>Valerian</i> , Heart-leaved	667	238	iv.
— — Red	664	234	iv.
— — Small Marsh	668	239	iv.
VALERIA'NA			
— <i>denta'ta</i> , <i>Ehrh.</i>	672	243	iv.
— DIO'ICA , <i>Linn.</i>	668	238	iv.
— <i>Locus'ta</i> , <i>Linn.</i>	669	240	iv.
— OFFICINA'LIS , <i>Linn.</i> ... 666		235	iv.
— — Mik.	666	236	iv.
— — Sm.	666	236	iv.
— — var. <i>Mika'nii</i> , <i>Syme</i> ... 666		236	iv.
— — var. <i>sambucifo'lia</i> , <i>Syme</i>	666	236	iv.
— PYRENA'TICA , <i>Linn.</i>	667	238	iv.
— <i>ru'bra</i> , <i>Linn.</i>	664	233	iv.
— <i>sambucifo'lia</i> , Mik.	666	236	iv.
<i>Valériane des Pyrénées</i> (Fr.) ...	238	iv.	
— — <i>dioïque</i> (Fr.).....	239	iv.	
— — <i>officinale</i> (Fr.)	237	iv.	
VALERIANELLA			
— AURIC'ULA , DC.	671	241	iv.
— CARINA'TA , <i>Lois.</i>	670	241	iv.
— — <i>denta'ta</i> , DC.	671	241	iv.
— DENTA'TA , <i>Koch</i>	672	243	iv.
— ERIOCAR'PA , <i>Desv.</i>	673	244	iv.
— — <i>mix'ta</i> , <i>Duf.</i>	672	243	iv.
— — <i>Morisoi'nii</i> , <i>Duf.</i>	672	243	iv.
— OLITORIA , <i>Möneh</i>	669	240	iv.
— — <i>tridenta'ta</i> , <i>Reich.</i>	671	241	iv.
<i>Vélar</i> (Fr.)	148, 149	i.	
VELLA			
— [<i>an'nua</i> , <i>Linn.</i>] (excluded)	224	i.	
<i>Venus'-Comb</i> , Common	627	172	iv.
— — Looking-glass, Small-flowered	874	18	vi.
VERBASCUM			
— BLATTA'RIA , <i>Linn.</i> ...	942	116	vi.
— <i>blattarioi'des</i> , <i>Lam.</i>	941	115	vi.
— <i>coll'num</i> , <i>Schrad.</i>	944	118	vi.
— <i>flocco'sum</i> , <i>W. & K.</i>	938	112	vi.
— LYCHNI'TIS , <i>Linn.</i>	939	113	vi.
— — <i>β. Thap'si</i> , Sm.	943	117	vi.
— — <i>β. thapsoi'des</i> , <i>With.</i> fl.....	943	117	vi.
— — <i>ni'gro-flocco'sum</i> , <i>Koch</i> ...	945	118	vi.
— — <i>ni'gro-Lychni'tis</i> , <i>Schiede</i> 946		119	vi.
— — <i>nigro-pulverulen'tum</i> , <i>Sm.</i> 945		118	vi.
— NI'GRUM , <i>Linn.</i>	940	114	vi.
— — var. <i>ni'gro-Lychni'tis</i> , <i>Bab.</i>	946	119	vi.
— — var. <i>ora'tum</i> , <i>Koch</i> ...	946	119	vi.
— — var. <i>tomento'sum</i> , <i>Bab.</i>	115	vi.	
— — [<i>phlomi'des</i> , <i>Linn.</i>] (excluded)... 187		vi.	
— — [<i>phœnic'eum</i> , <i>Linn.</i>] (excluded) 187		vi.	
— PULVERULEN'TUM , <i>Vill.</i> 938		112	vi.
— — <i>β. ni'gro-pulverulen'tum</i> , <i>Sm.</i>	945	118	vi.
— — <i>Schiedia'num</i> , <i>Koch</i>	946	119	vi.

	PLATE	PAGE	VOL.
VERBAS' CUM			
— <i>Schottia'num</i> , Schrad.	945	118	vi.
— <i>Schrad'eri</i> , Mey.	937	110	vi.
— <i>spur'ium</i> , Koch.	943	117	vi.
— [thapsifor'me, Mey.] (excluded)	187		vi.
— <i>thapso'id'es</i> , Huds.	943	117	vi.
— <i>Thap'so-Lychni'tis</i> , With.	943	117	vi.
— <i>Thap'so-ni'grum</i> , Schrad.	944	118	vi.
— <i>THAP'SUS</i> , Linn.	937	110	vi.
— — var. <i>ni'gro-Lychni'tis</i> , With.	946	119	vi.
— — <i>β. Thap'so-ni'grum</i> , With.	944	118	vi.
— <i>VIRGA'TUM</i> , With.	941	115	vi.
VERBENA			
— <i>OFFICINA'LIS</i> , Linn.	1018	202	vi.
— <i>Verge d'or commune</i> (Fr.)	114		v.
— <i>Verge'ette acre</i> (Fr.)	109		v.
— — <i>des Alpes</i> (Fr.)	110		v.
— — <i>du Canada</i> (Fr.)	108		v.
— <i>Verlängerte Segge</i> (Ger.)	100		x.
— <i>Vernachlässigtes Schilf</i> (Ger.) ...	57		xi.
— <i>Vernal-grass</i> , Sweet-scented ...	1696		18 xi.
— <i>Vernein'kraut</i> (Ger.)	88		viii.
VERONICA			
— <i>AGRES'TIS</i> , Linn.	972	151	vi.
— — var. Benth.	971	150	vi.
— <i>Allio'ni</i> , Hook.	163		vi.
— <i>ALPINA</i> , Linn.	980	159	vi.
— <i>anagallifor'mis</i> , Bor.	169		vi.
— <i>ANAGAL'LIS</i> , Linn.	989	168	vi.
— — Bor.	989	168	vi.
— <i>ARVEN'SIS</i> , Linn.	976	155	vi.
— <i>BECCABUN'GA</i> , Linn.	990	169	vi.
— <i>BUXBAUM'II</i> , Ten.	973	152	vi.
— <i>CHAMÆ'DRYS</i> , Linn.	986	164	vi.
— <i>did'yma</i> , Ten. ?	971	150	vi.
— <i>eu-serpyllifo'lia</i> , Syme.	978	157	vi.
— [fruticulosa, Linn.] (excluded)	188		vi.
— — <i>β. pilo'sa</i> , Benth.	981	160	vi.
— <i>HEDERIFO'LIA</i> , Linn.	970	149	vi.
— <i>hirsu'ta</i> , Hopk.	985	163	vi.
— <i>humifu'sa</i> , Dicks.	979	158	vi.
— <i>hyb'rida</i> , Linn.	983	162	vi.
— <i>MONTANA</i> , Linn.	987	166	vi.
— <i>OFFICINA'LIS</i> , Linn. 984, 985	162		vi.
— — Sm.	984	163	vi.
— — var. <i>hirsu'ta</i> , Syme ...	985	163	vi.
— <i>parmula'ria</i> , T. & P.	168		vi.
— <i>PEREGRINA</i> , Linn. ...	977	156	vi.
— <i>Pers'ica</i> , Poir. ?	973	152	vi.
— <i>POLUTA</i> , Fries.	971	150	vi.
— — var. <i>grandifl'ora</i> , Bab.	150		vi.
— <i>SAXAT'ILIS</i> , Linn.	981	160	vi.
— <i>SCUTELLA'TA</i> , Linn.	988	167	vi.
— <i>SERPYPILLIFO'LIA</i> , Linn. 978 & 979	157		vi.
— — var. <i>alpi'na</i> , Hook. & Arn.	979	158	vi.

	PLATE	PAGE	VOL.
VERONICA			
— <i>serpyllifo'lia</i> , var. <i>borealis</i> , Läst.	979	158	vi.
— — var. <i>humifu'sa</i> , Bab.	979	158	vi.
— — <i>SPICA'TA</i> , Linn. ... 982 & 983	161		vi.
— — var. <i>hyb'rida</i> , Syme... 983	162		vi.
— — <i>TRIPHYL'LOS</i> , Linn. ... 974	153		vi.
— — <i>VERNA</i> , Linn.	975	154	vi.
— <i>Véronique à écusson</i> (Fr.)	168		vi.
— — <i>à feuilles de lierre</i> (Fr.) ...	150		vi.
— — <i>à trois lobes</i> (Fr.)	154		vi.
— — <i>aquatique</i> (Fr.)	170		vi.
— — <i>de montagne</i> (Fr.) ...	167		vi.
— — <i>des Alpes</i> (Fr.)	159		vi.
— — <i>des champs</i> (Fr.)	156		vi.
— — <i>des rochers</i> (Fr.)	161		vi.
— — <i>en épi</i> (Fr.)	162		vi.
— — <i>mouron d'eau</i> (Fr.) ...	169		vi.
— — <i>officinale</i> (Fr.)	164		vi.
— — <i>petit chène</i> (Fr.)	165		vi.
— — <i>printanière</i> (Fr.)	155		vi.
— — <i>rustique</i> (Fr.)	152		vi.
— — <i>voyageuse</i> (Fr.)	157		vi.
— <i>Verschiedenblättrige Kratzdistel</i> (Ger.)	16		v.
— <i>Verschiedenfarbige Brombeere</i> (Ger.)	163		iii.
— <i>Verschiedenfarbiges Vergissmeln-</i> <i>nicht</i> (Ger.)	108		vii.
— <i>Vervain</i> , Common	1018	202	vi.
— <i>Verveine officinale</i> (Fr.)	202		vi.
— <i>Vesce à feuilles étroites</i> (Fr.) ...	98		iii.
— — <i>à quatre graines</i> (Fr.)	86		iii.
— — <i>cracca</i> (Fr.)	88		iii.
— — <i>cultivée</i> (Fr.)	96		iii.
— — <i>des haies</i> (Fr.)	92		iii.
— — <i>fausse gesse</i> (Fr.)	99		iii.
— — <i>grêle</i> (Fr.)	87		iii.
— — <i>jaune</i> (Fr.)	94		iii.
— — <i>orobe</i> (Fr.)	89		iii.
— <i>Vetch</i> , Alpine Milk	375	74	iii.
— — <i>Bithynian</i>	396	100	iii.
— — <i>Bitter Wood</i>	386	89	iii.
— — <i>Black Bitter</i>	407	112	iii.
— — <i>Bush</i>	388	92	iii.
— — <i>Common Cultivated</i>	392	96	iii.
— — <i>Kidney</i>	333	20	iii.
— — <i>Wild</i>	393	98	iii.
— — <i>Duckling</i>	304	109	iii.
— — <i>Grass-leaved</i>	398	103	iii.
— — <i>Hairy-flowered</i>	391	95	iii.
— — <i>Horse-shoe</i>	380	80	iii.
— — <i>Liquorice</i>	76		iii.
— — <i>Purple Milk</i>	376	75	iii.
— — <i>Rough-podded Yellow</i> ...	389	94	iii.
— — <i>Smooth-podded Sea</i>	390	94	iii.
— — <i>Spring</i>	395	99	iii.
— — <i>Sweet Milk</i>	377	76	iii.
— — <i>Tubercous Bitter</i>	406	111	iii.

	PLATE	PAGE	VOL.
Vetch, Tufted	385	88	iii.
— Wood	387	91	iii.
Vetchling, Hairy	399	104	iii.
— Marsh	404	109	iii.
— Meadow	400	105	iii.
— Tuberous	401	106	iii.
— Yellow	397	102	iii.
VIBURNUM			
— LANTANA, Linn.....	640	203	iv.
— OP'ULUS, Linn.....	639	202	iv.
VICIA			
— angustifolia, Roth ...	393 & 394	97	iii.
— — Sm.	394	98	iii.
— — Forst.	393	97	iii.
— — var. Bobar'tii, Koch.	394	98	iii.
— — var. segetalis, Koch.	393	97	iii.
— BITHYNICA, Linn.....	396	99	iii.
— — var. angustifolius, Syme.....	396	100	iii.
— — var. latifolia, Syme...	396	100	iii.
— Bobar'tii, Forst.	394	98	iii.
— cassubica, var. Or'obus, DC.	386	88	iii.
— CRACCA, Linn.	385	87	iii.
— eu-lu'tea, Syme	389	93	iii.
— eu-sati'va, Syme	392	96	iii.
— GRACILIS, Lois.	384	86	iii.
— HIRSUTA, Koch	382	84	iii.
— HYBRIDA, Linn.	391	94	iii.
— læviga'ta, Sm.	390	94	iii.
— LATHYROIDES, Linn.	395	98	iii.
— LU'TEA, Linn. 389 & 390	389	93	iii.
— — Sm.	389	93	iii.
— OR'OBUS, DC.	386	88	iii.
— sati'va, Fries.....	392	96	iii.
— SATIVA, Linn..... 392-394	392	96	iii.
— — var. α, Hook. & Arn.	392	96	iii.
— — var. β, Seringe	393	97	iii.
— — var. angustifolia, Bab.	393	97	iii.
— — var. angustifolia, Hook. & Arn.	393 & 394	97	iii.
— — var. Bobar'tii, Bab. ...	394	98	iii.
— — var. læviga'ta, Benth.	390	94	iii.
— SE'PIUM, Linn.....	388	91	iii.
— SYLVATICA, Linn.....	387	90	iii.
— TETRASPERMA, Mönch	383	85	iii.
— — var. α, Hook. & Arn.	383	85	iii.
— — var. grac'ilis, Hook. & Arn.	384	86	iii.
Vielblüthige Weisswurz (Ger.) ...	178	ix.	
Vielhalmiger Ried (Ger.)	54	x.	
Vielsamiger Gänsefuß (Ger.) ...	12	viii.	
Vielkürzelige Wasserlinse (Ger.)	24	ix.	
Vierblättrige Einbeere (Ger.) ...	174	ix.	
Vierblättriges Nagelkraut (Ger.)	134	ii.	
Vierflügeliges Harthen (Ger.) ...	153	ii.	
Vierkantiger Schotenweiderich (Ger.)	17	iv.	
Vierkantiges Harthen (Ger.) ...	152	ii.	
Viersamige Erve (Ger.).....	86	iii.	

VILFA

— seta'cea, P. de B. 1717 45 xi.

VILLAR'SIA

— nymphæoides, Vent. 921 80 vi.

VINCA

— MA'JOR, Linn. 905 62 vi.

— MI'NOR, Linn. 906 63 vi.

VIOLA

— agrest'is, Jord. 26 ii.

— Allio'nii, Pio. 174 (bis) 235 ii.

— ARENARIA, DC. ... 174 (bis) 235 ii.

— arven'sis, Murr. 179 25 ii.

— CANINA, Bab. 175 & 176 21 ii.

— — Smith
 173 | 19 | ii. |

— — Auct. Plur. 175 21 ii.

— — Hook. & Arn. ... 173 & 174 18 ii.

— — var. α, Bab. 175 21 ii.

— — var. β, Bab. 176 22 ii.

— contemp'ta, Jord. 26 ii.

— Curtis'ii, Forst. 180 26 ii.

— eu-tricolor, Syme..... 178 24 ii.

— flavicor'nis, Forst..... 20 ii.

— flavicor'nis, Smith
 175 | 21 | ii. |

— HIRTA, Linn. 172 17 ii.

— — var. calcar'ea, Bab.... 18 ii.

— lac'tea, Reich. 177 22 ii.

— — Smith
 176 | 22 | ii. |

— lanceifolia, Thore. 176 22 ii.

— lep'ida, Jord. 27 ii.

— lu'tea, Huds..... 181 27 ii.

— — Curtis'ii, β, Bab..... 180 26 ii.

— ODORATA, Linn..... 171 14 ii.

— PALUS'TRIS, Linn. 170 13 ii.

— pu'mila, Fries
 176 | 22 | ii. |

— — Hook. & Arn. 175 21 ii.

— — β, Hook. & Arn. 176 22 ii.

— Reichenbachia'na, Boreau. 174 20 ii.

— Rivinia'na, Reich. 173 19 ii.

— sabulo'sa, Bor. 180 26 ii.

— segetalis, Jord. 26 ii.

— sepin'cola, Jord. 18 ii.

— STAGNINA, Kit. 177 22 ii.

— sude'tica, Willd. 181 27 ii.

— SYLVATICA, Fries. 173 & 174 18 ii.

— — Auct. Plur. 174 20 ii.

— — α, Reichenbach'ii, Bab. 174 20 ii.

— — β, Rivinia'na, Bab.... 173 19 ii.

— sylves'tris, Reich. 174 20 ii.

— Syme'i, Baker
 27 | ii. | |

— TRICOLOR, Linn., Benth. 178-181 23 ii.

— — var. Curtis'ii, Hook. & Arn. 180 26 ii.

— — var. α, Auct. Plur. ... 178 24 ii.

— — var. β, Auct. Plur. ... 179 25 ii.

— — varia'ta, Jord. 25 i.

Violet, Calathian (Gentian) 914 74 vi.

— — Damask
 103 | 151 | i. |

— — Dame's
 103 | 151 | i. |

	PLATE	PAGE	VOL.
Violet, Dillenius's Dog	175	22	ii.
— Dog Sand	174	236	ii.
— Gerarde's Dog	173	20	ii.
— Hairy	172	18	ii.
— Haller's Dog	177	23	ii.
— Horn Poppy	64	96	i.
— Marsh	170	14	ii.
— Reichenbach's Dog	174	21	ii.
— Smith's Dog	176	22	ii.
— Sweet	171	15	ii.
— Three-coloured	178	25	ii.
— Water	1128	130	vii.
— Willow	1366	251	viii.
<i>Violette de Rivin</i> (Fr.)	20	ii.	
— <i>des champs</i> (Fr.)	26	ii.	
— <i>des marais</i> (Fr.)	14	ii.	
— <i>des sables</i> (Fr.)	236	ii.	
— <i>hérissée</i> (Fr.)	18	ii.	
— <i>lactée</i> (Fr.)	22	ii.	
— <i>odorante</i> (Fr.)	15	ii.	
— <i>pensée</i> (Fr.)	25	ii.	
<i>Violier jaune</i> (Fr.)	154	i.	
<i>Viorne mancienne</i> (Fr.)	204	iv.	
— <i>obier</i> (Fr.)	203	iv.	
Viper's Bugloss, Common	1095	88	vii.
— Purple	1096	90	vii.
<i>Vipéreuse vulgaire</i> (Fr.)	89	vii.	
— <i>à poils uniformes</i> (Fr.)	90	vii.	
VISCARIA			
— <i>alpina</i> , Fries	214	73	ii.
— <i>purpurea</i> , Wimm.	213	72	ii.
— <i>vulgaris</i> , Röhring	213	72	ii.
VIS'CIUM			
— ALBUM, Linn.	635 (bis)	189	iv.
<i>Vogel-Knöterich</i> (Ger.)	64	viii.	
<i>Vogelkirsche</i> (Ger.)	120	iii.	
<i>Volant d'eau à fleurs alternes</i> (Fr.) ...	33	iv.	
— <i>en épi</i> (Fr.)	32	iv.	
— <i>verticillé</i> (Fr.)	32	iv.	
VULPIA			
— <i>ambigua</i> , More.	1780	140	xi.
— <i>bromoïdes</i> , Dum.	1782	142	xi.
— — Godr.	1779	138	xi.
— <i>membrancea</i> , Link.	1779	138	xi.
— <i>Myuros</i> , Gmel	1781	141	xi.
— — Parl.	1780-1782	139	xi.
— — var. <i>α</i> , Parl.	1781	141	xi.
— — var. <i>β. bromoïdes</i> , Parl.	1782	142	xi.
— <i>Pseudo-myuros</i> , Reich. ...	1781	141	xi.
— <i>sciuroïdes</i> , Gmel.	1782	142	xi.
— <i>uniguimis</i> , Dum.	1779	138	xi.
<i>Vulpin des champs</i> (Fr.)	23	xi.	
— <i>des prés</i> (Fr.)	28	xi.	
— <i>fauve</i> (Fr.)	24	xi.	
— <i>genouillé</i> (Fr.)	26	xi.	

WAHLENBERGIA

	PLATE	PAGE	VOL.
— <i>hedera'cea</i> , Reich.	875	18	vi.
<i>Wald Baldgreis</i> (Ger.)	82	iv.	
— <i>-Binse</i> (Ger.)	18	x.	
— <i>Brustcurz</i> (Ger.)	145	iv.	
— <i>Erze</i> (Ger.)	91	iii.	
— <i>Kerbel</i> (Ger.)	168	iv.	
— <i>Kranichschnabel</i> (Ger.) ...	195	ii.	
— <i>Läusekraut</i> (Ger.)	180	vi.	
— <i>Marbel</i> (Ger.)	7	x.	
— <i>Platterbse</i> (Ger.)	107	iii.	
— <i>Ruhrkraut</i> (Ger.)	75	v.	
— <i>Schwingel</i> (Ger.)	150	xi.	
— <i>-Segge</i> (Ger.)	145	x.	
— <i>Simse</i> (Ger.)	70	x.	
— <i>Tulpe</i> (Ger.)	190	ix.	
— <i>Vergissmeinnicht</i> (Ger.) ...	103,104	vii.	
— <i>Ziest</i> (Ger.)	60	vii.	
— <i>Zwenke</i> (Ger.)	174	xi.	
<i>Waldbinse</i> (Ger.)	30	x.	
<i>Waldmeier</i> (Ger.)	228	iv.	
<i>Waldmeister</i> (Ger.)	228	iv.	
<i>Waldminze</i> (Ger.)	7, 8	vii.	
<i>Wall-Cress</i>	163	i.	
<i>Wall Rue</i>	1880	135	xii.
<i>Wallflower</i>	102	149	i.
— Common	105	154	i.
— Common	106	154	i.
<i>Wart Cress</i> , Common	160	222	i.
— Lesser.	159	221	i.
<i>Warted Spurge</i> , Bushy	1256	102	viii.
— Broad-leaved ...	1255	101	viii.
<i>Wasser Baldgreis</i> (Ger.)	87	v.	
— <i>Braunwurz</i> (Ger.)	121	vi.	
— <i>Ehrenpreis</i> (Ger.)	169	vi.	
— <i>Lobellie</i> (Ger.)	2	vi.	
— <i>-Quellgras</i> (Ger.)	95	xi.	
— <i>Schwaden</i> (Ger.)	101	xi.	
— <i>Schwertel</i> (Ger.)	146	ix.	
— <i>-Weichling</i> (Ger.)	92	ii.	
<i>Wasserkresse</i> (Ger.)	178	i.	
<i>Wasserpfeffer</i> (Ger.)	71	viii.	
<i>Water Avens</i>	459	200	iii.
— Betony, Common	947	121	vi.
— Ehrhart's	948	123	vi.
— Blinks	259	137	ii.
— Caltrops	41	52	i.
— Can	54	79	i.
— Chickweed	227	92	ii.
—	259	137	ii.
— Cress, Commou	125	178	i.
— Crowfoot	21	24	i.
— Baudot's ...	22 & 23	26	i.
— Ivy-leaved	26	30	i.
— Lenormand's ...	25	29	i.
— Rigid-leaved ...	15	17	i.
— Three-lobed ...	24	28	i.
— Dock, Great	1220	52	viii.
— Dropwort, Callous-fruited	594	126	iv.
— Common	593	125	iv.

	PLATE	PAGE	VOL.
Water Avens, Dropwort, Fine-leaved	598	131	iv.
Hemlock ...	597	129	iv.
Parsley.....	596	128	iv.
River.....	599	132	iv.
Sulphurwort...	595	127	iv.
Forget-me-not, Creeping	1105	102	vii.
Great ...	1104	100	vii.
Tufted ...	1103	98	vii.
Germand-r	1092	83	vii.
Hemlock	571	97	iv.
Horsehound	1019	2	vii.
HorsefaiI	1893	159	xii.
Lily, Common Yellow ...	54	79	i.
Least.....	56	80	i.
White	53	77	i.
Lobelia	861	2	vi.
Milfoil, Alternate-flowered	515	33	iv.
Spiked	514	32	iv.
Whorled.....	513	32	iv.
Mint, Hairy	1030	14	vii.
Parsnip	588	119	iv.
Great.....	587	118	iv.
Least.....	575	103	iv.
Procumbent	573 & 574	110	iv.
Pepper.....	1234	71	viii.
Plantain, Floating	1441	74	ix.
Greater.....	1437	71	ix.
var. β	1438	71	ix.
Lesser	1439	72	ix.
var. β ..	1440	73	ix.
Purslane	493	5	iv.
Radish, Small Jagged ...	127	181	i.
Rocket.....	126	180	i.
Great	128	182	i.
Sedge	1641 & 1642	113	x.
Soldier.....	1445	80	ix.
Speedwell	989	163	vi.
Starwort, Autumnal	1275	123	viii.
Hooked.....	1273	121	viii.
Large-fruited...	1272	120	viii.
Pedunculated	1274	122	viii.
Vernal.....	1271	119	viii.
Thyme.....	1446	82	ix.
Violet	1128	130	vii.
Whorl-grass	1750	95	xi.
Waterwort, Hexandrous	262	141	ii.
Octandrous.....	263	142	ii.
Wayfaring-tree	640	204	iv.
Weber Karde (Ger.)	247	iv.	
Wechselblättriges Milzkraut (Ger.).....	85	iv.	
Wechselblütthiges Tausendblatt (Ger.)...	33	iv.	
Wegbreitblättriges Samkraut (Ger.)	30	ix.	
Wegerichblättrige Grasnelle (Ger.) ...	159	vii.	
Wegesenf (Ger.)	144	i.	
Weichblättrige Rose (Ger.)	208	iii.	
Weicher Kranichschnabel (Ger.)	193	ii.	
Weiches Honiggras (Ger.)	84	xi.	
Weichhaarige Birke (Ger.)	187	viii.	

	PLATE	PAGE	VOL.
Weichhaarige Trespe (Ger.).....	171	xi.	
Weichhaariger Gänsefuss (Ger.)	21	viii.	
Hajer (Ger.).....	75	xi.	
Weidenblättriger Lattich (Ger.)	150	v.	
Weidenblättriger Seedorn (Ger.)	83	viii.	
Weinberg-Lauch (Ger.)	211	ix.	
WEINGAERTNERIA			
canescens, Bernh.....	1729	204(62)	xi.
Weinrose (Ger.)	210	iii.	
Weisse Seerose (Ger.)	77	i.	
Weissen Wachtelweizen (Ger.) ...	186	vi.	
Weiss Klee (Ger.)	55	iii.	
Weisse Fetthenne (Ger.)	52	iv.	
Lichtnelke (Ger.)	68	ii.	
Moorsimse (Ger.)	47	x.	
Neunkraut (Ger.)	119	v.	
Taubnessel (Ger.)	75	vii.	
Weide (Ger.)	212	viii.	
Weisser Ahorn (Ger.).....	231	ii.	
Mistel (Ger.).....	190	iv.	
Senf (Ger.)	125	i.	
Steinklee (Ger.)	31	iii.	
Weissgraue Segge (Ger.)	103	x.	
Winterlerkoje (Ger.)	153	i.	
Weissliche Hösnuurz (Ger.)	104	ix.	
Weissliches Straussgras (Ger.)...	48	xi.	
Weisspappel (Ger.)	193	viii.	
Weld	164	5	ii.
Wellenblättrige Weide (Ger.) ...	214	viii.	
Welsh Poppy	63	94	i.
Willow, White	1307	207	viii.
Weldet Thistle	684	9	v.
Wenigblütthige Segge (Ger.)	83	x.	
Wermuth (Ger.).....	62	v.	
Whin	2323	5	iii.
Petty	2326	8	iii.
White Beam, Common	482	244	iii.
Lobed-leaved	484	247	iii.
Rock.....	483	245	iii.
Thorn, Common.....	480	240	iii.
Glabrous.....	479	237	iii.
Whitlow Grass, Common (Fig. 2)	134	190	i.
(Fig. 3)	134	191	i.
Hoary	136	193	i.
Rock.....	137	194	i.
Sea Green	138	195	i.
Speedwell-leaved	135	192	i.
Twisted-podded	136	193	i.
Wall	135	192	i.
Woolly.....	136	193	i.
Yellow Alpine	138	195	i.
Peppervort.....	158	219	i.
Whorl-grass, Water	1750	95	xi.
Whortleberry Red.....	877	23	vi.
Wiesen Ampfer (Ger.)	48	viii.	
Bärenschote (Ger.)	75	iii.	
Fuchschwanz (Ger.) ...	28	xi.	
Hajer (Ger.).....	77	xi.	
Hajerwurz (Ger.).....	140	v.	
Knöterich (Ger.)	79	viii.	

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.	
<i>Wiesen Kranichschnabel</i> (Ger.)	196	ii.	<i>Willow, Golden</i>	1311	213	viii.	
— <i>Platterbse</i> (Ger.)	105	iii.	— herb, Broad-flowered ...	499	13	iv.	
— <i>Rispengras</i> (Ger.)	128	xi.	— Chickweed-leaved	505	21	iv.	
— <i>Salbei</i> (Ger.)	45	vii.	— Greater Alpine ...	506	22	iv.	
— <i>Silau</i> (Ger.)	140	iv.	— Great hairy	497	11	iv.	
<i>Wiesenkнопf</i> (Ger.)	134	iii.	— Lesser Alpine ...	507	23	iv.	
<i>Wiesenrannukel</i> (Ger.)	39	i.	— Long-podded square-stalked				
<i>Wiesentraute</i> (Ger.)	4	i.	—	502	17	iv.	
<i>Wild Angelica</i>	607	145	iv.	— Narrow-leaved Marsh			
— Basil	1047	32	vii.	—	504	19	iv.
— Cabbage	87	130	i.	— Short-podded square-stalked			
— Carrot	616	158	iv.	—	503	18	iv.
— Celery	572	99	iv.	— Small-flowered hairy			
— Chamomile	719	48	v.	—	498	12	iv.
— Charlock	81	121	i.	—	501	15	iv.
— Chervil	624	168	iv.	— Spear-leaved	500	14	iv.
— Coleseed	89	135	i.	— -leaved <i>Inula</i>	768	100	v.
— English Clary	1056	43	vii.	— Pondweed	1404	34	ix.
— French-Willow	495 & 496	10	iv.	— Spirea	414	126	iii.
— Larkspur	47	64	i.	— Rosemary-leaved French	494	7	iv.
— Leek	1530 & 1531	206	ix.	— Rose	464	206	iii.
— Madder	645	212	iv.	— White	1309	212	viii.
— Medlar	478	235	iii.	— Wild French.....	495 & 496	10	iv.
— Mustard	83	124	i.	<i>Wilson's Filmy Fern</i>	1841	36	xii.
— Nasturtium	126	180	i.	<i>Windblume</i> (Ger.)	.....	14	i.
— Navette	89	135	i.	<i>Windartiger Knöterich</i> (Ger.)	.....	62	viii.
— Navev	89	135	i.	<i>Wind Flower</i>	11	13	i.
— Oat	1741	80	xi.	<i>Winter Aconite, Common</i>	43	56	i.
— Parsnip	612	152	iv.	— Cress	120	171	i.
— Pear	488	252	iii.	—	124	176	i.
— Radish	81	121	i.	— Early	1139	142	vii.
— Red Currant.....	521 & 522	45	iv.	— Intermediate.....	897	49	vi.	
— Rosemary	883	31	vi.	— Lesser	898	50	vi.
— Service-tree	481	242	iii.	— Round-leaved 895 & 896	48	vi.	
— Strawberry	488	155	iii.	— Serrated.....	899	51	vi.
— Succory	786	123	v.	— Single-flowered	900	52	vi.
— Teasel	674	246	iv.	— Heliotrope.....	781	118	v.
— Thyme, Creeping.....	1043	26	vii.	<i>Winterkresse</i> (Ger.)	.....	171	i.	
—	— Larger	1044	28	vii.	<i>Winterling</i> (Ger.)	.....	56	i.
— Tulip	1520	191	ix.	<i>Wirbeldost</i> (Ger.)	.....	32	vii.
— Valerian, Great	666	237	iv.	<i>Witches'-thimbles</i>	870	13	vi.
— Vetch, Common	393	98	iii.	<i>Woad</i>	161	223	i.
— Williams	212	71	ii.	<i>Wohlriechende Süssholde</i> (Ger.)	.....	170	iv.
<i>Wild Löffel-Kraut</i> (Ger.)	49	i.	<i>Wohlriechender Kellerhals</i> (Ger.)	.....	87	viii.	
<i>Wilde Karde</i> (Ger.)	246	iv.	— <i>Oderuennig</i> (Ger.) ...	131	iii.		
— <i>Käseppel</i> (Ger.)	167	ii.	<i>Wohlriechendes Mariengras</i> (Ger.).....	16	xi.		
<i>Wilder Lattich</i> (Ger.)	148	v.	— <i>Veilchen</i> (Ger.)... ..	15	ii.		
— <i>Reis</i> (Ger.)	3	xi.					
<i>Wilderseuf</i> (Ger.)	144	i.					
<i>Willow, Almond-leaved</i> ...	1313-1315	216	viii.	WOLF'FLA				
— Bay-leaved	1303	203	viii.	— <i>arch'za</i> , Wimm.	1398	24	ix.
— Bedford	1308	208	viii.	— <i>Michel'i</i> , Schleid.	1398	24	ix.
— Blue	1310	212	viii.	<i>Wolfsbane, Common</i>	48	65	i.
— Boyton	1318	219	viii.	<i>Wolköpfige Kratzdistel</i> (Ger.) ...	12	v.	
— Crack	1306	207	viii.	<i>Wollige Schlinge</i> (Ger.).....	204	iv.	
— Donian	1365	220	viii.	<i>Wolliges Honiggras</i> (Ger.)	.....	85	xi.
— Downy Mountain, var. <i>a</i>					<i>Wood Anemone</i>	11	13	i.
	1368-1370	253	viii.	—	— Crowfoot.....	12	13	i.
— Dwarf	1356-1362	248	viii.	— Yellow	12	13	i.
— Flowering	933	99	vi.	<i>Wood Avens</i>	457	198	iii.

	PLATE	PAGE	VOL.
Wood Barley	1820	193	xi.
—— Betony	1067	54	vii.
—— Bitter Vetch	386	89	iii.
—— Bromo-grass, False	1807	174	xi.
—— Calamint	1052	36	vii.
—— Chickweed	228	93	xi.
—— Club-rush	1602	70	x.
—— Couch-grass.....	1809	177	xi.
—— Cow-wheat	1005	187	vi.
—— Crane's-bill.....	296	195	ii.
—— Crowfoot	32	37	i.
—— Fescue-grass	1787 & 1788	149	xi.
—— Forget-me-not.....	1107	104	vii.
—— Germander	1093	85	vii.
—— Hawkweed	850	981	v.
—— Horsetail	1891	156	xii.
—— Hyacinth.....	1528	201	ix.
—— Meadow-grass	1768 & 1769	124	xi.
—— Melic-grass	1749	94	xi.
—— Millet-grass.....	1728	61	xi.
—— Nightshade	930	96	vi.
—— Sanicle	568	93	iv.
—— Sedge, Loose-spiked	1661	142	x.
—— Pendulous	1665	145	x.
—— Starved	1664	144	x.
—— Small-reed	1723	54	xi.
—— Sorrel	310	211	ii.
—— Stitchwort	228	93	ii.
—— Vetch	387	91	iii.
—— Waxen	328	10	iii.
Woodbine, Common	642	207	iv.
—— Perfoliate.....	641	206	iv.
Woodruff, Blue Field	662 (bis)	231	iv.
—— Pink	662	230	iv.
—— Sweet	660	228	iv.
Wood-rush, Broad-leaved Hairy	1548	6	x.
—— Curved Alpine	1552	11	x.
—— Field	1551	9	x.
—— Great	1549	7	x.
—— Many-headed.....	1550	10	x.
—— Narrow-leaved Hairy	1547	5	x.
—— Spiked.....	1553	12	x.
WOOD'SIA			
—— <i>alpina</i> , Newm.	1863	99	xii.
—— <i>Aronica</i> , Milde	1863	99	xii.
—— HYPERBOREA , <i>R. Brown</i>	1863	99	xii.
—— var. <i>rufidula</i> , Koch	1862	98	xii.
—— ILVEN'SIS , <i>R. Brown</i> ...	1862	98	xii.
—— <i>Raina</i> , Newm.	1862	98	xii.
—— <i>rufidula</i> , Beck	1862	98	xii.
Woodsia, Alpine.....	1863	99	xii.
—— Oblong	1862	98	xii.
Wormseed Mustard	102	149	i.
Wormwood, Common.....	731	62	v.
—— Sea, var. <i>α</i>	734	65	v.
—— var. <i>β</i>	735	66	v.
Woundwort, Corn	1072	60	vii.
—— Downy	1068	57	vii.
—— Hedge	1070 & 1071	{59, 60}	vii.

	PLATE	PAGE	VOL.
Woundwort, Hybrid	1070	58	vii.
—— Marsh	1069	57	vii.
—— Pale Annual.....	1073	61	vii.
Wurzellose Wasserlinse (Ger.)... ..	25	ix.	

XANTHIUM

—— [spino'sum, <i>Linn.</i>] (excluded) ...	219	v.	
—— STRUMARIUM , <i>Linn.</i>	860	214	v.

XANTHOPHTHALMUM

—— <i>segetum</i> , C. H. Schultz ...	713	40	v.
---------------------------------------	-----	----	----

XIPHION

—— <i>fœtidissimum</i> , Parl.	1494	143	ix.
—— <i>Pseudocorus</i> , Parl.	1495	145	ix.

Yarr	253	128	ii.
Yarrow, Common	727	57	v.
—— Serrated	729	59	v.
—— Sneeze-wort	730	60	v.
—— Tansy-leaved	728	58	v.
—— Woolly Yellow.....	726	57	v.
Yellow-rattle, Common	998	181	vi.
—— Larger	999	182	vi.
Yorkshire Fog	1744	85	xi.
<i>Ysopblättriger Weiderich</i> (Ger.)	4	iv.	

<i>Zannichelle des marais</i> (Fr.)	57	ix.
—— <i>pédonculée</i> (Fr.)	57	ix.

ZANNICHELLIA

—— eu-palus'tris, <i>Syme</i>	1425	56	ix.
—— <i>na'jor</i> , (?) Bönn.	1425	56	ix.
—— <i>palus'tris</i> , <i>Fries</i>	1425	56	ix.
—— PALUSTRIS , <i>Linn.</i> 1425, 1426	1425	56	ix.
—— var. <i>α</i> , Bab.	1425	56	ix.
—— <i>pedicella'ta</i> , <i>Fries</i>	1426	57	ix.
—— <i>peduncula'ta</i> , Reich.	1426	57	ix.
<i>Zarter Gauchheil</i> (Ger.)	153	vii.	
<i>Zaun Rose</i> (Ger.)	212	iii.	
—— <i>Wicke</i> (Ger.).....	92	iii.	
—— <i>Winde</i> (Ger.)	87	vi.	
<i>Zerrissene Segge</i> (Ger.).....	94	x.	
<i>Zittergrasartige Segge</i> (Ger.)	99	x.	
<i>Zitterlinse</i> (Ger.)	84	iii.	
<i>Zitterpappel</i> (Ger.)	197	viii.	

ZOSTERA

—— <i>angustifolia</i> , Reich.	1430	60	ix.
—— MARINA , <i>Linn.</i> ...1429 & 1430	1429	60	ix.
—— Reich.	1429	60	ix.
—— var. <i>angustifolia</i> , <i>Fries</i>	1430	60	ix.
—— <i>mi'nor</i> , <i>Nolte</i>	1431	61	ix.
—— NA'NA , <i>Roth</i>	1431	61	ix.
<i>Zostère marine</i> (Fr.)	61	ix.	
—— <i>mineur</i> (Fr.)	62	ix.	

	PLATE	PAGE	VOL.		PLATE	PAGE	VOL.
<i>Zotiges Habichtskraut</i> (Ger.)	184	v.		<i>Zweijährige Grundfeste</i> (Ger.)... ..	162	v.	
<i>Zugespitzte Weide</i> (Ger.)	205	viii.		————— <i>Nachkerze</i> (Ger.)... ..	24	iv.	
<i>Zurückgekrümmte Fetthenne</i> (Ger.) ...	57	iv.		<i>Zweiknötige Feldkresse</i> (Ger.)	221	i.	
<i>Zusammengedrückte Binse</i> (Ger.)	38	x.		<i>Zweinerige Segge</i> (Ger.)	148	x.	
————— <i>Simse</i> (Ger.)	48	x.		<i>Zweizeilige Segge</i> (Ger.)	86	x.	
<i>Zusammengedrücktes Rispengras</i> (Ger.)	126	xi.		<i>Zwerg Birke</i> (Ger.)	188	viii.	
<i>Zweiblättrige Kuckucksblume</i> (Ger.) ...	106	ix.		———— <i>Holunder</i> (Ger.)	201	iv.	
————— <i>Schattenblume</i> (Ger.) ...	176	ix.		———— <i>Seegras</i> (Ger.)	62	ix.	
<i>Zweifarbige Weide</i> (Ger.)	241	viii.		———— <i>Wachholder</i> (Ger.)	276	viii.	
<i>Zweifelhafte Weide</i> (Ger.)	246	viii.		<i>Zwerglerkaje</i> (Ger.)	151	i.	
<i>Zweihäusige Segge</i> (Ger.)	79	x.		<i>Zwergmaulbeer</i> (Ger.)	158	iii.	
<i>Zweihäusiges Ruhrkraut</i> (Ger.)	79	v.		<i>Zwiebeliges Rispengras</i> (Ger.)	114	xi.	
				<i>Zwiebelheurzellige Hahnenfuss</i> (Ger.) ...	42	i.	

ENGLISH BOTANY.

ILLUSTRATIONS.







Isoetes eu-lacustris. var *Morei*



Isoetes Hystrix.

























E.B. 1417

Trichomanes radicans.















S.B.F. 4

Phegopteris Robertiana.





Lastrea thelypteris.









Lastrea remota.





Lastrea uliginosa.







Lastrea glandulosa.





Lastrea aemula.















B. S. 2790. *Cystopteris eu-fragilis*, var. *dentata*. Brittle Bladder-Fern, var. β





S. B. F. 22. *Cystopteris alpina*, var. *Dickiana*. Alpine Bladder-Fern, var. β .





S. B. F. 25.

Athyrium Filix-femina.

Common Lady-Fern.





Athyrium alpestre, var. *flexile*.

Dwarf Alpine Lady-Fern.







E. B. 1950. *Asplenium Adiantum-nigrum*, var. *genuinum*. Black Spleenwort.



Asplenium Adiantum-nigrum, var. *acutum*.

Black spleenwort var. ♂









Asplenium Clermontæ.

Lady Clermont's Spleenwort.











E. B. 1150.

Scolopendrium vulgare.

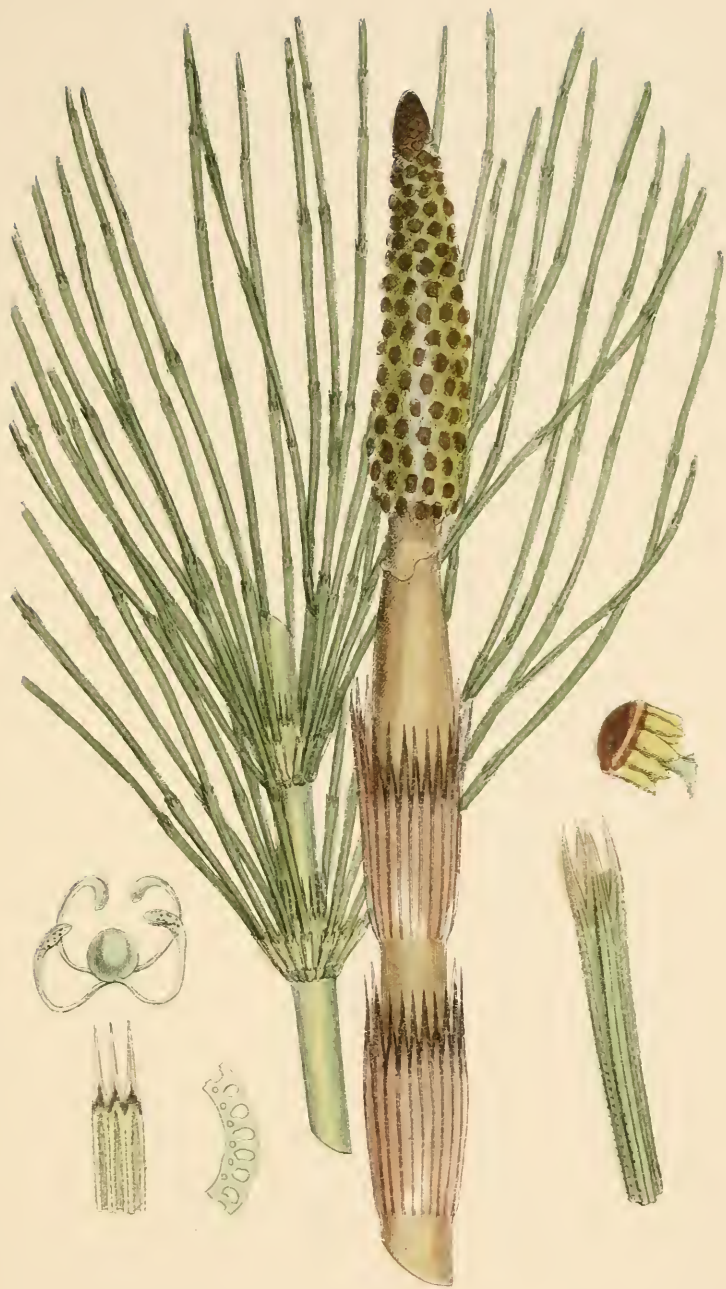
Hart's-tongue.



Lomaria Spicant. Hard Fern.









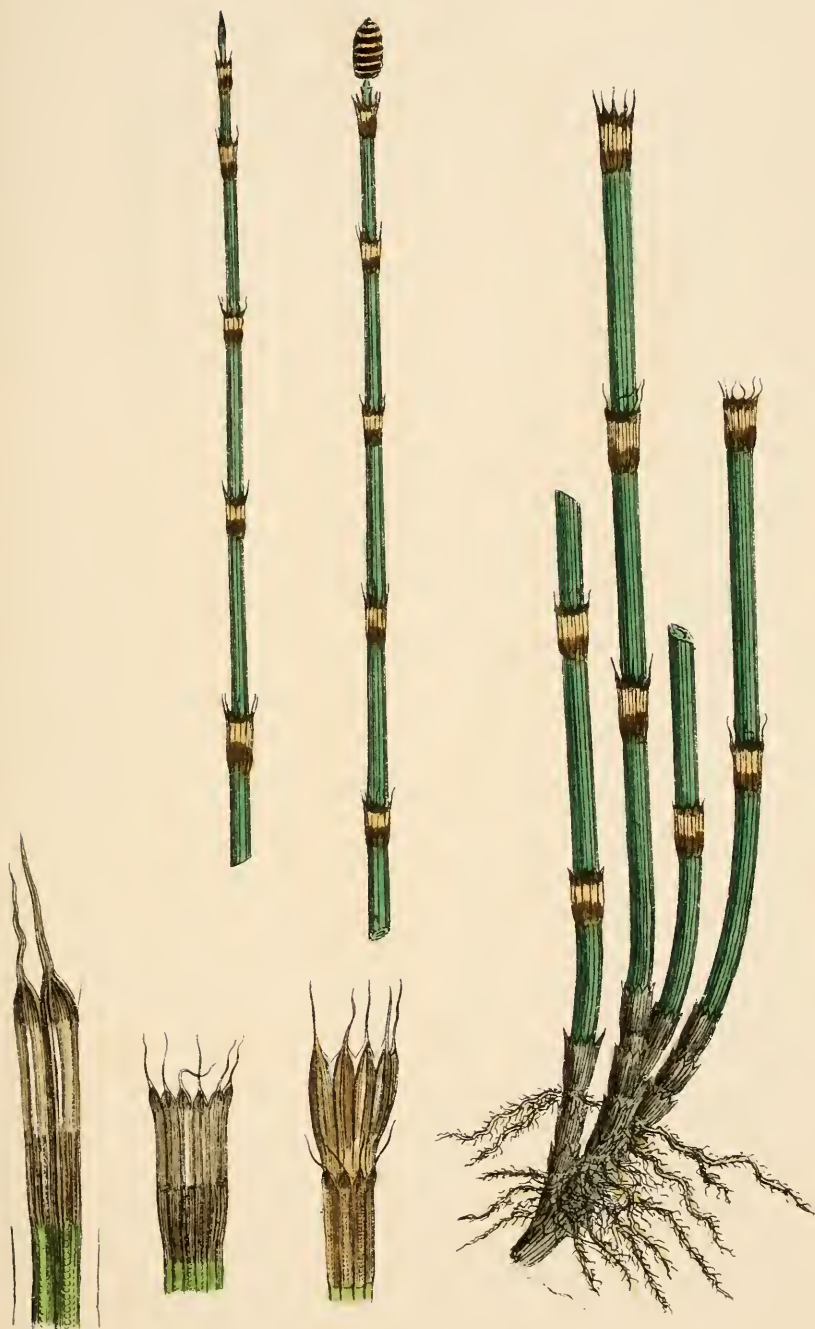




















Nitella flexilis.

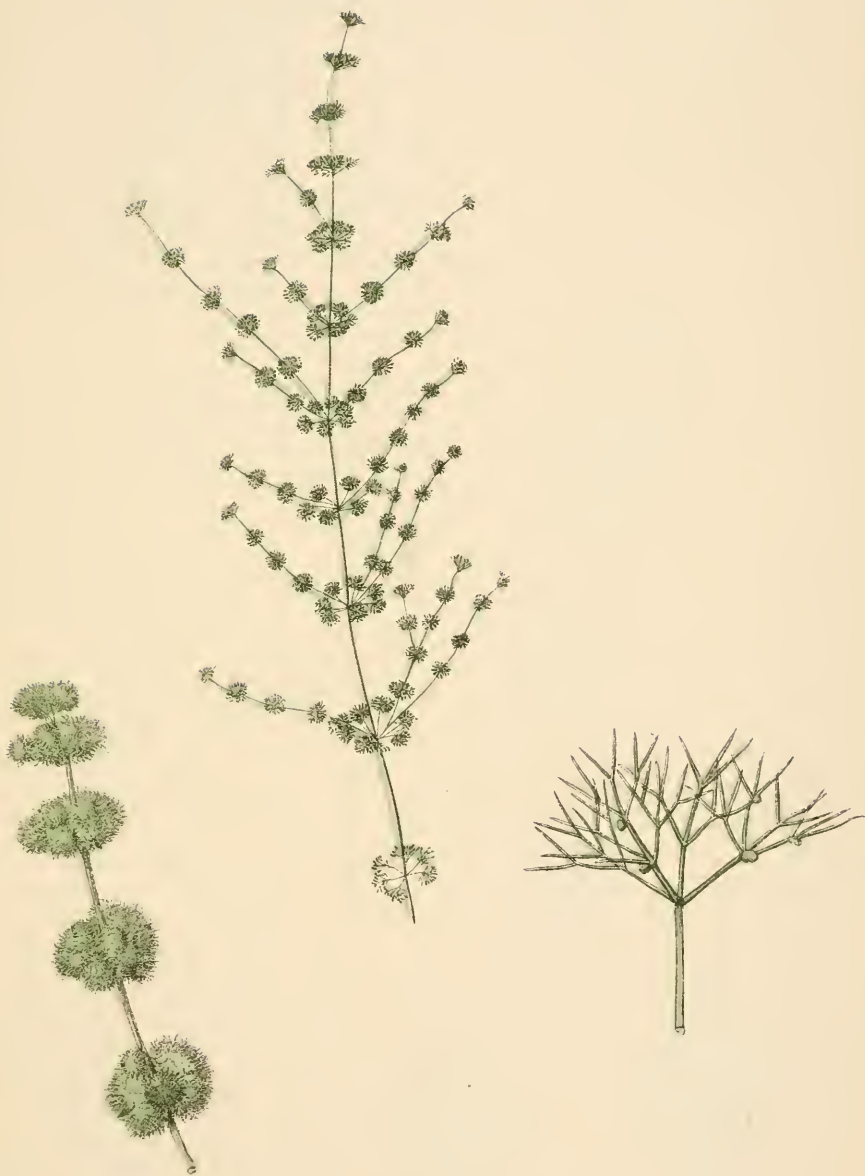






Nitella mucronata.





Nitella tenuissima.



Nitella glomerata var. α genuina.





Nitella intricata.



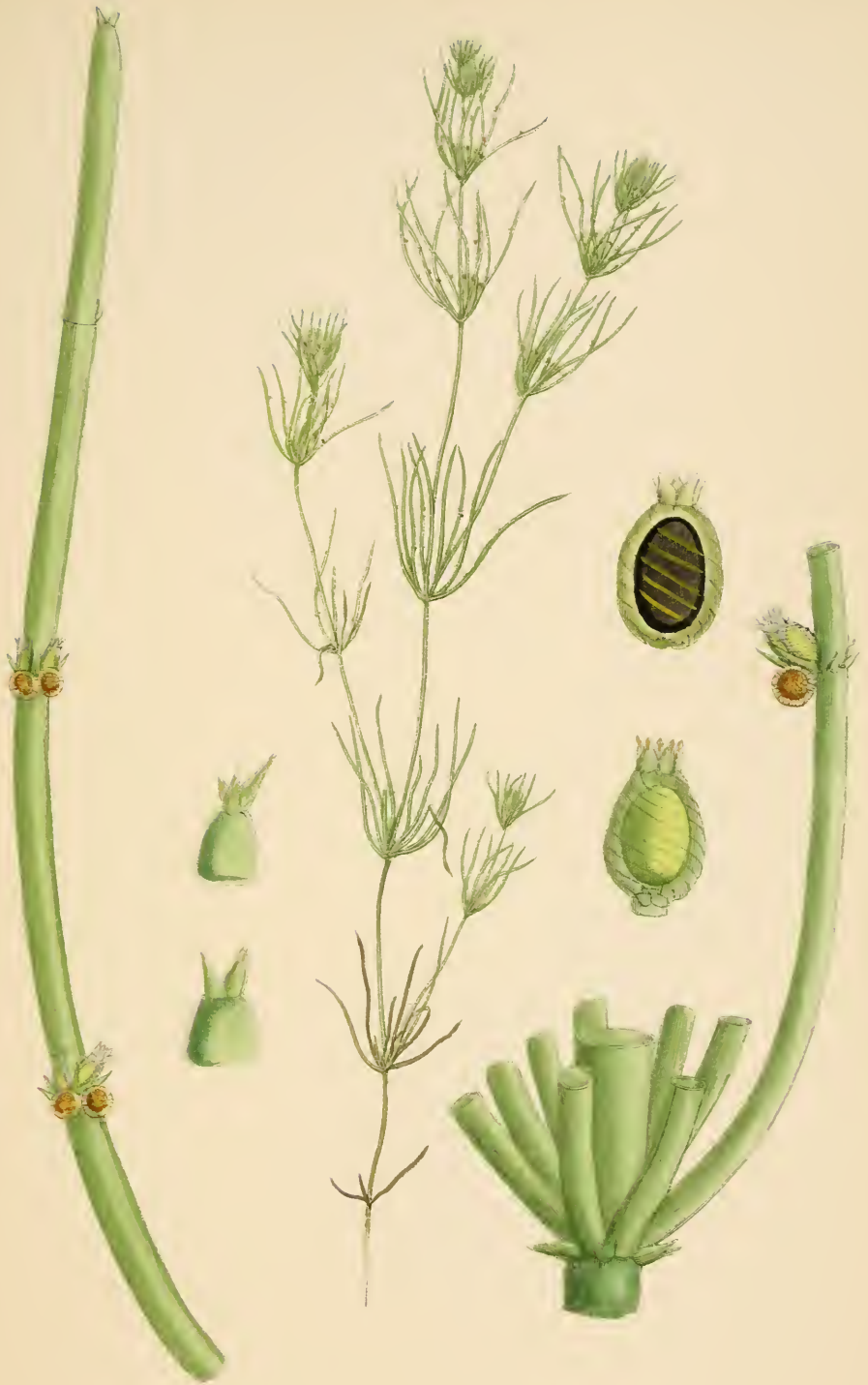
Nitella intricata var. *prolifera*.



Chara alopecuroidea. Foxtail chara.



Chara stelligera. Starbearing chara.



Chara Braunii. Braun's chara.



Chara crinita. Bearded chara.



Chara tomentosa. Tomentose chara.



E. B. 336.

Chara foetida, var. *a. genuina*.

Fetid chara.



Chara foetida, var. β . *contraria*.

Fetid chara.



E. B. 463.

Chara hispida, var. *a. genuina*. Bristly chara.



Chara hispida, var. β . Baltica.

Bristly chara. Baltic. var.



Chara hispida, var. *y pseudo-crinita*.

Bristly chara, var. *y*.



E. B. S. 2738.

Chara aspera. Rough chara.



Chara fragilis, var. *genuina*.

Fragile chara.



Chara fragilis, var. β . *connivens*.

Fragile chara, var. β .



Chara fragifera.

Strawberry chara.

To avoid fine, this book should be returned on
or before the date last stamped below

5M-1-38

--	--	--

12 vols

100⁰⁰

526317

Sowerby, J.
English botany.

MR

DATE

NAME

DATE

526317

CALIF ACAD OF SCIENCES LIBRARY



3 1853 00048 1494