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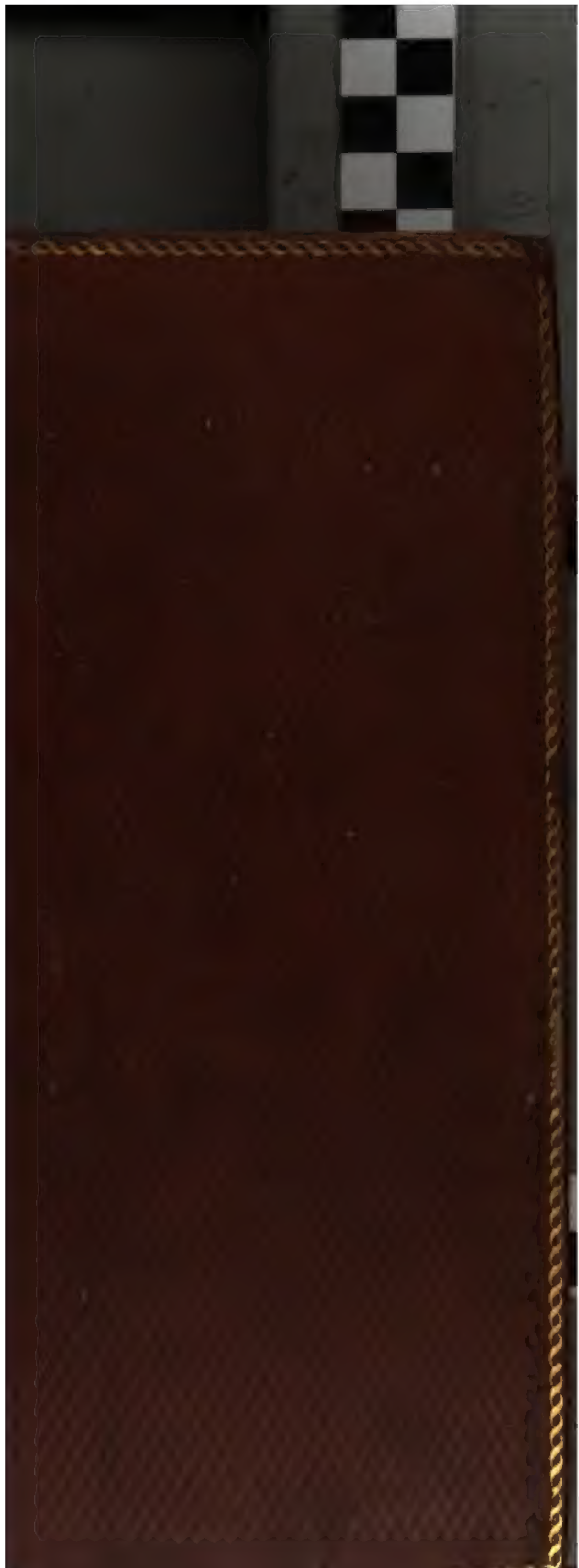
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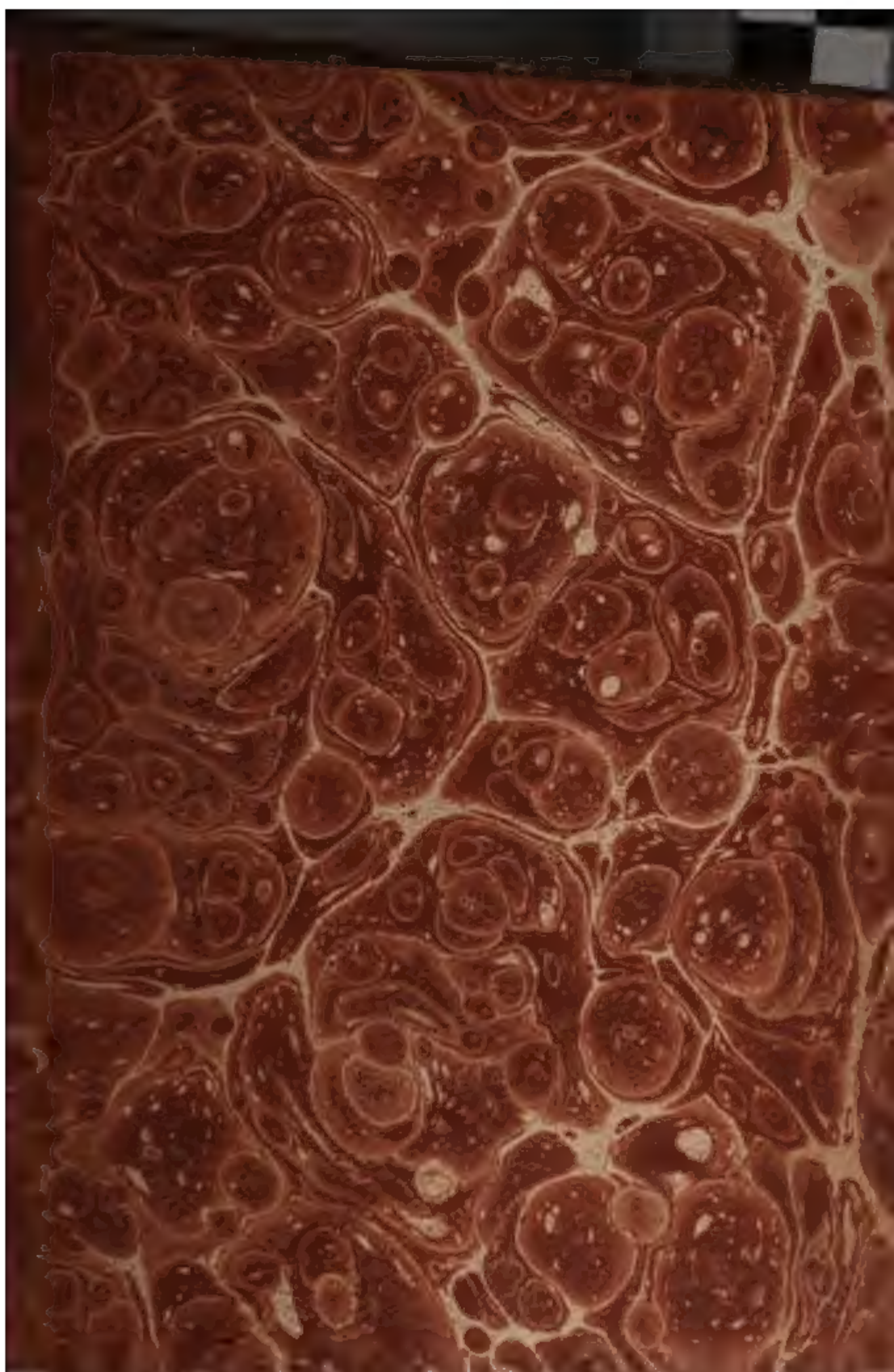
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ENGLISH BOTANY;
OR,
COLOURED FIGURES
OF
BRITISH PLANTS,

WITH THEIR
ESSENTIAL CHARACTERS, SYNONYMS,
AND PLACES OF GROWTH.

TO WHICH WILL BE ADDED,
OCCASIONAL REMARKS.

BY

JAMES EDWARD SMITH, M. D. F. R. S.

MEMBER OF THE IMP. ACAD. NATURÆ CURIOSORUM, THE
ACADEMIES OF STOCKHOLM, UPSAL, TURIN,
LISBON, LUND, BERLIN, PHILADELPHIA, AND
THE NAT. HIST. SOCIETY OF PARIS;
PRESIDENT OF THE LINNEAN SOCIETY.

THE FIGURES BY
JAMES SOWERBY, F.L.S.

"VIRESCERE ACQUIRIT MUNDO."—*Virg.*

VOL. XVI.

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HYPNUM subtile.

Slender Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base : *inner* a variously-toothed membrane. *Veil* smooth.

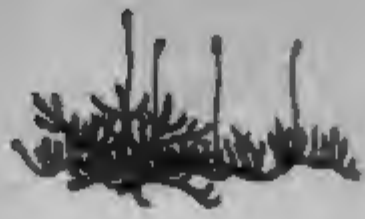
SPEC. CHAR. Stem creeping, with slender thread-shaped branches. Leaves lanceolate, acute, ribless, rather loosely spreading. Capsule erect. Lid conical.

SYN. Hypnum subtile. *Hoffm. Germ. v. 2. 70.*
Dicks. Crypt. fasc. 4. 17. Sm. Fl. Brit. 1277.
Turn. Musc. Hib. 135.

Leskea subtilis. Hedw. Sp. Musc. 221. Crypt. v. 4. 23. t. 9.

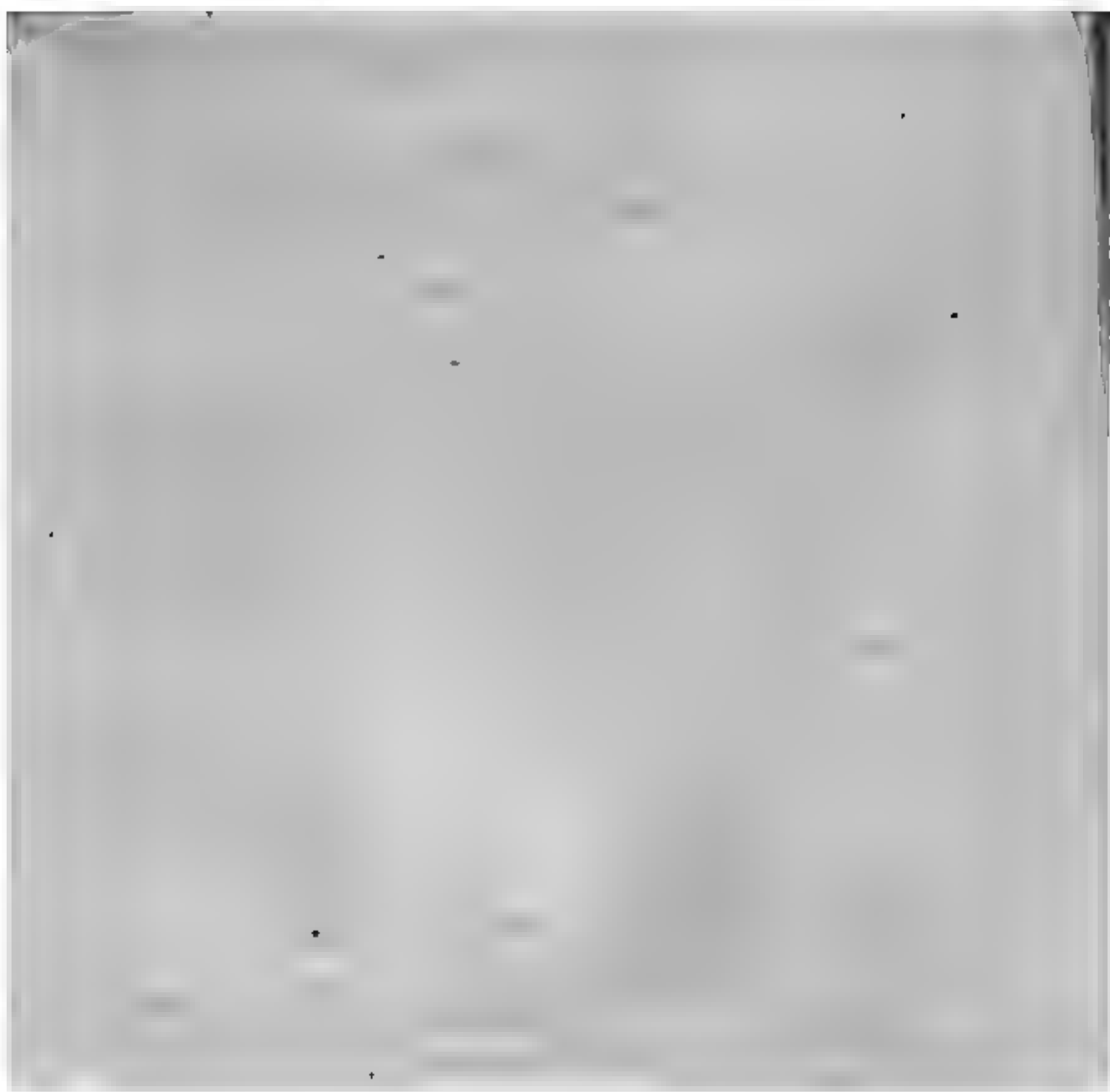
WET situations, about the roots of trees, and watery gravelly heaths, produce this moss, but the capsules do not often occur in England. We are obliged to take them from a German specimen of Mr. Turner's. The very slender, creeping, entangled stems throw up numerous, erect, short, extremely slender, round, almost always simple, branches, composing fine matted tufts. The leaves are light yellowish green, loosely clothing the branches, spreading every way, lanceolate, very acutely pointed, entire, destitute of rib or veins; and the scales of the sheath are like them, but more concave; both appear reticulated, with oblong interstices, under a microscope. The fruitstalks are capillary and reddish, hardly an inch high, ascending. Capsule either quite erect, or, when ripe, sometimes slightly inclining, cylindrical, wide-mouthed, quite smooth and even, light brown. Lid conical, short and reddish, according to Hedwig, who, finding the inner fringe with 16 simple equal teeth, refers this moss to his *Leskea*, a genus we do not adopt.

2495



Phytolacca





HYPNUM pulchellum.
Beautiful Tufted Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stems erect, tufted. Branches cylindrical, simple. Leaves ovato-lanceolate, taper-pointed, ribless, somewhat inclining to one side. Capsule upright. Lid conical.

SYN. Hypnum pulchellum. *Dicks. Crypt. fasc. 2. 13. t. 5. f. 6. H. Sicc. fasc. 9. 22. Sm. Fl. Brit. 1277. With. 847. Hüll. 269. Turn. Musc. Hib. 136. Leskea pulchella. Hejc. Sp. Musc. 220. t. 55. f. 7—12.*

GATHERED last summer by Mr. Borrer and Mr. Hooker in the Den of Rechip, Perthshire, already celebrated in botanic story for producing *Convallaria verticillata*, t. 123.

This is truly an elegant moss, consisting of dense tufts, an inch and half high, conspicuous for their light and splendid green colour. The branches are numerous, alternate, upright, simple and cylindrical. Leaves imbricated, rather inclining to one side, shining, ovato-lanceolate, concave, en-



2006



Printed by J. G. Smith, London



HYPNUM polyanthos.
Thread-shaped Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scaly sheath. Outer fringe of 16 teeth, dilated at the base: inner a variously-toothed membrane. Veil smooth.

SPEC. CHAR. Stem creeping, much branched, round. Leaves lanceolate, taper-pointed, imbricated, erect, without ribs. Capsule erect. Lid pointed.

SYN. Hypnum polyanthos. Schreb. Lips. 97. Sm. Fl. Brit. 1278. Turn. Musc. Hib. 137.

H. filiforme. Hudson. 497.

H. filicilium. Linn. Mant. 2. 310.

H. filifolium. Wulf. 862. Hull. 273.

H. sericeum ramosius et tenuius, capsulis acuminatis. Dill. Musc. 227. t. 42. f. 62. Herb. Dill.

H. repens trichoides terrestre viridius minus, capitulis cernuis, minus tumidis. Raii Syn. 84.

Leskea polyantha. Hedw. Sp. Musc. 229. Crypt. t. 4. 4. t. 2.

L. filiformis. Sibth. 303.

A FREQUENT species about rotten wood and old trees, bearing capsules in the early spring.

Stems creeping, entangled, in dense patches, throwing up many slender, cylindrical, leafy, often pinnated, branches. Leaves with a silky gloss, light yellowish green, small, imbricated every way, rarely inclined a little to one side, lanceolate, broad, entire, ending in a long taper point, but without any rib or vein. Their reticulations are oblong and linear. Sheaths numerous, long, pale; their leaves long-pointed. Fruitstalk half an inch or more in length, erect, red, spiral when dry. Capsule upright, cylindrical inclining to an elliptical figure, rather narrow mouthed, red-brown, smooth. Lid convex, with a longish beak, as figured by Dillenius; Mr. Turner justly observes that German specimens have a shorter lid, as represented by Hedwig, and we find it so in Swiss ones, yet there seems no other difference. Its length varies with us.

In the first edition of Hudson *filiciforme* was printed by mistake for *filiforme*; hence arose the above confusion of names.

166A



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HYPNUM attenuatum.

Taper-branched Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scaly sheath. Outer fringe of 16 teeth, dilated at the base: inner a variously-toothed membrane. Veil smooth.

SPEC. CHAR. Stem much branched. Branches incurved. Leaves ovate, pointed, imbricated, single-ribbed; the upper ones rather leaning one way. Capsule erect. Lid conical.

SYN. Hypnum attenuatum. Schreb. Lips. 100. Dicks. Crypt. fasc. 2. 13. Sm. Fl. Brit. 1279. With. 860. Hull, 272.

H. repens trichodes arboreum majus, cauliculis ramosis. Dill. Musc. 331. t. 42. f. 66.

Leskia attenuata. Hedw. Sp. Musc. 280. Crypt. v. 1. 33. t. 12.

SUCH as we have only can we here present to our friends. Dillenius never saw the fruit of this moss, nor have we more than one aged capsule, on the specimen given by Mr. Dickson, gathered by him on trunks of trees in Scotland. It accords exactly with the specimens of Dillenius, and, if we are not much mistaken, with some, destitute of fructification, sent by Dr. R. A. Hedwig.

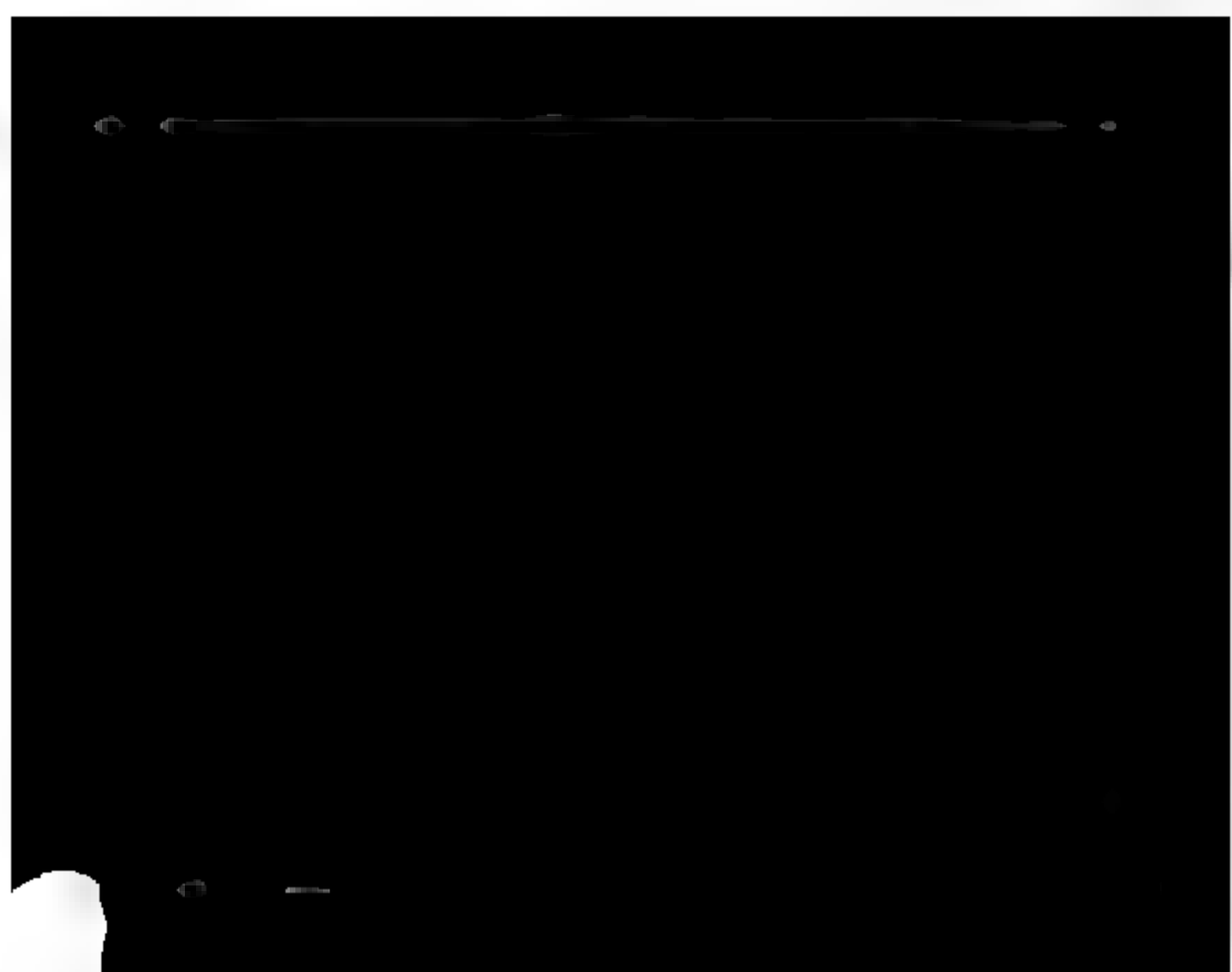
The stems are very much branched, leafy, ascending, entangled, the branches and their extremities incurved. Leaves imbricated every way, close-pressed when dry, dull-green, or tawny, ovate, broad, short, entire, single-ribbed, taper-pointed; the upper ones rather curved, the same way as the branch. Sheaths pale. Fruitstalk an inch high, wavy, dark red. Capsule erect, cylindrical or somewhat ovate. Lid, according to Hedwig, much shorter than the capsule, conical, obtuse.

2420



For specimens, see 436







HYPNUM medium.
Long-headed Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem creeping. Branches scattered. Leaves ovato-lanceolate, acute, single-nerved, imbricated. Capsule cylindrical, slightly elliptical, erect.

SYN. *Hypnum medium.* *Dicks. Crypt. fasc. 2. 12.*
Sm. Fl. Brit. 1281. With. 847. Hall. 269.

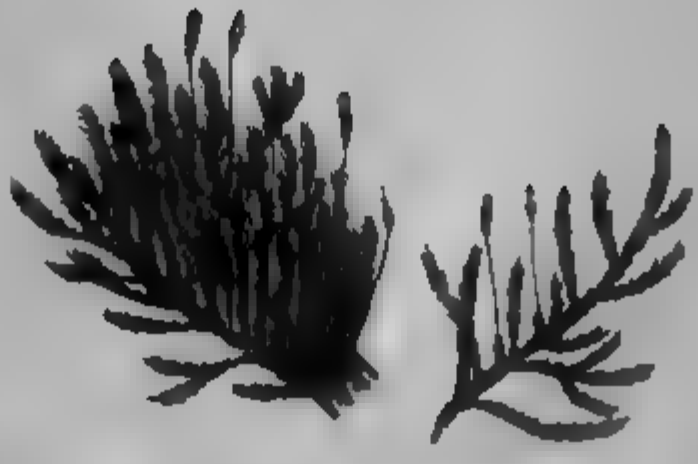
H. trichodes, capsulis oblongis in setis brevioribus.
Dill. Musc. 331. t. 42. f. 65.

Leskea polycarpa. Hedw. Sp. Musc. 225.

MR. DICKSON discovered this *Hypnum* on the trunks of trees in Scotland, and Mr. Templeton has observed it in Ireland upon stones. Our specimens, the only English ones we have ever seen, were gathered by the Rev. Dr. Abbot about



174







[1922]

HYPNUM inundatum.

Marsh Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem creeping. Branches erect. Leaves ovate, concave, single-ribbed, somewhat inclining to one side. Capsule cylindrical, erect.

SYN. Hypnum inundatum. *Dicks. Crypt. fasc. 4. 17.*
Sm. Fl. Brit. 1281. Turn. Musc. Hib. 143.

H. heterophyllum aquaticum, polycephalum, repens.
Dill. Musc. 293. t. 37. f. 27, B.

Leskea paludosa. Hedw. Sp. Musc. 221. Crypt.
v. 4. l. t. 1.

GATHERED by the late Mr. W. Brunton upon trees in rivulets near Ripon, Yorkshire. The late Mr. R. Teesdale observed the same on the trunks of willows, chiefly about the roots, in Yorkshire, Wiltshire, and at Chiswick near London, bearing capsules from June to September. Our specimens all agree with those of Dillenius, and with what Dr. Swartz

1922



Asplenium adnigrum L. var. *adnigrum* L.





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HYPNUM sericeum.

Silky Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem creeping. Branches ascending, crowded. Leaves ovate, pointed, erect, with three nerves. Lid conical.

SYN. *Hypnum sericeum.* Linn. *Sp. Pl.* 1595. Sm. *Fl. Brit.* 1282. Huds. 505. With. 864. Hull. 274. Relh. 490. Attot. 251. Curt. *Lond. fasc.* 2. t. 69.

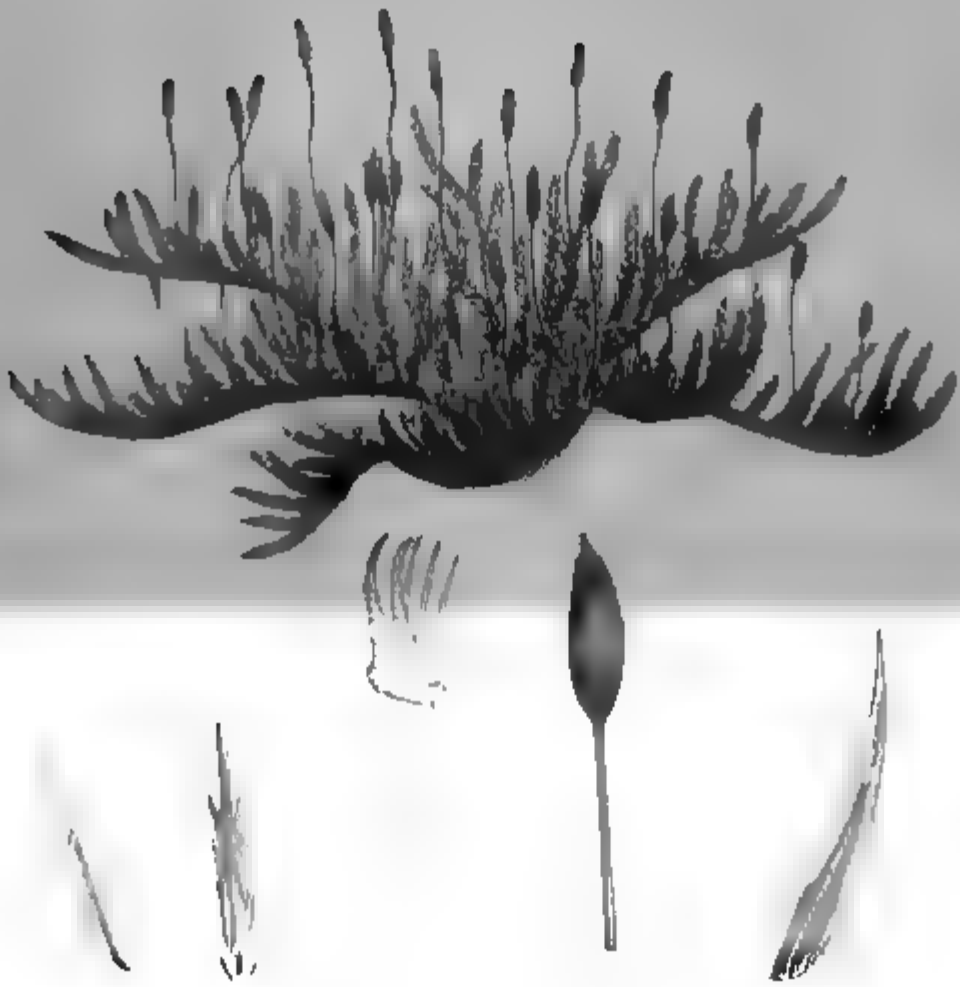
H. vulgare sericeum recurvum, capsulis erectis cuspidatis. Dill. *Musc.* 323. t. 42. f. 59.

H. repens trichoides terrestre luteo-virens vulgare majus, capitulis erectis. Raii *Syn.* 84.

Leskea sericea. Hedw. *Sp. Musc.* 228. *Crypt.* t. 4. 43. t. 17.

Neckera sericea. Sibth. 305.

2744.5



2744.5





HYPNUM dendroides.
Tree-shaped Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem erect, simple. Branches clustered, terminal. Leaves ovate, single-ribbed, finely serrated. Lid pointed. Capsules erect.

SYN. Hypnum dendroides. *Linn. Sp. Pl.* 1593. *Sm. Fl. Brit.* 1283. *Huds.* 503. *With.* 859. *Hull.* 272. *Retz.* 430. *Abbot.* 250. *Dicks. Dr. Pl.* 96. *H. Sicc. fasc.* 13. 21. *Ehrh. Crypt.* 16. *Turn. Musc. Hib.* 138.

H. dendroides sericeum, setis et capsulis longioribus erectis. *Dill. Musc.* 313. t. 40. f. 48.

H. erectum, arbusculam referens, ramulis subrotundis confertim nascentibus. *Raii Syn.* 81.

FOUND in moist shady woods and boggy grassy pastures, producing its fruit, though very rarely, in spring, summer, or autumn. Mr. Mackay gathered our specimens on the island of Innesfallen, Killarney, in August 1805, at which time some capsules were quite ripe, others just beginning to swell.

The species before us is readily known by its tree-like form of growth, which gives it a pretty and peculiar aspect. The roots are long and creeping. Stems solitary, simple and scaly. Branches clustered, cylindrical, straight, acute, covered with imbricated shining leaves, which vary in colour, and are ovate, rather minutely serrated, furnished with a rib and 2 longitudinal plants. Sheath cylindrical. Capsules erect, slenderly elliptical. Lid conical, pointed. Inner fringe divided almost to the base into uniform slender teeth: hence Swartz has referred it to *Neckera*; and his opinion is sanctioned by the colour and texture of the part in question.

2845



Adiantum acrostichum L. var. *puberulum* (L.) Kuhn





HYPNUM curvatum.

Curve-branched Bushy Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem creeping. Branches clustered, incurved. Leaves elliptical, concave, entire, single-ribbed. Lid tapering. Capsule erect.

SYN. Hypnum curvatum. Swartz. *Musc. Succ.* 64. *Sm. Fl. Brit.* 1284. *Dicks. Crypt. fasc.* 4. 18. *Turn. Musc. Hist.* 139.

H. myosuroides. Hedw. *Sp. Musc.* 266. *Crypt.* t. 4. 20. t. 8. *Huds.* 308, 3.

H. myosuron. *With.* 865. *Hull.* 274.

H. myosuroides crassius, capsulis erectis. *Dill. Musc.* 316. t. 41. f. 50.

H. repens, triangularibus angustis foliis, ramulis subrotundis. *Dill. in Raii Syn.* 83.

VERY frequent on the trunks of trees, more particularly in

2560



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[1567]

HYPNUM myosuroides.

Mouse-tail Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scaly sheath. Outer fringe of 16 teeth, dilated at the base: inner a variously-toothed membrane. Veil smooth.

SPEC. CHAR. Stem creeping. Branches clustered, incurved. Leaves lanceolate, pointed, serrated, single-ribbed. Capsule drooping as it ripens.

SYN. Hypnum myosuroides. Linn. Sp. Pl. 1596. Sm. Fl. Brit. 1285. Huds. 507. With. 865. Hull. 274. Relh. 431. Abbot. 251. Turn. Musc. Hist. 140.

H. myosuroides tenuius, capsulis nutantibus. Dill. Musc. 517. t. 41. f. 51.

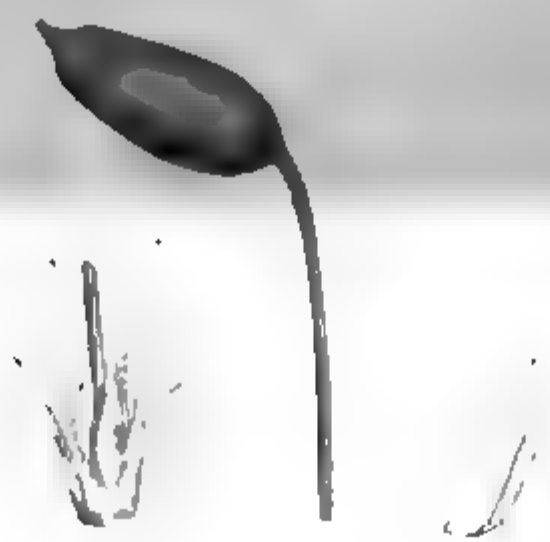
H. polyanthon, triangularibus angustis foliis. Dill. in Raii Syn. 83.

Leskia myosuroides. Sibth. 903.

PLENTIFUL on limestone rocks in mountainous countries, bearing fruit in the spring and summer. Mr. Turner gathered our specimen in Anglesea.

This species differs from *H. curvatum*, t. 1566, in not being above half so large, and in having narrower and less concave leaves, which are finely serrated. The capsules moreover are, when they begin to ripen, no longer perfectly erect, as in the foregoing, but become inclined or drooping; insomuch that the close affinity of these two species in habit and general structure can alone justify us in placing the present in that section of its genus distinguished by upright capsules. It must however be remarked that these capsules droop only by a bend in their stalks, and are not of themselves arcuate or incurved. The lid is shorter than in *H. curvatum*, and a little bent.

1867





[1620]

HYPNUM nigro-viride.

Dark-green Silky Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem procumbent, pinnated. Leaves ovate, pointed, concave, ribless, slightly curved to one side. Lid conical, pointed.

SYN. *Hypnum nigro-viride.* *Dicks. Crypt. fasc. 4. 18.*
Sm. Fl. Brit. 1285. Turn. Musc. Hib. 141.

H. myosuroides δ . *Huds. 508. var. 2. With. 865.*
Hull. 274.

H. myosuroides sericeum tenuius, capsulis erectis.
Dill. Musc. 318. t. 41. f. 53.

FOR the specimen here represented we are obliged to Charles



1680



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HYPNUM Donnianum.

Donnian Feather-moss.

CRYPTOGAMIA Musci.


GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stems tufted, simple or divided, bearing fruit from their base. Leaves imbricated every way, ovate, without nerves. Capsule cylindrical, erect.

SYN. Hypnum Donnianum. *Sm. Fl. Brit.* 1286.

WE believe this moss has never been noticed by any other botanist than Mr. G. Donn, who found it, in August 1802, on a bank by the side of a rivulet, upon the high mountains of Cairngorm (vulgarly called Corum Gorum) in Inverness-shire, nor has he seen it elsewhere.

The whole plant has a pale-green shining silky appearance. The stems in the specimens described in *Fl. Brit.* were simple, but we have recently seen others once or twice divided, they

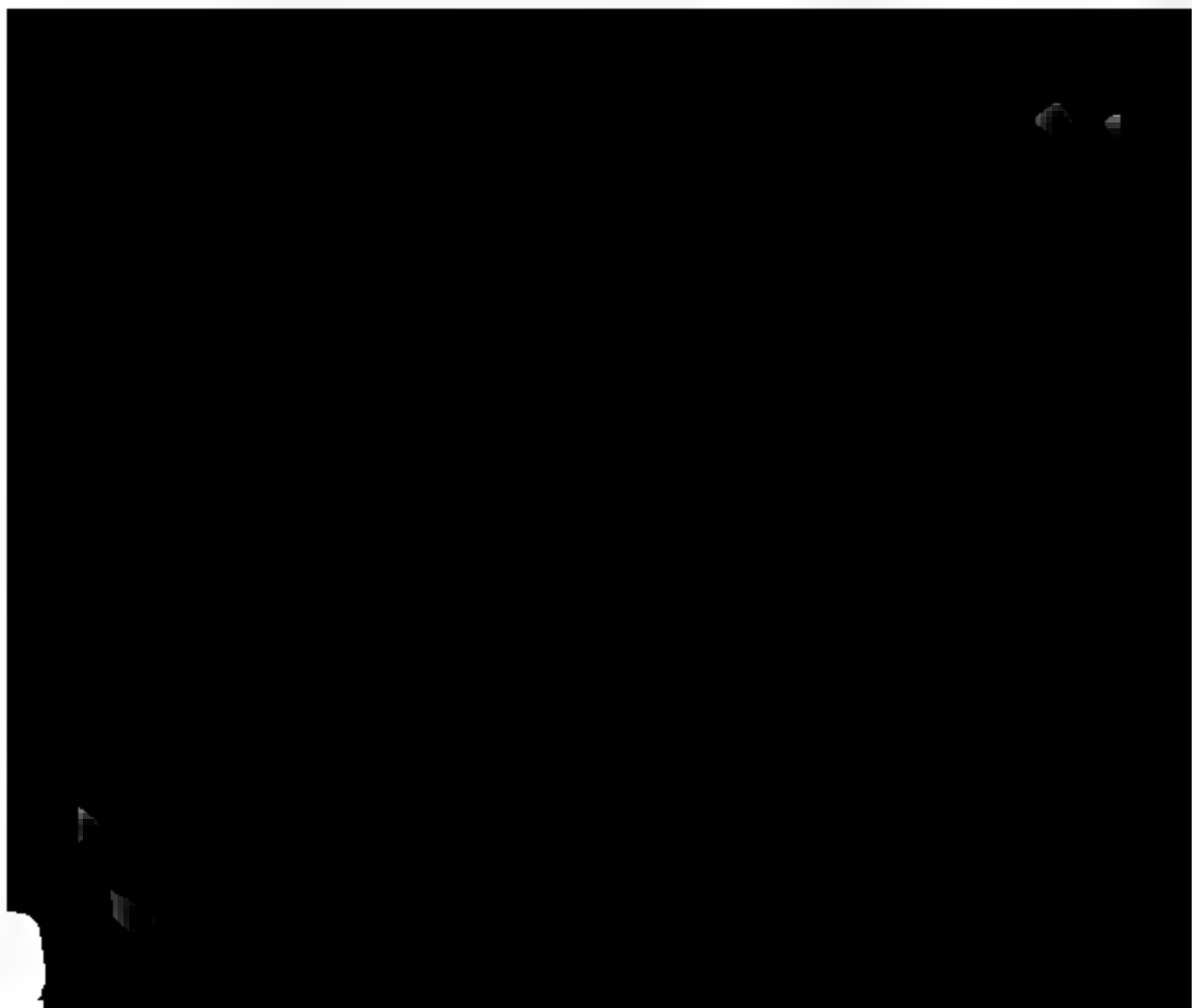


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1871. 10. 1. *Phacelia* sp. at ...







HYPNUM complanatum.

Flat Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem pinnated. Leaves in two ranks, obtuse with a little point, compressed, without a nerve. Lid beaked, oblique. Sheath elongated.

SYN. *Hypnum complanatum.* Linn. *Sp. Pl.* 1588. Sm. *Fl. Brit.* 1286. Huds. 495. With. 844. Hull. 268. Relh. 431. Abbot. 244. Lightf. 742. Turn. *Musc. Hib.* 144.

H. pennatum compressum et splendens, capsulis ovatis. Dill. *Musc.* 268. t. 34. f. 7.

H. repens filicifolium ramosum, ramulis appressis et magis complanatis. Raii *Syn.* 87.

Leskea complanata. Hedw. *Sp. Musc.* 231. Sibth. 902.

ABUNDANT in woods about the roots and stems of trees. In the former situation it often forms dense tufts; in the latter it is pressed close to the bark. In either case the whole plant is singularly flat, as if it had been placed between the leaves of a book. The fructification is produced in March or April, but by no means generally.

Each plant is about 4, 5, or more inches in length, doubly pinnated, the branches two-ranked as well as the leaves, which are closely imbricated, compressed, ovate-oblong, obtuse, entire, without vein or nerve, of a pale shining green, membranous, tipped with a small point. The young points of the branches are often long and taper, bearing a few, more distant, leaves. Sheaths about a third of the length of the fruit-stalks, which are slender, red upwards. Capsule erect, elliptical, short. Lid obliquely beaked.

2428



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HYPNUM trichomanoides
Blunt Fern-like Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scaly sheath. Outer fringe of 16 teeth, dilated at the base: inner a variously-toothed membrane. Veil smooth.

SPEC. CHAR. Stem imperfectly pinnated. Branches all obtuse. Leaves in two ranks, scimitar-shaped, pointless, without a nerve. Lid awl-shaped. Sheath short.

SYN. Hypnum trichomanoides. Schreb. Lips. 88. Sm. Fl. Brit. 1287. With. 844. Hull. 268. Relh. 431. Turn. Musc. Hib. 145.

H. complanatum β . Huds. 495.

H. pennatum trichomanoides splendens ramosum. Dill. Musc. 269. t. 34. f. 8.

H. erectum filicifolium ramosum, pinnulis obtusis. Dill. in Raii Syn. 87.

Leskea trichomanoides. Hedw. Sp. Musc. 231. Sibth. 303.

ON the trunks of trees or on the ground, bearing capsules in February or March. Our specimens were gathered at Studley near Rippon, by Mr. W. Brunton, who justly remarks that the much shorter sheath of the fruit-stalk serves well to distinguish this moss from the preceding, of which Hudson made it a variety. The stems moreover are much shorter, and less regularly pinnated. Branches not running out into a taper point. Leaves slightly recurved into the form of a scimitar, a little convex, with scarcely any point. They have been thought finely serrated, but we believe it to be an optical deception occasioned by their reticulated texture. The lid of the capsule is longer and slenderer than in *H. complanatum*. The inner fringe is, as in that, simply and regularly toothed, which makes the character of Hedwig's *Leskea*.





HYPNUM denticulatum.
Sharp Fern-like Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Leaves two-ranked, ovato-lanceolate, acute, entire, without a nerve. Capsule cylindrical, drooping. Lid conical.

SYN. *Hypnum denticulatum.* *Linn. Sp. Pl.* 1588.
Hedw. Sp. Musc. 237. *Crypt. v.* 4. 81. *t.* 31.
Huds. 494. *With.* 843. *Hull.* 267.

H. denticulatum pennatum, pinnulis duplicatis recurvis.
Dill. Musc. 266. *t.* 34. *f.* 5.

H. repens filicifolium non ramosum, pediculis et capitulis longioribus ad radicem egredientibus, foliolis utrinque duplicatis. *Raii Syn.* 88.

FOUND in shady rather moist places, bearing its fruit in March and April.

The root is perennial. The stems form tufts, and are either





Adiantum species





HYPNUM crenulatum.

Crenate Feather-moss.

CRYPTOGAMIA Musci.

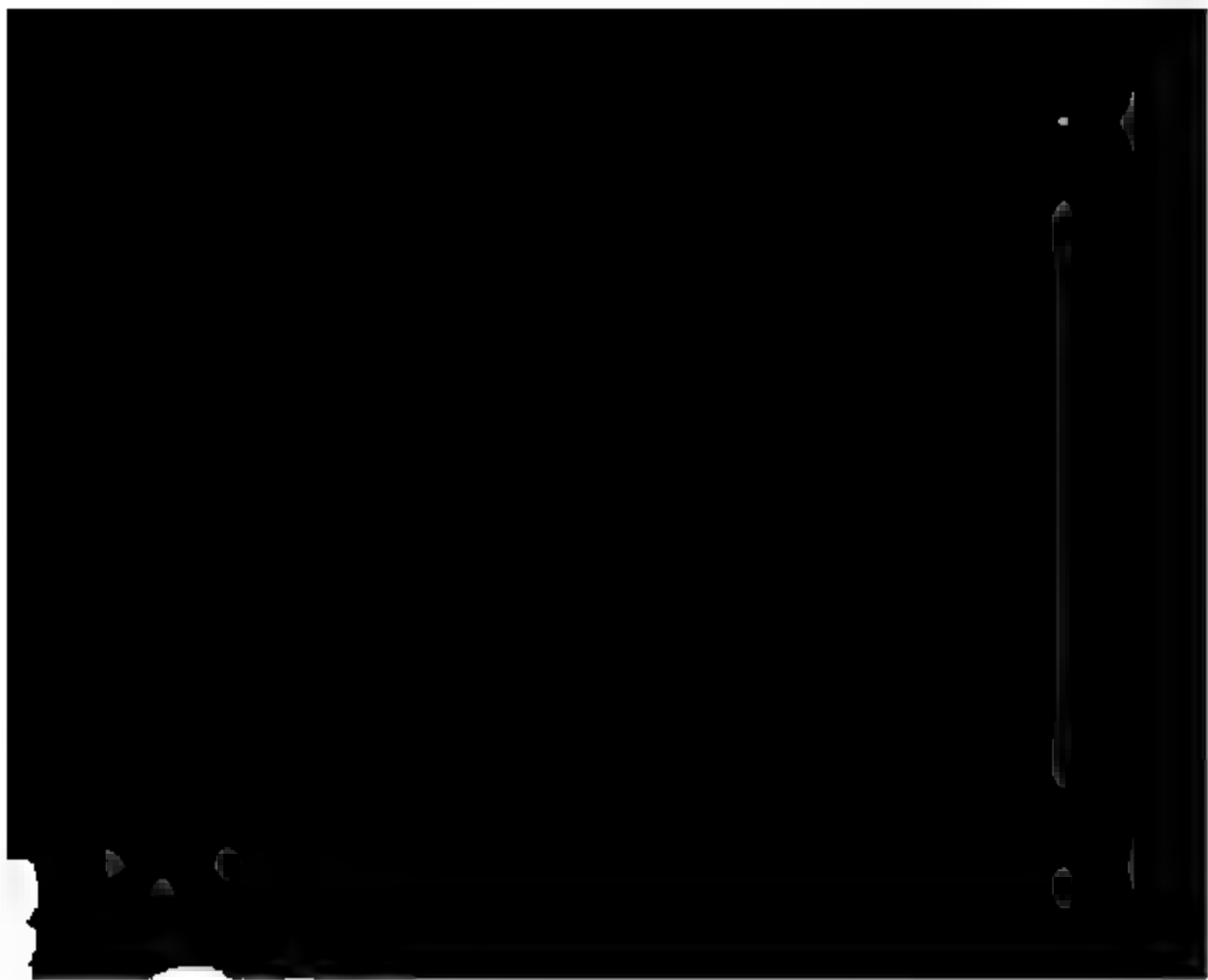
GEN — CHAR. Caps. ovate-oblong, from a lateral scaly sheath. Outer fringe of 16 teeth, dilated at the base: inner a variously-toothed membrane. Veil smooth.

SPEC — CHAR. Stem creeping. Branches mostly simple. Leaves imperfectly two-ranked, ovate, acute, finely notched, single-nerved. Lid conical.

SYN — Hypnum crenulatum. *Sm. Fl. Brit.* 1289.

GATHERED near Newcastle by Mr. Winch. We are obliged to Mr. Turner for specimens, as well as for pointing out the characters which indicate it to be a species hitherto undescript.

It is perennial, and appears to grow on rotten wood or decayed bark of trees. It is next akin to *H. denticulatum*, but larger in size and darker in colour. The stems creep to some extent, throwing up numerous, spreading, mostly simple branches. Leaves imbricated in two principal rows, but less exactly than in the last, shining, ovate, sharp-pointed, but little concave, not reticulated, minutely crenate, except at the base, furnished with a central nerve, which scarcely reaches to the point. Stalks red and shining, from a pale sheath. Capsule drooping and at length somewhat curved, of an elliptic-cylindrical figure, brown, darker at the base. Lid conical. Fringe reddish brown.





HYPNUM serrulatum.

Serrulated Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. *Stem* much branched, creeping. *Leaves* ovato-lanceolate, sharp-pointed, serrated, with a single nerve at the base. *Lid* awl-shaped.

SYN. *Hypnum serrulatum.* *Hedw. Sp. Musc.* 238. t. 60. *Sm. Fl. Brit.* 1290.

WE are also obliged for specimens of this moss to Mr. Turner, who in the progress of his work on Irish Mosses has kindly communicated to us many observations, especially every fact which could only be ascertained by the authentic Hedwigian specimens in his collection.

The *H. serrulatum* was received by the celebrated Hedwig from Pennsylvania. Our specimens were gathered in Ireland by Dr. Scott; nor is it very wonderful that an American plant should be found in that country, whose moist climate moreover renders it fertile in mosses.

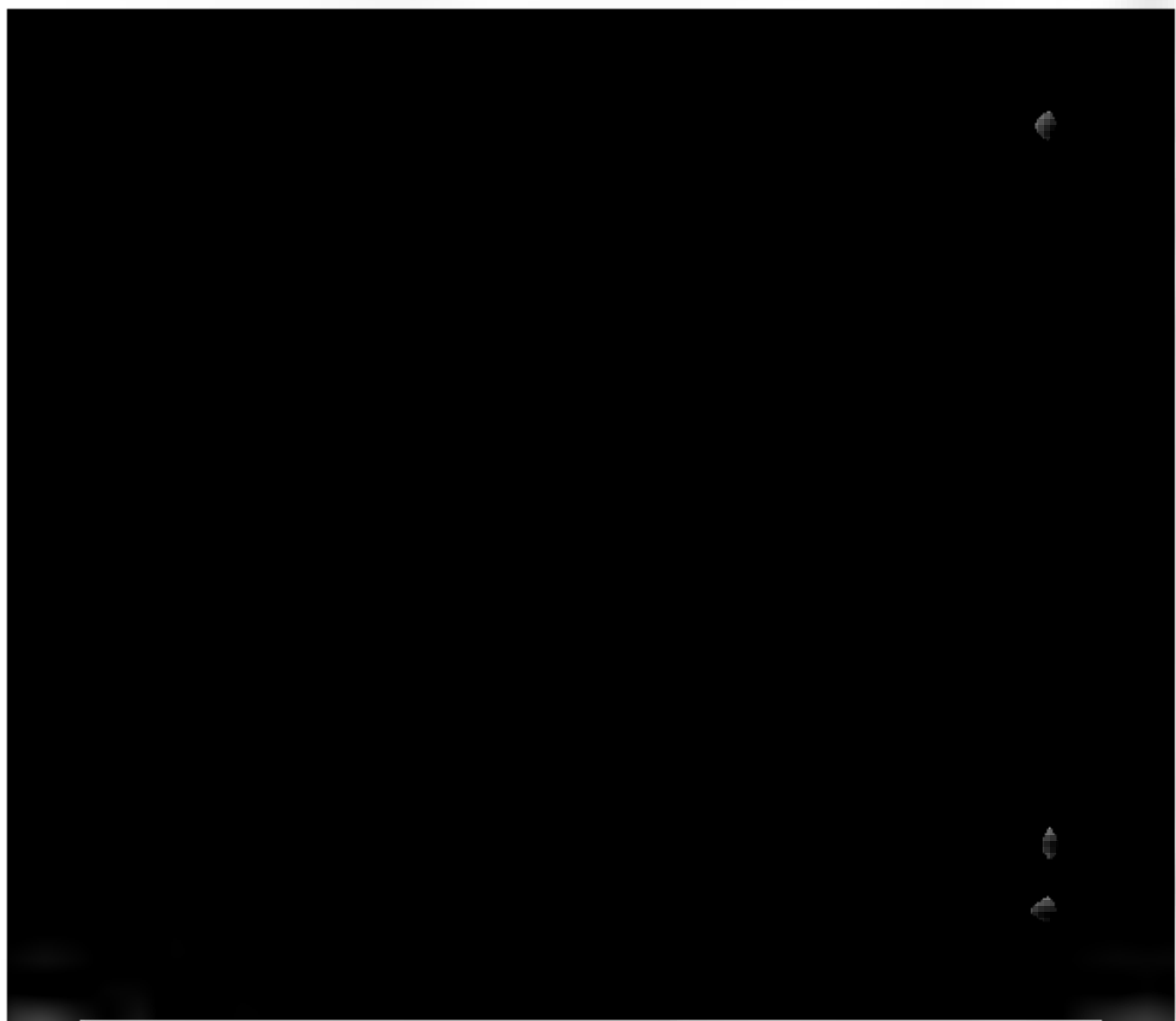
The roots appear to be perennial. With the time of its fructifying we are not acquainted. It is smaller than the foregoing species, and much more branched. The leaves are more or less perfectly two-ranked, deep-green, not shining, ovato-lanceolate with a taper point, obscurely reticulated, unequally and finely serrated, furnished with a central nerve which reaches only about half way from their base. Stalks red and shining. Capsule drooping, ovate-oblong. Lid awl-shaped, by which this species is, as well as by the leaves, clearly distinguished from the two last. Fringe of a rusty red.

Mr. Turner, on the authority of a specimen just received from Mr. Dickson, thinks this moss may not be distinct from his *H. confertum*.



Fig. 1. 17. A. D. 1862. In the Journal of the







HYPNUM lætè-virens.
Bright-green Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem threadshaped, creeping. Branches scattered, nearly simple. Leaves ovate, acute, finely serrated, single-ribbed. Lid flattish.

SYN. Hypnum lætè-virens. *Sm. Fl. Brit.* 1290. *Turn. Musc. Hib.* 149.

H. rotundifolium. *Dicks. Crypt. fasc. 2.* 10; excluding the synonym. *Wih.* 845. *Hull.* 268.

FOR this we are also indebted to Mr. Dickson, who gathered it about the roots of trees in some Scottish woods. Dr. Scott is said to have collected the same in Ireland. We cannot adopt the synonym of Scopoli's *rotundifolium*, though there is a considerable likeness in his figure to ours; but his lid is pointed, ours flat.

The stems are slender, creeping and scaly, throwing up numerous, simple or divided, short, nearly lanceolate branches. Leaves imbricated in two rows, bright green, ovate, acute, finely serrated, with a fine central rib, scarcely visible to the end. Fruitstalk short, tawny. Sheath-leaves with a twisted serrated point, but no rib. Capsule ovate, inclining, more or less curved. Fringe brown. The lid is wanting in our present specimen; but we have found it, in another authentic one in Mr. Turner's possession, nearly flat, with a small central prominence.

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HYPNUM intricatum.

Matted Hypnum.

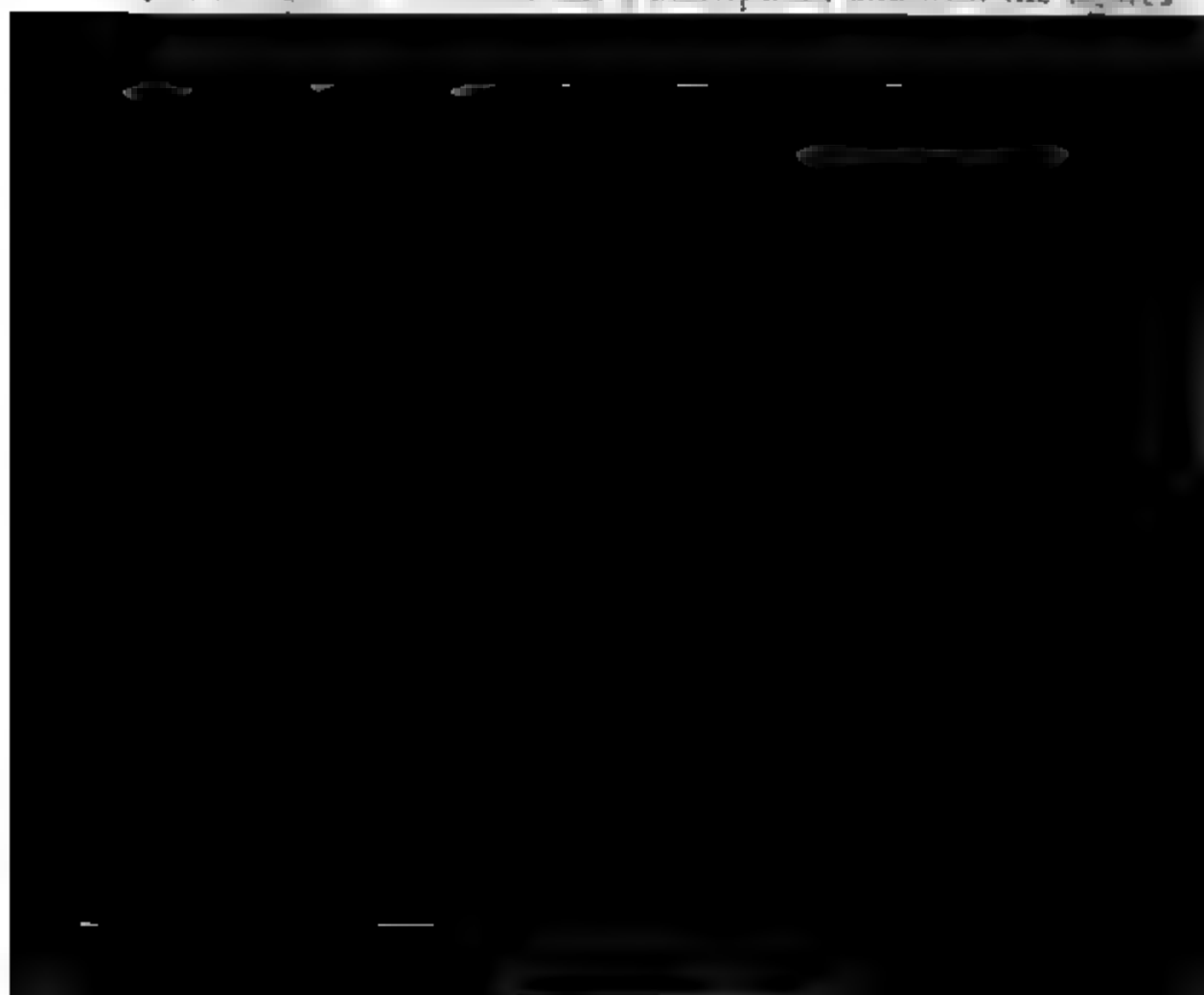
CRYPTOGAMIA Musci.

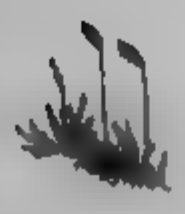
GEN. CHAR. *Capsule* with a lid. *Veil* smooth. *Flower-stalk* from a lateral tubercle invested with scales.

SPEC. CHAR. Shoots creeping, with shortish branches. Leaves spreading, lanceolate, taper-pointed. Capsules urn-shaped, inclining, with a recurved beak.

SYN. *Hypnum intricatum*. *Schreb. Fl. Lipsf.* 99. *Dicks. Crypt. fasc.* 2. 10. *Witb. Bot. Arr.* v. 3. 120.

THIS moss was first discovered in England by Mr. Robert Textdale, F.L.S. in some woods on the south-east side of the river at Matlock-bath, from whence Dr. Smith sent it to Mr. Dickson, and from his original specimens our figure was drawn. It well agrees with Schreber's description, and with the figures

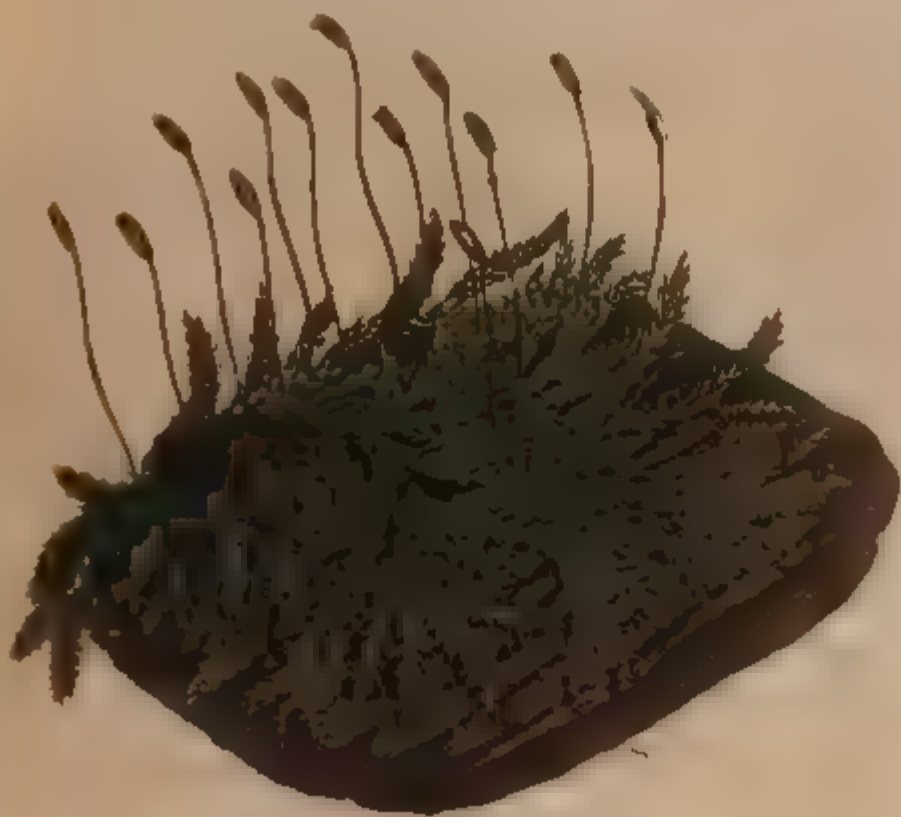




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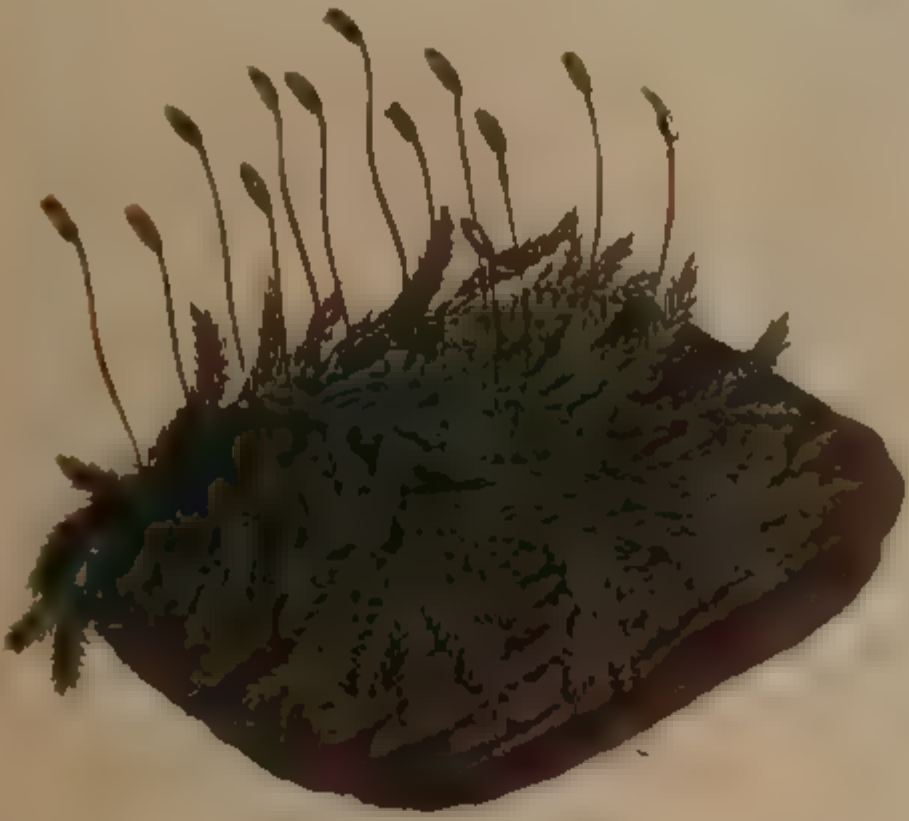
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Funaria hygrometrica

HYPNUM ruscifolium.

Long-beaked Water Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base; *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem branched. Leaves ovate, acute, minutely serrated, single-ribbed, imbricated, obscurely two-ranked. Lid awl-shaped.

SYN. *Hypnum ruscifolium.* *Dicks. Crypt. fasc. 3. 10. Sm. Fl. Brit. 1292. With. 848. Hull. 269. Relh. 433. Sibth. 297. Abbot. 246.*

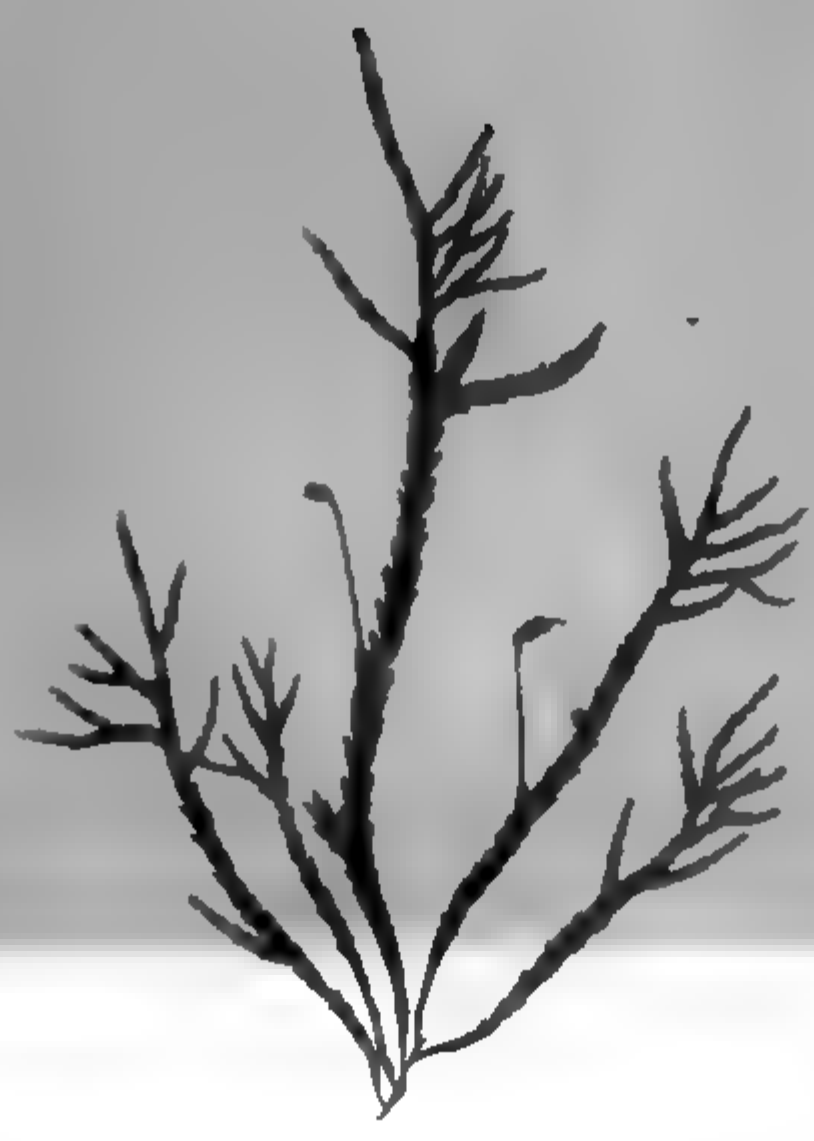
H. rutabulum δ . *Huds. 497.*

H. riparioides. *Hedw. Sp. Musc. 242. Crypt. v. 4. 10. t. 4.*

H. foliis rusciformibus, capsulis subrotundis. *Dill. Musc. 298. t. 38. f. 31; and t. 40. f. 44, A.*

NOT rare on stones, posts and mill-wheels in rivers, bearing fruit from March to September. Stems perennial, branched, floating, black, varying in length according to the strength of the current: hence we presume Mr. Dickson's *H. ovalatum*

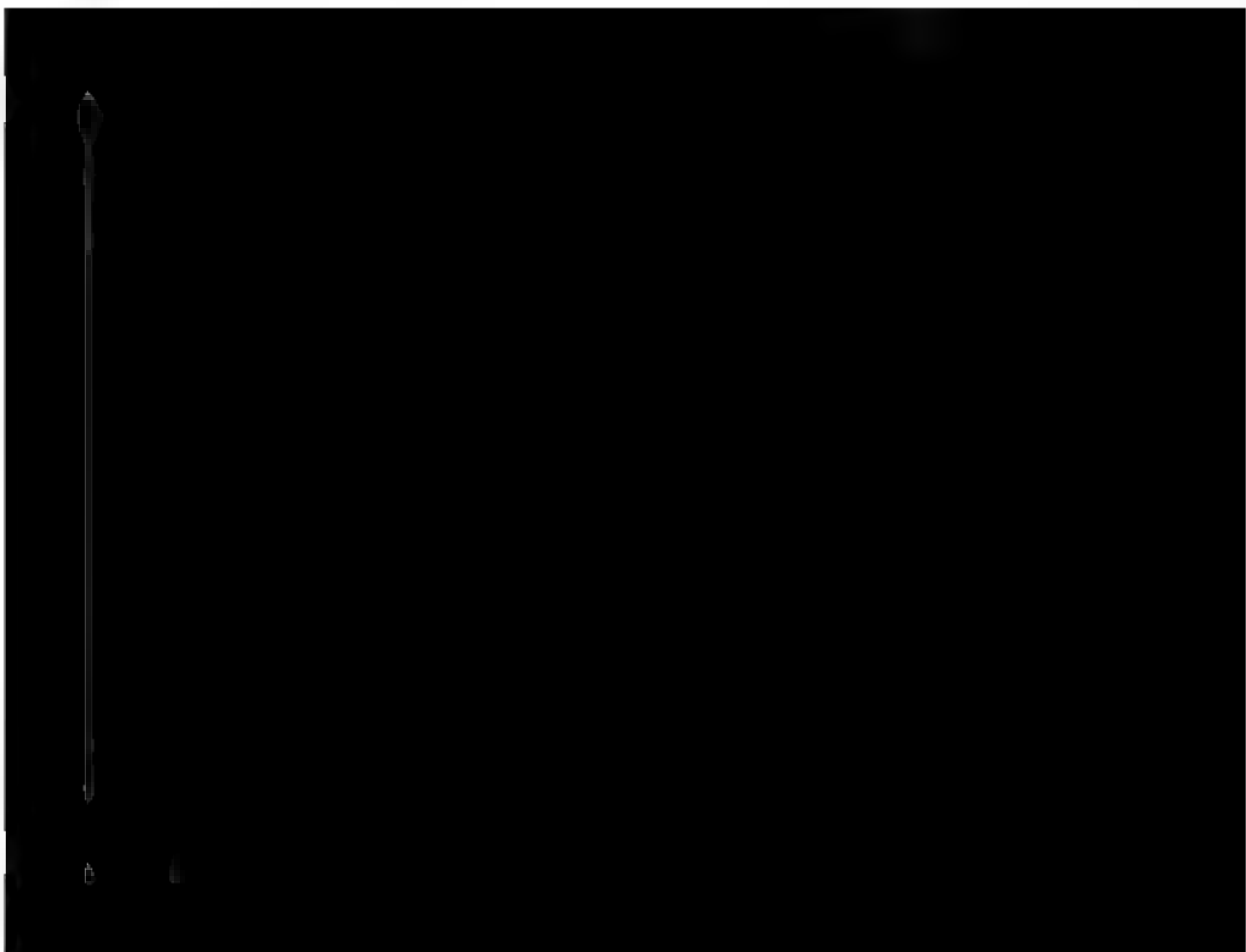
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HYPNUM Swartzii.

*Swartzian Feather-moss.**CRYPTOGAMIA Musci.*

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem procumbent, much branched. Leaves obscurely two-ranked, remote, ovate, finely serrated, single-ribbed. Lid awlshaped, curved. Stalk rough.

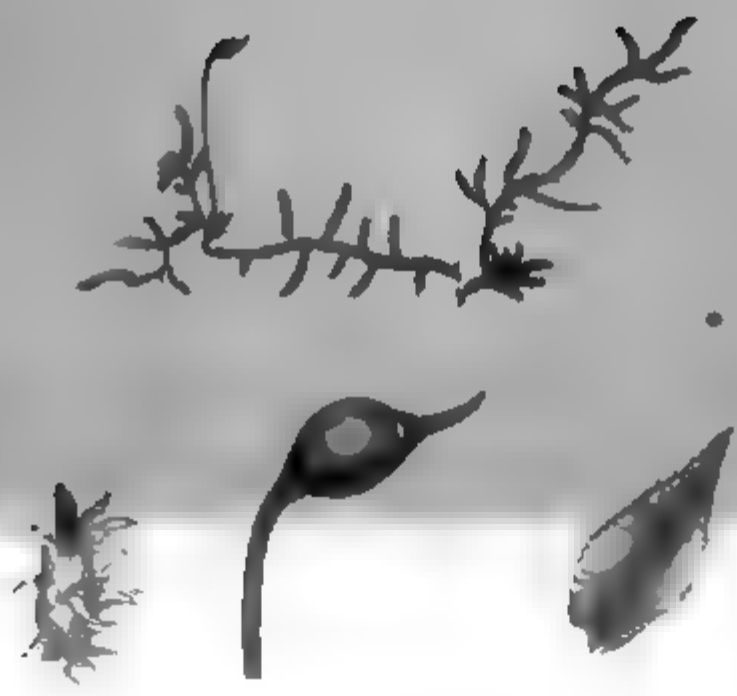
SYN. Hypnum Swartzii. *Turn. Musc. Hib.* 151. t. 14. f. 1. *Sm. Fl. Brit.* 1293.

H. atro-virens. *Swartz. Musc. Suec.* 65; exclusive of the synonyms.

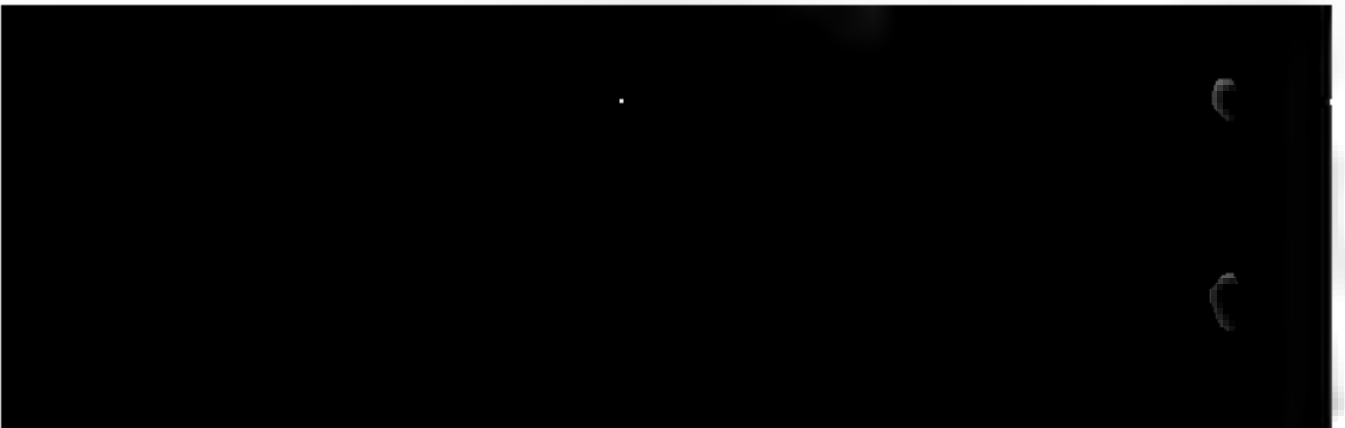
MR. TURNER received this originally from Ireland. Our specimens were gathered by S. Hailstone, Esq. in Bell-bank wood, near Bingley, Yorkshire.

The stems are procumbent and creeping, much and irregularly branched, divaricated and loosely spreading, very slender, leafy. Leaves of a more or less deep green, remote, not imbricated, spreading, not very accurately, in two rows, ovate, acute, slightly concave, single-ribbed, finely and sharply serrated. Sheath pale, of numerous, recurved, lanceolate, serrated scales. Fruit-stalks scarcely an inch long, erect, crimson, rough with minute tubercles. Capsule ovate, short, smooth, drooping. Lid awlshaped, taper, the length of the capsule, slightly curved. Fringe of a tawny yellow.

It has been lately suggested to us that this may be only a variety of *H. proelongum*, t. 2035, the difference in the disposition of their leaves being, certainly, very slight. We cannot, however, be convinced that Mr. Turner's variety β , whose fructification we have not seen, is the same species with either.



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HYPNUM undulatum.

Waved Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Fringe* double: outer of 16 tapering teeth: *inner* a toothed membrane. *Flowers* lateral. *Fruit-stalk* from a scaly sheath.

SPEC. CHAR. Stem procumbent, moderately branched. Leaves imbricated in two principal rows, waved, entire, without a main rib.

SYN. *Hypnum undulatum.* Linn. *Sp. Pl.* 1589. Hedw. *Sp. Musc.* 242. Hudf. 495. *Witb.* 849. *Hull.* 269. *Lightf.* 744. *Dicks. H. Sicc. fasc.* 6. 22. *Erb. Crypt.* 26.

H. pennatum undulatum, lycopodii instar sparsum. Dill. *Musc.* 271. t. 36. f. 11.

H. repens crispum, cauliculis compressis, lycopodii in morem per terram sparsis. Raii *Syn.* 88.

WE are happy to lay before the public a figure of this elegant *Hypnum*, which is very rarely found in fructification, and of which no plate occurs in the works of Hedwig. It is peculiar to dry mountainous woods. The fruit we have obtained from Bingley woods, Yorkshire, by favour of the Rev. Mr. Haultone, and it has also been obligingly communicated to us from Ireland, by Dr. Scott and Mr. Templeton. It is produced from April to August.

This species is easily known by its large size, and delicate pale-green or whitish colour. The stems grow prostrate, and are irregularly, but not very copiously, branched. Leaves imbricated in two principal rows, compressed, lanceolate, entire, transversely waved, without a central rib, but with a pair of minute veins at the base. Fruit-stalks solitary, each from a lateral scaly bud. Capsule oblong, curved and furrowed when ripe. Outer fringe of 16 shortish teeth: inner a white membrane cut into 16 narrow teeth with notches between them. Lid with a curved beak not half so long as the capsule.

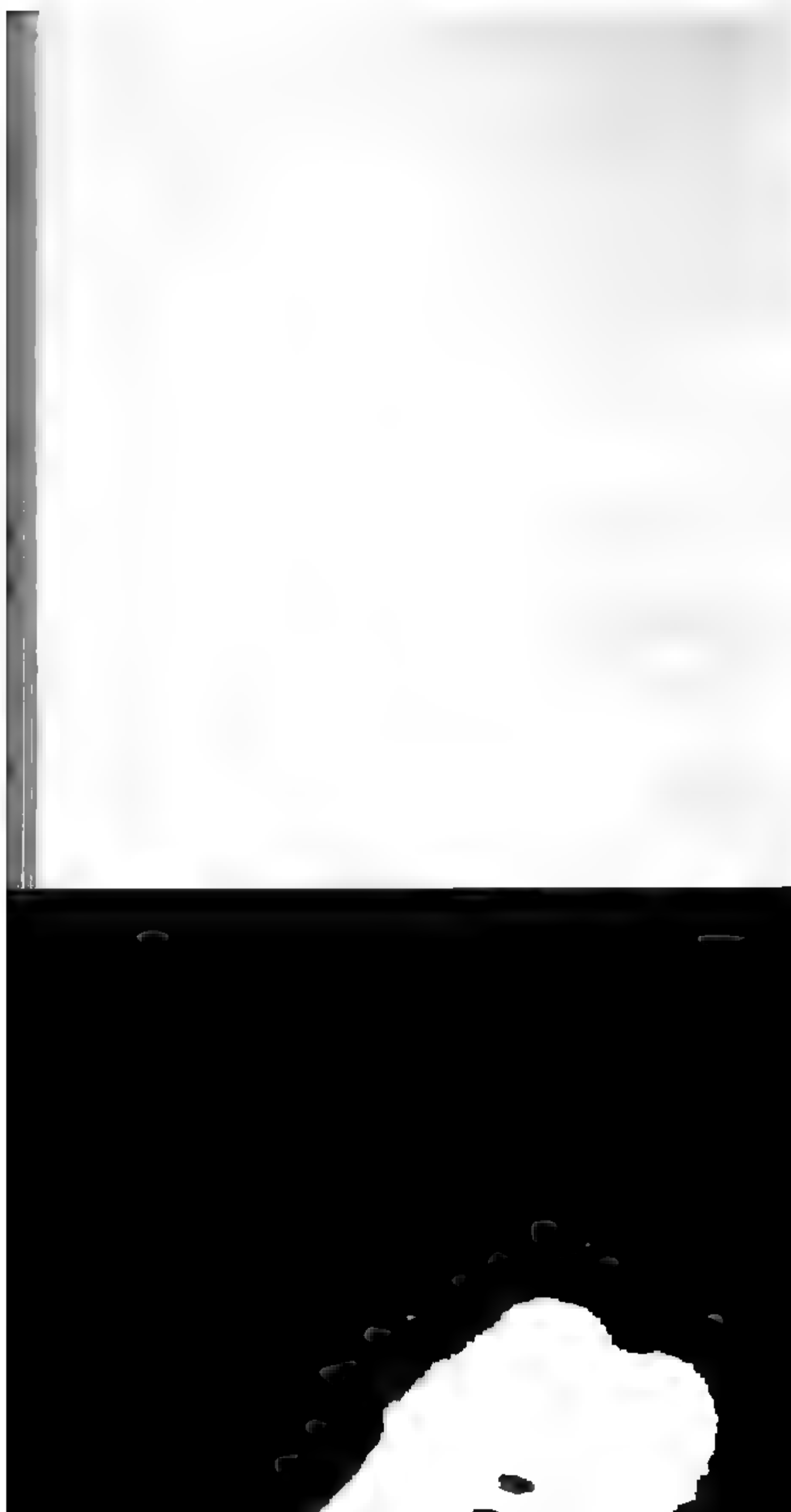
1861

1861



Plate I. 1861. Published by J. G. & Co. London





HYPNUM splendens.

Shining Tamarisk Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem doubly pinnate, flattish. Leaves closely imbricated every way, ovate, concave, nerveless, shining, tipped with a little point. Lid awl-shaped, recurved.

SYN. Hypnum splendens. *Hedw. Sp. Musc.* 262. t. 67. f. 6—9. *Sm. Fl. Brit.* 1295. *Sibth.* 295. *Turn. Musc. Hib.* 156.

H. parietinum. *Huds.* 499. *With.* 853. *Hull.* 271. *Lightf.* 751. *Relh.* 434. *Abbot.* 247.

H. filicinum, tamarisci foliis majoribus splendentibus. *Dill. Musc.* 274. t. 35. f. 13.

H. repens filicinum, veluti spicatum. *Raii Syn.* 86.

FOUND in dry woods and on mountainous heaths, where it bears fruit about March or April, retaining its ripe capsules a long time, but in the southern counties the fructification is not very usual.

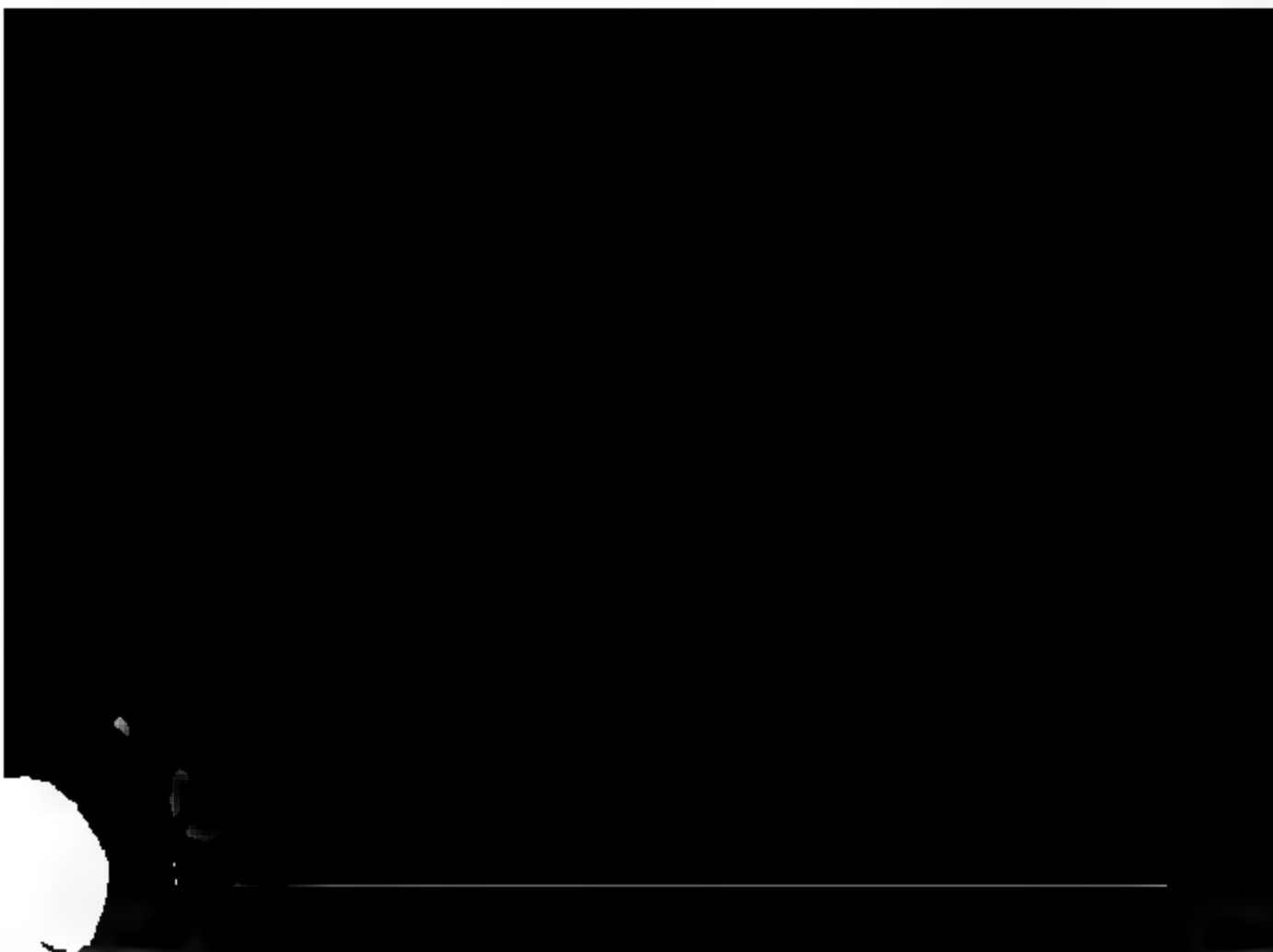
Stems perennial, a span or more in length, decumbent, elastic and loosely entangled, proliferous, interrupted, doubly pinnate, purple and shining under the leaves, which for the most part closely cover them, and are imbricated, of a pale shining yellowish green, small, ovate, concave, without a nerve; those on the main stem obscurely serrated and long-pointed; the rest entire and pointless. The scaly sheaths are generally crowded near together, each bearing one crimson shining fruit-stalk. Capsule inclining, of a rusty hue, ovate, smooth, taper at the base. Lid taper, longish, conical at the base, recurved.

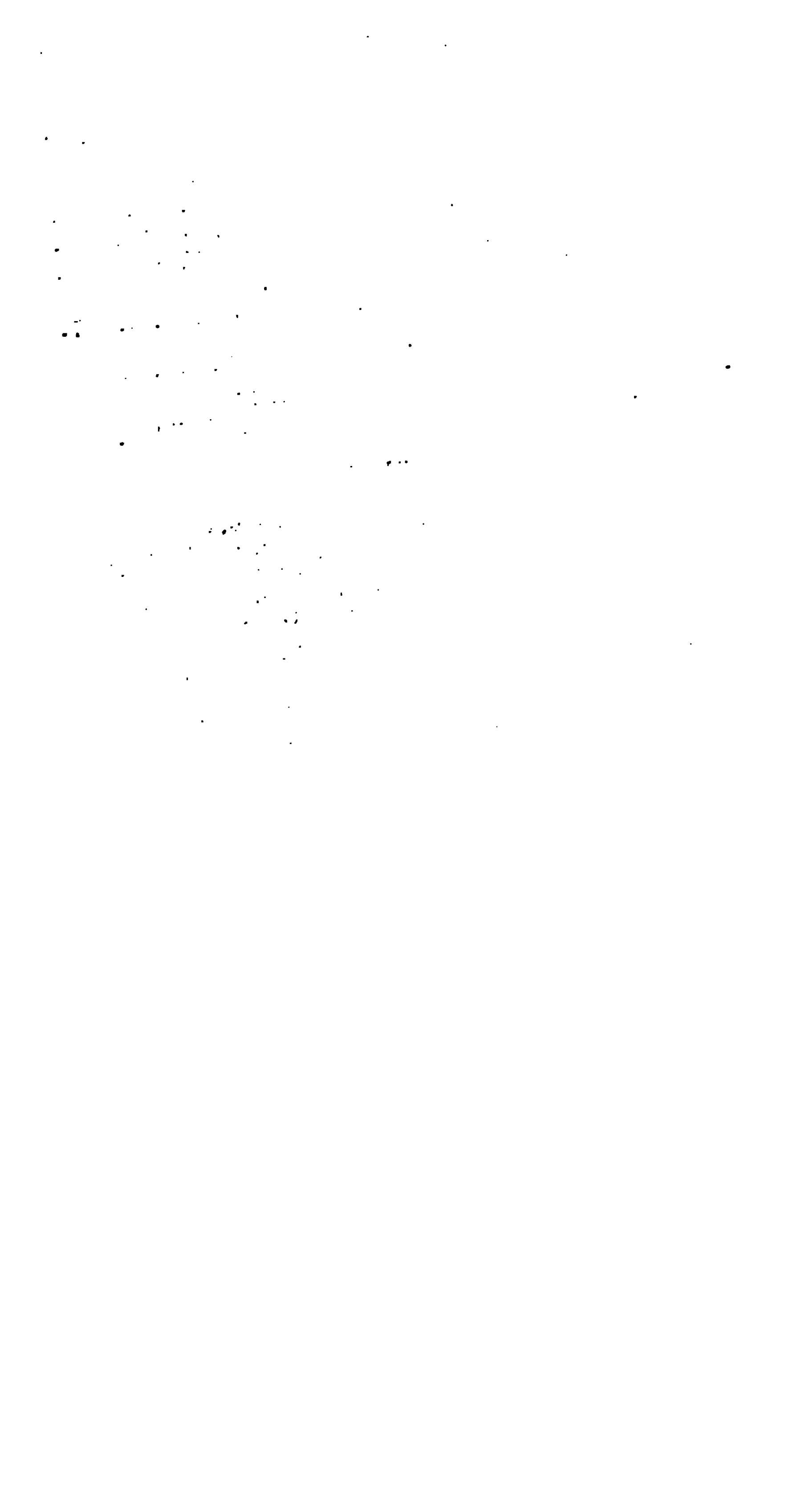
Linnaeus confounded this with his dark-green unpolished *H. proliferum*, *Curt. Lond. v. 1. t. 72*; but having quoted *Dill. t. 35. f. 13.* for his *parietinum*, the moss before us has gone by that name.



Plantago lanceolata L. var. *lanceolata* L.

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HYPNUM proliferum.

Opaque Proliferous Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem triply pinnate. Leaves heart-shaped, acute, close-pressed, very minutely serrated, opaque, with one or three nerves. Lid awl-shaped.

SYN. Hypnum proliferum. *Linn. Sp. Pl.* 1590. *Sm. Fl. Brit.* 1297. *Huds.* 499. *With.* 853. *Hull.* 270. *Retz.* 434. *Sibth.* 294. *Abbot.* 248. *Lightf.* 750. *Curt. Lond. fasc.* 1. t. 72. *Dicks. H. Sicc. fasc.* 14. 21. *Turn. Musc. Hib.* 157.

H. tamariscinum. *Hedw. Sp. Musc.* 261. t. 67. f. 1—5.

H. filicinum, tamarisci foliis minoribus non splendens. *Dill. Musc.* 276. t. 35. f. 14.

H. repens filicinum minus luteo-virens. *Raii Syn.* 86.

ONE of the most handsome European mosses, very common in woods, and sometimes in exposed situations, clothing the ground or the trunks of old trees with a rich entangled tapestry. The capsules are very rarely found. They are produced in the winter or early spring. Our specimens were gathered at Studley by Mr. W. Brunton. In them the fruit-stalks are all solitary, but we have generally seen 2 or 3 from each sheath.

The stem is elegantly proliferous from its uppermost side; the branches triply pinnate, clothed with rusty down and with imbricated, close-pressed leaves, which are heart-shaped, acute, of a fine opaque (not shining) green, often yellowish; the larger furnished with 3 nerves, the rest with 1; the edges apparently entire, but Mr. Sowerby, with a high magnifier, has found them serrulated as in our plate. Sheaths awl-shaped, shining, of several lanceolate, finely serrated leaves. Fruit-stalks crimson. Capsule incurved, cylindrical, red-brown. Lid awl-shaped, curved, thick at the base.





HYPNUM recognitum.
Lesser Opaque Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem doubly pinnate. Leaves heart-shaped, acute, close-pressed, three-nerved, opaque, finely serrated. Lid conical, acute.

SYN. Hypnum recognitum. *Hedw. Sp. Musc.* 261.
Crypt. v. 4. 92. t. 35. Sm. Fl. Brit. 1298. *Roth. Germ. v. 3. 279.*

H. delicatulum. Willden. Berol. 321.

H. parietinum β . *Pollich. v. 3. 135.*

THIS I gathered in the neighbourhood of Matlock bath, Derbyshire, in 1790; of the precise spot I am not certain. The plant has hitherto either not been observed in any other part of Britain, or has been confounded with *H. proliferum*, from which it is very distinct. The stem and branches are not half so large as in that species, nor do they grow in the same prolific manner. The latter are only doubly pinnated. The leaves are finely serrated, and have all, for the most part, 3 nerves, of which the middle one is very conspicuous. The leaves of the sheaths are long and taper, very inconspicuously serrated towards their points. The fruit-stalks are always solitary, reddish, shorter than those of the last-mentioned, but longer in proportion to the branches. Capsule incurved, cylindrical, brown. Lid short and conical, with a minute point, a little curved. By the shape of the lid these 2 species are essentially distinguished.



1





HYPNUM umbratum.

Striated Proliferous Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem doubly pinnate. Leaves heart-shaped, pointed, finely serrated, with several longitudinal plaits, but no nerves. Lid conical, with a small point.

SYN. *Hypnum umbratum.* *Ehrh. Crypt.* 66. *Sm. Fl. Brit.* 1298. *Hedw. Sp. Musc.* 263. *t.* 67. *f.* 10—12. *Turn. Musc. Hib.* 158.

ORIGINALLY discovered in Ireland by the late Dr. Scott. Our present specimen was gathered by Dr. Taylor, on Sefing mountain, in the county of Wicklow.

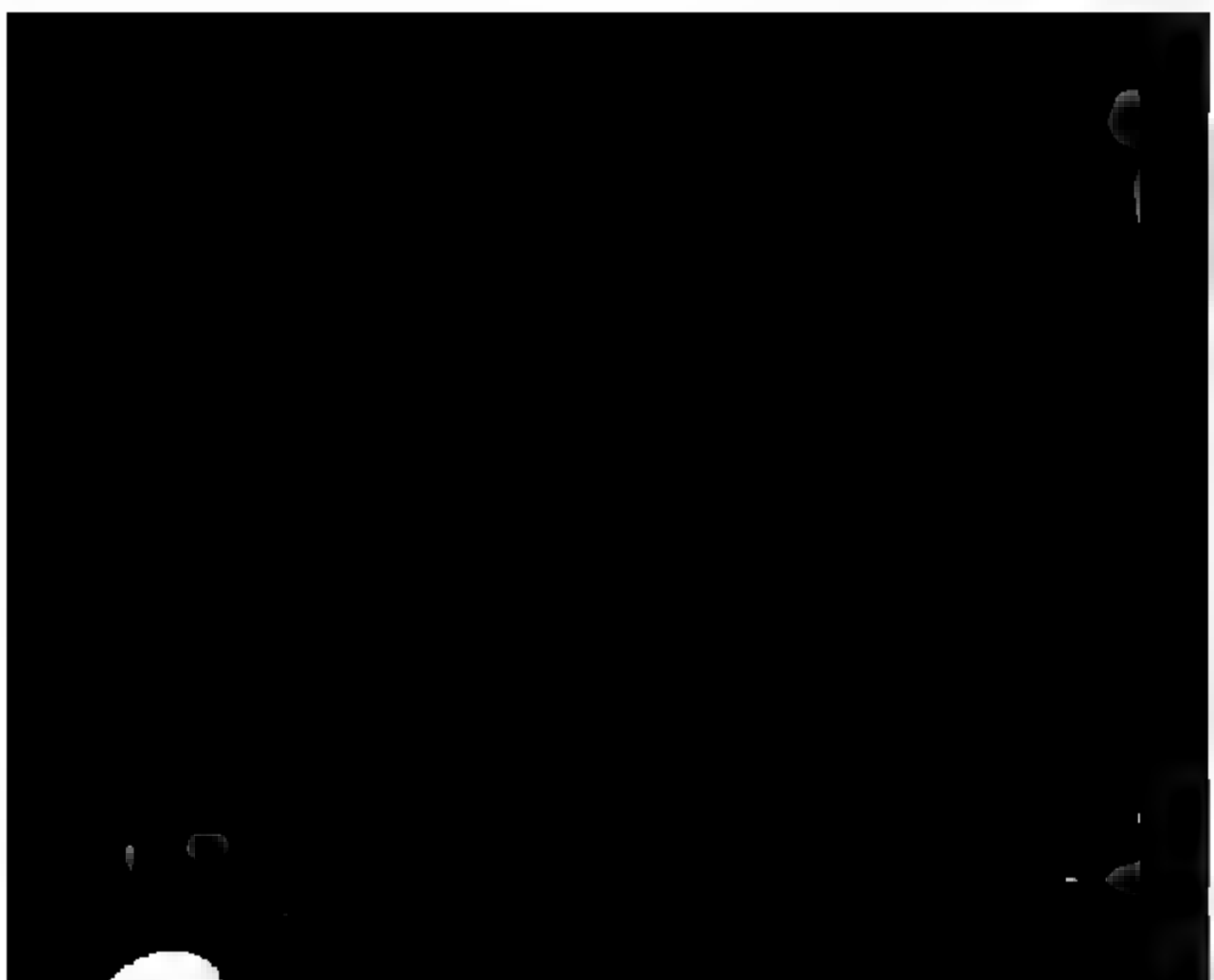
This species, no less rare than the *H. recognitum*, *t.* 1495, is of a rather larger size, and not so regularly bipinnate. The stem is interruptedly pinnate in the first instance, its copious branches either simple or again pinnate, but not with great regularity. Leaves of a fine, bright, yellowish, rather shining green, spreading, heartshaped, dilated, pointed, minutely serrated, destitute of ribs or veins, but furnished with many longitudinal plaits or furrows. Sheaths often several together, rather lax, of several oblong, serrated, rough-awned leaves. Fruitstalks crimson, rough, an inch and half or two inches long. Capsule inclining, ovate. Lid short, conical, obtuse, with a small point.

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[2035]

HYPNUM prælongum.
Long Trailing Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scaly sheath. Outer fringe of 16 teeth, dilated at the base: inner a variously-toothed membrane. Veil smooth.

SPEC. CHAR. Stem pinnate, creeping. Leaves spreading every way, ovato-lanceolate, pointed, serrated, single-ribbed. Lid awlshaped, curved. Stalk rough.

SYN. Hypnum prælongum. Linn. Sp. Pl. 1591. Sm. Fl. Brit. 1299. Hedw. Sp. Musc. 258. Crypt. v. 4. 76. t. 29. Huds. 499. With. 855. Hull. 271. Relh. 434. Sibth. 295. Abbot. 248.

H. repens filicinum, triangularibus parvis foliis, prælongum. Raii Syn. 80. Dill. Musc. 278. t. 35. f. 15.

THIS species of *Hypnum* is frequent in moist woods, especially on a sandy or gravelly soil, and about the shady bottoms of hedges, where the morning dew, glistening among its leaves, renders it, at that time, particularly apparent. The long, slender, branched and pinnated stems creep closely over rotten wood or bark, spreading in every direction. The lateral branches are scarcely an inch long, and usually simple. Leaves small, of a pale yellowish green, rarely dark-green, spreading loosely every way, lanceolate or slightly ovate, pointed, sharply serrated, with a solitary pale-green nerve. Sheaths solitary, of several loosely recurved ovate leaves, with serrated points. Fruitstalks solitary, rather above an inch long, crimson, rough with very minute tubercles. Capsule drooping, ovate, or slightly cylindrical, a little curved. Lid awlshaped, curved, rather shorter than the capsule. Veil acute, of a pale green.



*Fig. 1. *Andropogon*, *Andropogon* *Andropogon**



7





HYPNUM Stokesii.
Alpine Trailing Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scaly sheath. Outer fringe of 16 teeth, dilated at the base: inner a variously-toothed membrane. Veil smooth.

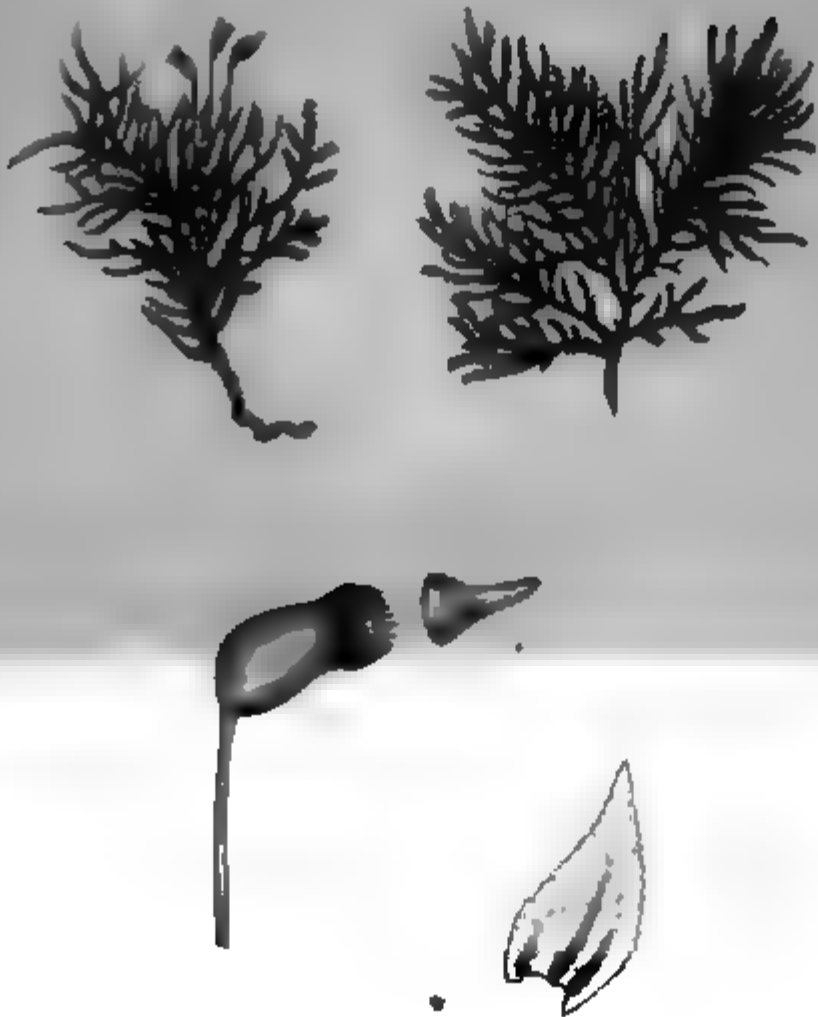
SPEC. CHAR. Stem pinnate. Leaves spreading every way, heartshaped, pointed, minutely serrated, single-ribbed. Capsule ovate, drooping. Lid conical, pointed.

SYN. Hypnum Stokesii. *Sm. Fl. Brit.* 1300. *Turn. Musc. Hib.* 159. t. 15. f. 2.

DISCOVERED by Dr. Whitley Stokes in the hollows of rocks under the eagle's nest at Lough Bray. Having received from Professor Swartz more perfect specimens of the fruit than had previously been seen, we have annexed a branch of his plant. This species appears intermediate between *H. umbratum*, with which it agrees much in leaves and habit, and *H. praelongum*, which it more nearly approaches in dimensions and fructification. Still we think it cannot be united to either. Dr. Swartz names it *H. Ludwigi* of Brdel, and we have been told it is *H. strigosum* of Hoffmann, *Fl. Germ.* v. 2. 76. These authorities may, by the right of priority, to which in this case we ought to submit, disturb our name, but they confirm our species.

Our plant has loosely creeping stems, with crowded pinnate or bipinnate branches. Leaves imbricated every way, spreading, of a full but bright green, somewhat shining, heartshaped, twisted, sharp-pointed, single-ribbed, not always to the extremity, more closely and finely serrated than in *H. praelongum*. Sheaths whitish. Stalks red, an inch long, scarcely rough except towards their base. Capsule drooping, ovate. Lid conical, curved, pointed, rather thicker, if we mistake not, than in the *praelongum*, t. 2035.

2010



2010 published by J. Kewey London







HYPNUM abietinum.

Fir-branched Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scaly sheath. Outer fringe of 16 teeth, dilated at the base: inner a variously-toothed membrane. Veil smooth.

SPEC. CHAR. Stem pinnate, shaggy. Leaves closely imbricated every way, heart-shaped, pointed, nearly entire, with one rib and two plaits. Capsule drooping. Lid conical.

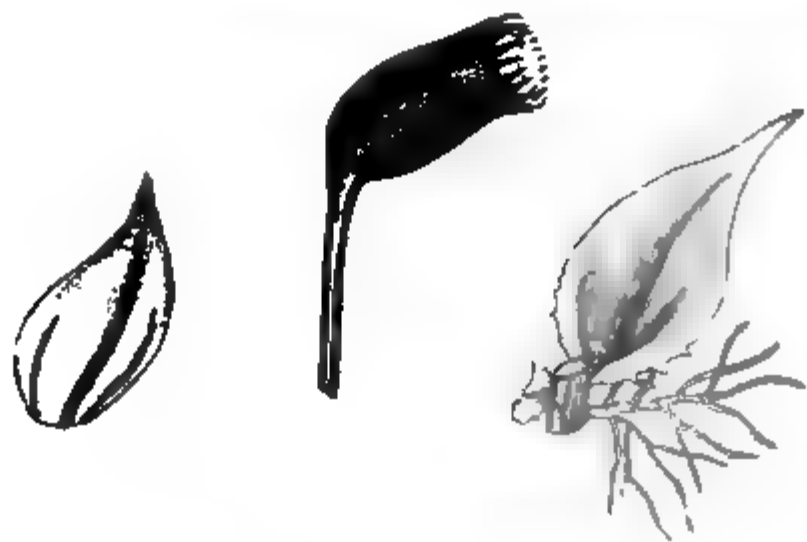
SYN. Hypnum abietinum. Linn. Sp. Pl. 1591. Sm. Fl. Brit. 1300. Hedw. Sp. Musc. 353. Crypt. v. 4. 84. t. 32. Huds. 500. With. 855. Hull. 271. Retz. 435. Sibth. 296. Abbot. 246. Necker Musc. 163.

H. lutescens, alis subulatis tenacibus. Dill. Musc. 280. t. 35. f. 17.

H. repens filicinum trichoides montanum, ramulis teretibus lutescentibus non divisis. Dill. in Raii Syn. 86.

NOT unfrequent on the dry chalky hills of Kent, Oxfordshire, &c., but the fructification is so extremely rare that Dillenius never saw it, and Necker, though he quotes the place where Linnæus describes it, asserts that it cannot be found. Our specimens of the fruit were sent by Professor Swartz.

The stems are about as long as the finger, decumbent, densely, and generally simply, pinnate, the branches short, acute, spreading. Leaves of a pale tawny opaque green, close-pressed, heartshaped, or broad ovate, sharp-pointed, entire or nearly so, a little revolute when dry, with one rib and two lateral plaits. Their reticulations seem to be elongated by age. Among the leaves the stem is clothed with dense branched jointed fibres, varying in length. Sheaths slender, close, pale. Fruitstalks 2 inches long, wavy, crimson, shining. Capsule inclining, oval-cylindrical, curved, tinged with red, very minutely reticulated. Outer fringe red; inner yellow. Lid, according to Hedwig, conical.



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HYPNUM alopecurum.

Fox-tail Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Fringe* double: *outer* of 16 tapering teeth: *inner* a toothed membrane. *Flowers* lateral. *Fruit-stalk* from a scaly sheath.

SPEC. CHAR. Root creeping. Stems erect; naked below; branched in a paniced form above. Capsules ovate, drooping, with a taper beak. Leaves serrated.

SYN. Hypnum alopecurum. *Linn. Sp. Pl.* 1594. *Hedw. Sp. Musc.* 267. *Huds.* 503. *Witb.* 859. *Hull.* 272. *Relb.* 436. *Sibth.* 299. *Albot.* 249. *Dicks. H. Sicc. fasc.* 13. 22. *Ehrh. Crypt.* 37.

H. dendroides obscurius, fetis et capsulis brevioribus, subnutantibus. *Dill. Musc.* 315. t. 41. f. 49.

H. palustre erectum arbusculam referens, ramulis subrotundis. *Rait Syn.* 81.

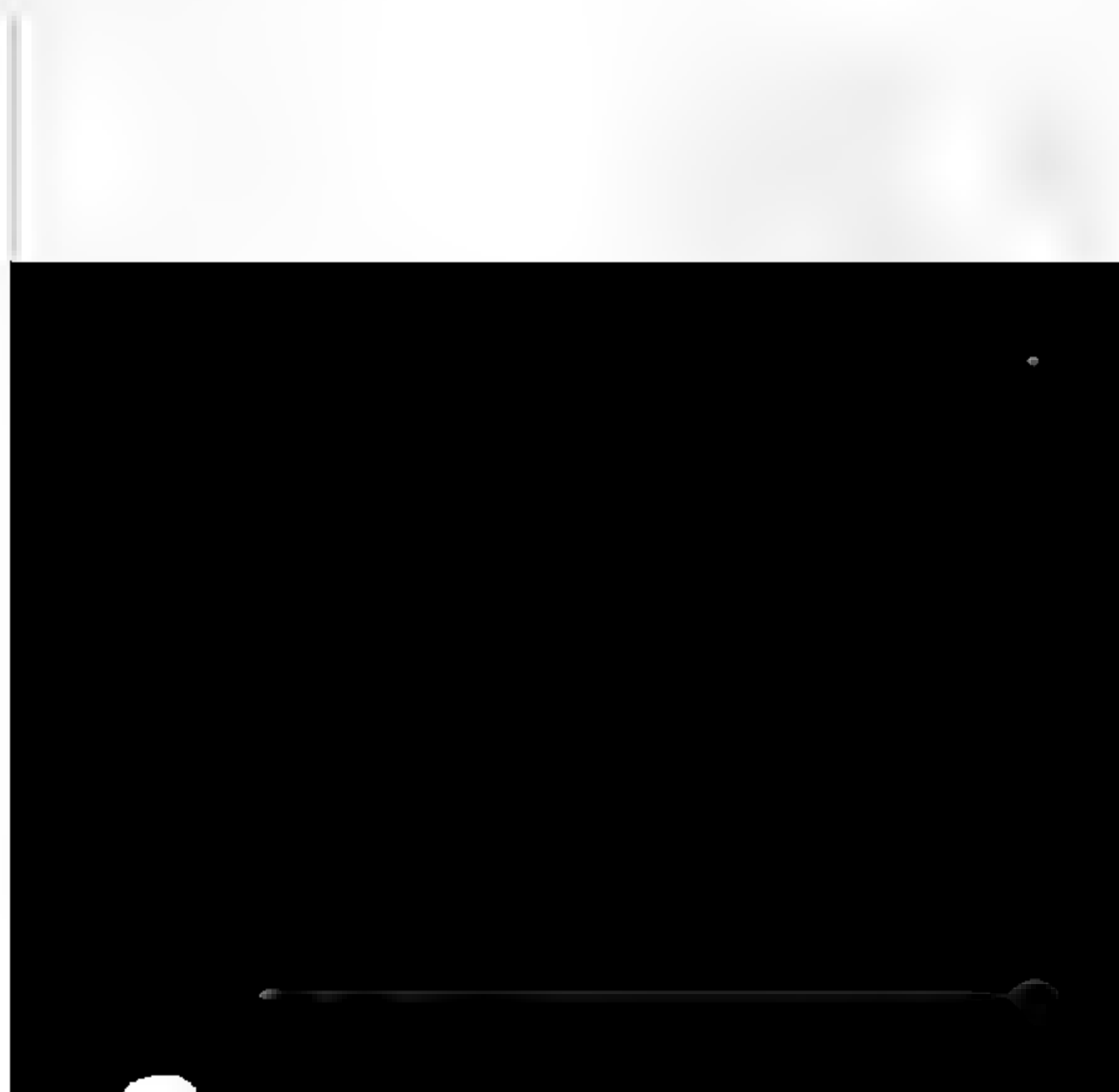
NEITHER has this *Hypnum* been delineated by the celebrated Hedwig. It is to be reckoned among our rarer species, at least in fructification. We received it in that state from Mr. W. Borrer of Suffex. Its general places of growth are moist and shady, as boggy woods, wet calcareous rocks or caverns, and the margins of cascades. The capsules are ripened in the spring.

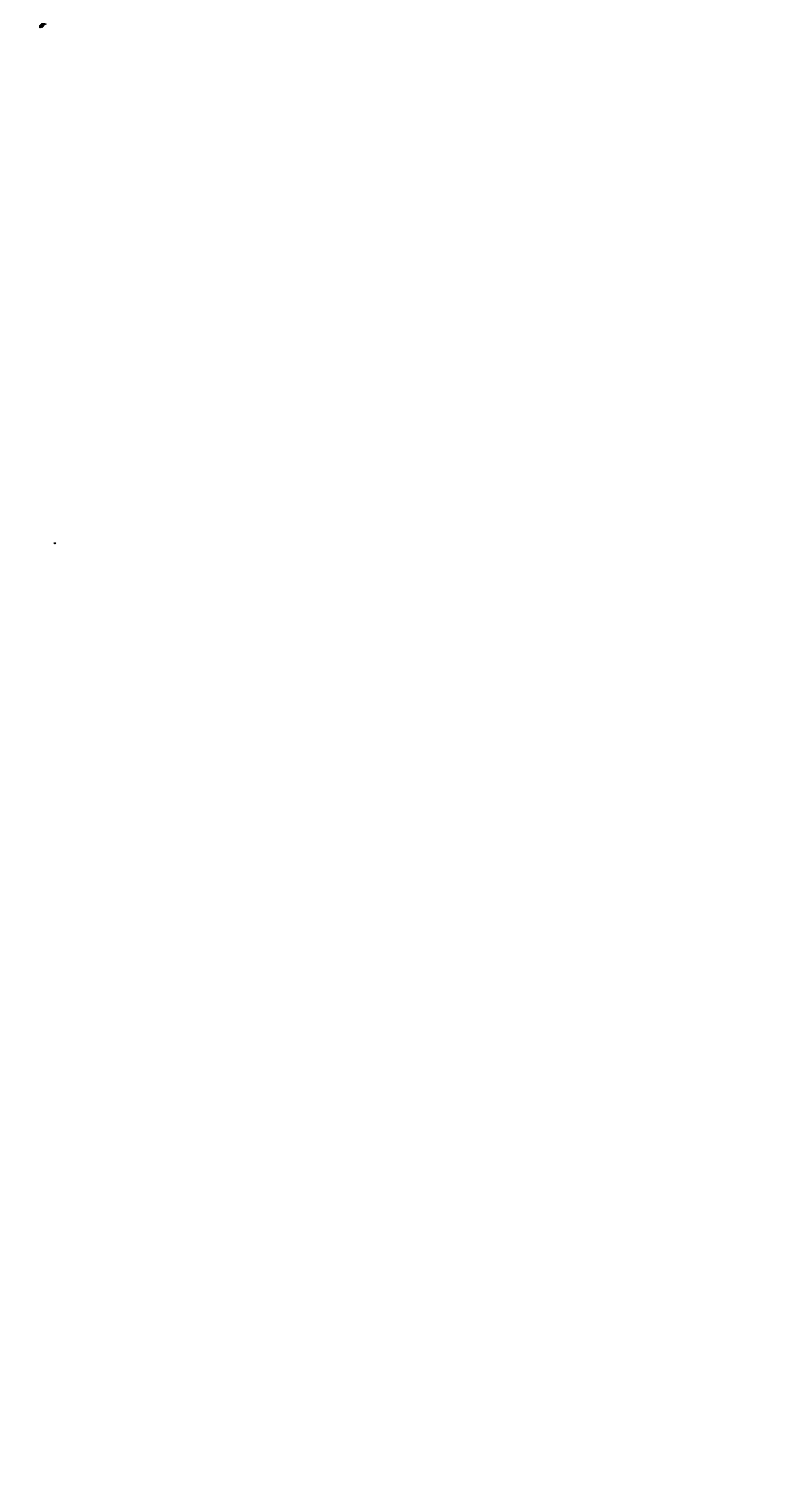
The horizontal branched roots or scions produce several erect tree-like stems; naked, and when old leafless, below; branched and subdivided above, in the form of a panicle or feather, all the branches inclining to one side, and their summits mostly tapering and elongated. Leaves dark green, yellow when exposed, unbricated every way, ovate, broad, concave, serrated, especially towards the point, and furnished with an acute central rib. Capsules on short solitary inclining stalks, ovate, smooth, nodding. Lid taper and almost as long as the capsule.

112



1861. Polytrichum commune L. Frond.





[2405]

HYPNUM stramineum.

Straw-like Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scaly sheath. Outer fringe of 16 teeth, dilated at the base: inner a variously-toothed membrane. Veil smooth.

SPEC. CHAR. Stem but little branched, thread-shaped, erect. Leaves elliptic-lanceolate, concave, destitute of a nerve. Lid convex, with a short point.

SYN. Hypnum stramineum. *Dicks. Crypt. fasc. 1. 6. t. 1. f. 9. H. Sicc. fasc. 11. 21. Sm. Fl. Brit. 1303. With. 860. Hull. 273. Turn. Musc. Hib. 164.*

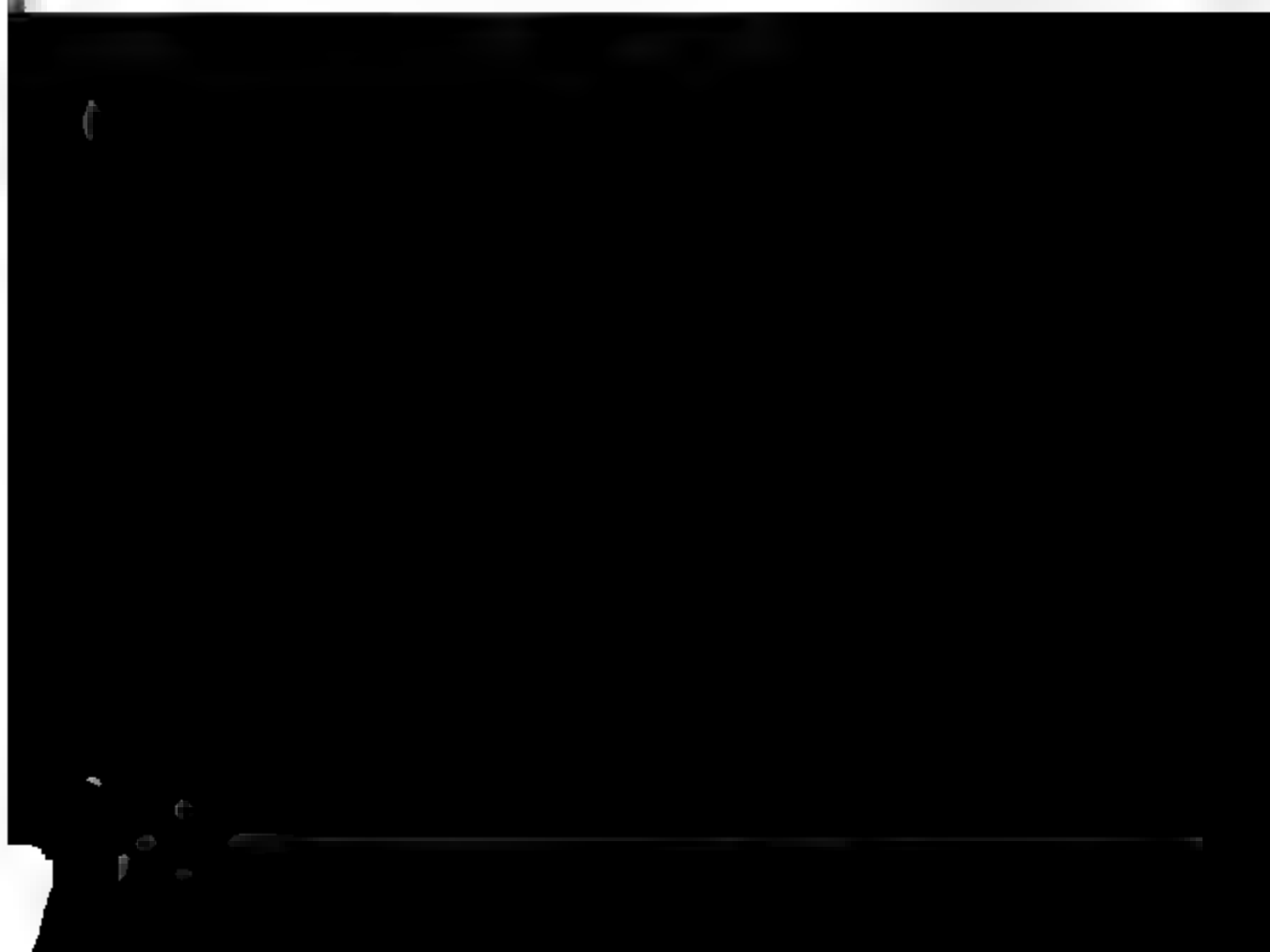
COMMUNICATED long ago by Mr. Dickson, from a bog, on the west side of Hampstead heath. Mr. Turner finds this species near Yarmouth. Its slender, pale, shining, straw-coloured aspect is remarkable. The stems throw out but a few short branches, and are covered with leaves, loosely imbricated every way, which are elliptic-lanceolate, bluntish, concave, entire, destitute of any proper rib or nerve, but often, as Mr. Turner observes, furnished with a few longitudinal plaits in their lower part. Sheaths pale, close, situated about the middle of the stem. Fruitstalk upright, wavy, two inches long, of a shining red. Capsule ovate, inclining and curved, short, rusty-coloured when ripe. Lid convex or very slightly conical, with a short point. Veil pale brown with a black tip. Hedwig has not noticed this moss.

2403



* 1881. 1881. 1881. 1881. 1881.

v



2600

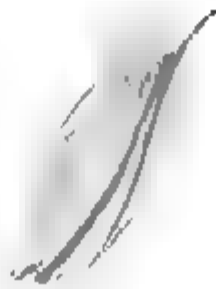


Asplenium platyneuron L.

v



2400



Chenopodium album



HYPNUM confertum.

Clustered Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem creeping. Leaves ovate, sharp-pointed, somewhat serrated, spreading, single-ribbed at the base. Lid awlshaped, curved.

SYN. Hypnum confertum. *Dicks. Crypt. fasc. 4. 17. t. 11. f. 14. Sm. Fl. Brit. 1304.*

H. clavellatum. Huds. 508. With. 866. Hull. 274; excluding the synonym of Dillenius.

FOUND upon the trunks of trees, bearing fruit in February. We exhibit an authentic specimen from Mr. Dickson, by which his plant, that of the *Flora Britannica*, will be placed out of the reach of uncertainty. The stems are short, growing in dense tufts, and beset with many short branches. Leaves loosely imbricated in every direction, light green, ovate, concave, sharp-pointed, finely but rather distantly serrated, furnished with a central rib which vanishes entirely about the middle. Scales of the sheath much like the leaves, but rather smaller. Fruitstalks hardly an inch high, tawny or red. Capsule drooping, small, ovate, oblique. Lid convex, with a curved awlshaped beak, almost as long as the capsule.

There has been some suspicion that this species was not distinct from *serrulatum*, t. 1262; but the latter has more the aspect of an aquatic moss, and the leaves certainly are disposed in two ranks. Otherwise they are indeed nearly akin. Our t. 1038 should now be called

HYPNUM murale.

Wall Feather-moss.

The synonyms must be erased, as belonging to the present; others to replace them may be found in *Fl. Brit. 1304, 1305.*

2107



v





[1038]

HYPNUM confertum.

Clustered Hypnum.

CRYPTOGAMIA Musci.

GEN. CHAR. *Fringe* double: *outer* of 16 tapering teeth: *inner* a toothed membrane. *Flowers* lateral. *Fruit-stalk* from a scaly sheath.

SPEC. CHAR. Stem creeping. Branches erect, cylindrical, simple. Leaves closely imbricated, ovate, acute, minutely serrated, obsoletely ribbed. Capsules inclining, ovate. Lid with a long slender curved beak.

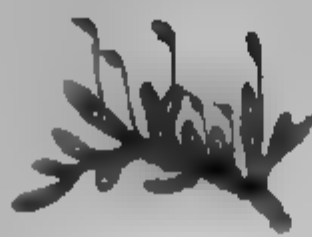
SYN. Hypnum confertum. *Dicks. Crypt. fasc. 4. 17. t. 11. f. 14.*

H. clavellatum. Hudf. 508. Witb. 866. Hull. 274.

WE have Mr. Dickson's authority for believing this the *Hypnum clavellatum* of Hudson; that of Linnæus, adopted entirely from Dillenius, is a Pennsylvanian moss, unknown in Europe, though Linnæus incautiously says the contrary. The *clavellatum* of Pollich and Hedwig seems to be still a different species.

Ours therefore has received the name of *confertum* in Mr. Dickson's 4th *fasciculus*. It is a rare species, and was gathered at Walthamstow by Mr. Dillwyn, bearing ripe fruit early in

1038



Handwritten text, possibly a name or description, located below the specimens.







[1568]

HYPNUM velutinum.

*Velvet Feather-Moss.**CRYPTOGAMIA Musci.*

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem creeping. Leaves imbricated every way, ovate, pointed, serrated, single-ribbed in their lower part. Capsule ovate, drooping. Lid conical.

SYN. Hypnum velutinum. *Linn. Sp. Pl.* 1595. *Sm. Fl. Brit.* 1305. *Hedw. Sp. Musc.* 272. *Crypt. v. 4.* 70. *t.* 27. *Huds.* 506. *With.* 866. *Hull.* 274. *Relh.* 437. *Sibth.* 301. *Abbot.* 251. *Turn. Musc. Hib.* 167.

H. velutinum, capsulis ovatis cernuis. *Dill. Musc.* 326. *t.* 42. *f.* 61.

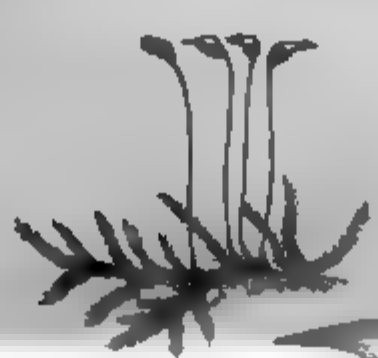
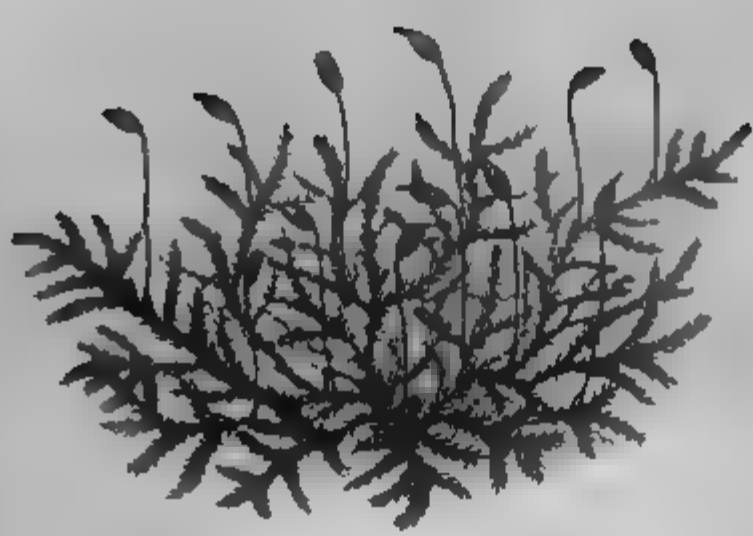
H. repens trichoides terrestre viridius minus, capitulis tumidioribus cernuis. *Raii Syn.* 84. *n.* 24.

COMMON on banks, and about the roots of trees in woods, forming dense entangled tufts and patches, and bearing ripe fruit in the early spring.

Stems creeping, perennial, densely matted together, much branched. Branches short, erect, clustered, mostly simple, cylindrical, thickly clothed in every direction with imbricated upright little leaves of a yellowish lively green, which are ovate and single-ribbed at their base, tapering into a long serrated nerveless point. Sheath of several slender pale tapering leaves without nerves. Fruitstalk about an inch long, purplish, often rough towards the top with very minute tubercles. Capsule ovate, short, curved and drooping, of a rusty brown when ripe. Lid conical, acute, reddish. Veil greenish.

Ray's No. 25 should seem to be only a slight variety of the above.

1508



Adiantum species





37.

HYPNUM intricatum.

Matted Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scaly sheath. Outer fringe of 16 teeth, dilated at the base: inner a variously-toothed membrane. Veil smooth.

SPEC. CHAR. Stem creeping. Leaves lanceolate, taper-pointed, serrated, single-ribbed half way up, imbricated every way. Capsule drooping, tumid. Lid conical.

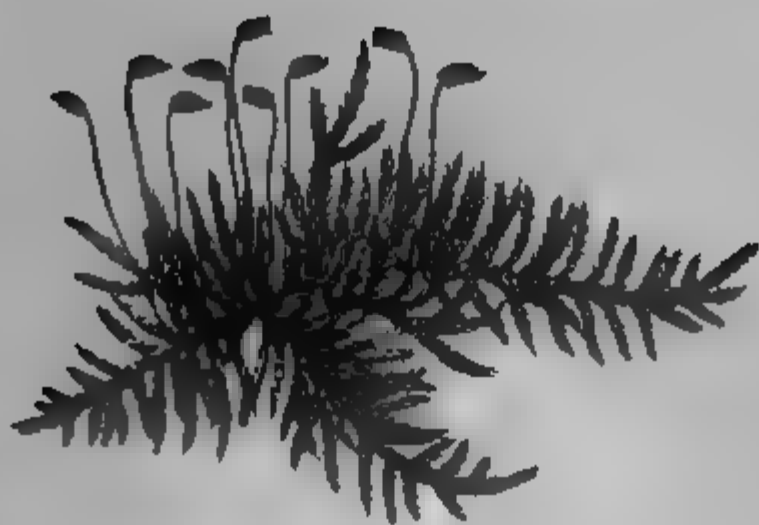
SYN. Hypnum intricatum. Schreb. Lips. 99. Sm. Fl. Brit. 1306. Hedw. Sp. Musc. 271. Crypt. v. 4. 73. t. 28. Turn. Musc. Hib. 167.

H. Teesdalii. Dicks. Crypt. fasc. 4. 16. t. 11. f. 13.

THE late Mr. Teesdale found this moss in Yorkshire, and communicated it to Mr. Dickson, who, not aware of its being already named, called it after its discoverer. What he had taken for *intricatum*, is now the *Teesdalii* of *Fl. Brit.* 1291, and is our *t.* 202.

The present species comes next to *velutinum*, *t.* 1568, from which it differs in being rather smaller, with narrower and more spreading leaves, and a rather more tumid capsule, much contracted at the mouth. The scales of the sheath are also much more taper-pointed, and obscurely toothed. Hedwig remarks that the ring which surrounds the mouth of the capsule consists of a double row of scales, not merely a single one, as in *velutinum*. This we have not examined. The fruit-stalk is finely granulated. Lid conical, somewhat oblique.

2421



Polystichum acrostichoides



7





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HYPNUM serpens.
Creeping White-veiled Hypnum.

CRYPTOGAMIA Musci.

GEN. CHAR. *Fringe* double: *outer* of 16 tapering teeth: *inner* a toothed membrane. *Flowers* lateral. *Fruit-stalk* from a scaly sheath.

SPEC. CHAR. Stem creeping. Branches irregularly subdivided, very slender. Leaves straight, ovate, pointed, imbricated. Capsules oblong, curved.

SYN. Hypnum serpens. *Linn. Sp. Pl.* 1596. *Huds.* 507. *Willd.* 865. *Hull.* 274. *Rehb.* 416. *Sibth.* 302. *Abbot.* 251. *Hedw. Crypt.* v. 4. 45. t. 18. *Sp. Musc.* 268.

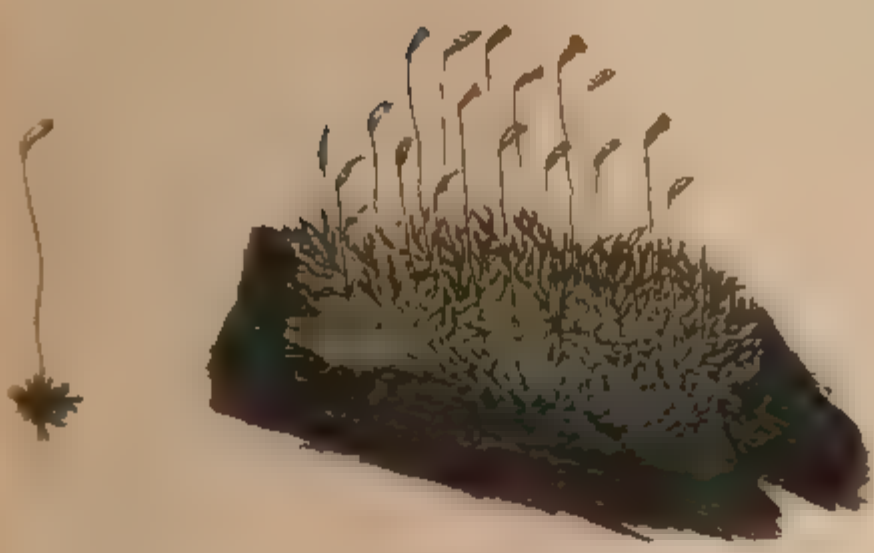
H. trichodes serpens, setis et capsulis longis erectis. *Dill. Musc.* 329. t. 42. f. 64.

A VERY general Moss in moist shady places, running over decayed wood, trunks of trees, stones and earth, producing flowers and fruit at almost all seasons when there is humidity in the air sufficient to favour its growth.

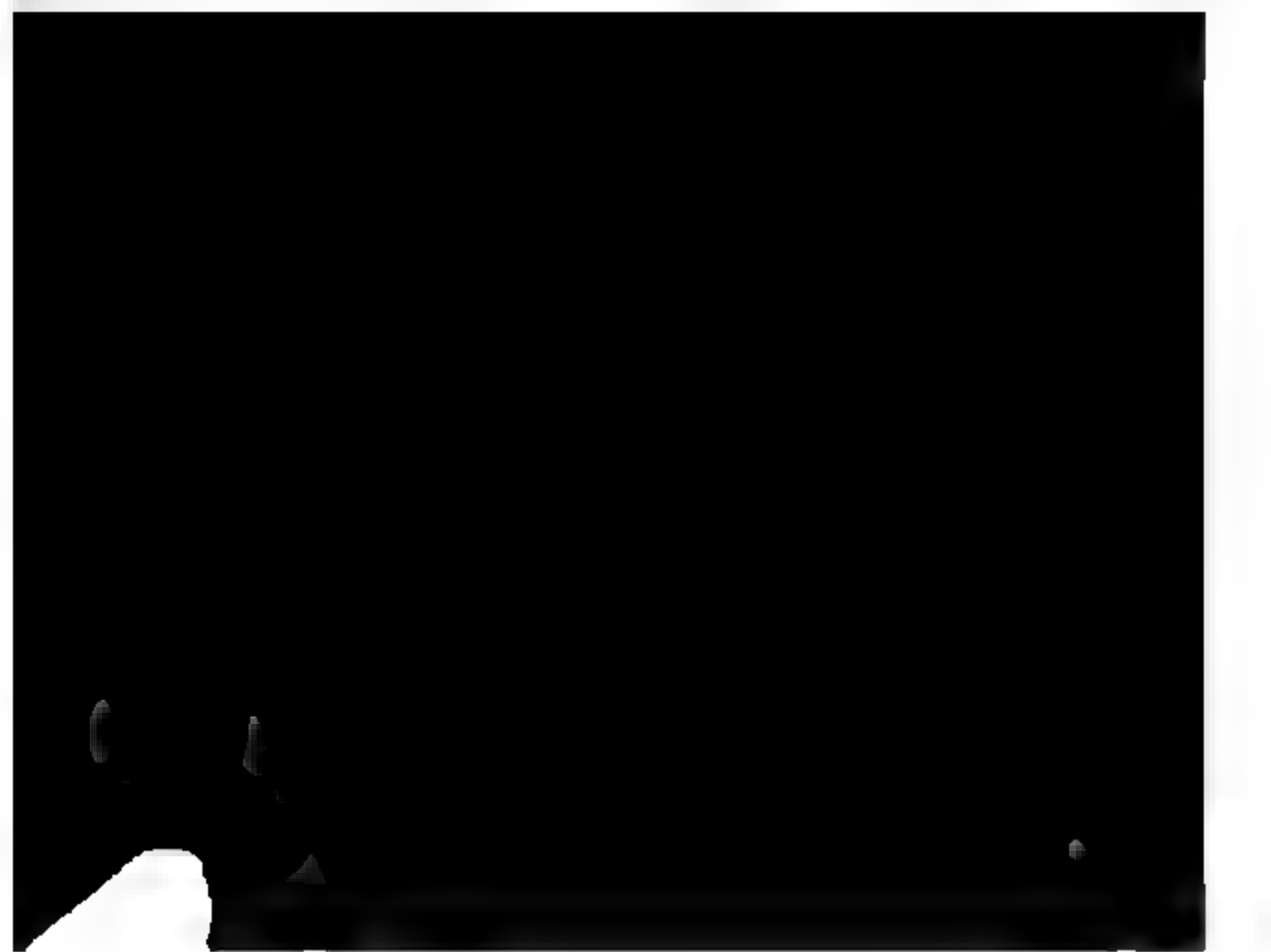
Stems closely creeping, by means of numerous, short, fibrous, perennial roots, and thickly branched. Branches irregular, simple or subdivided, very slender; clothed with small, pale-green, upright, ovate, entire, sharp-pointed, concave leaves,

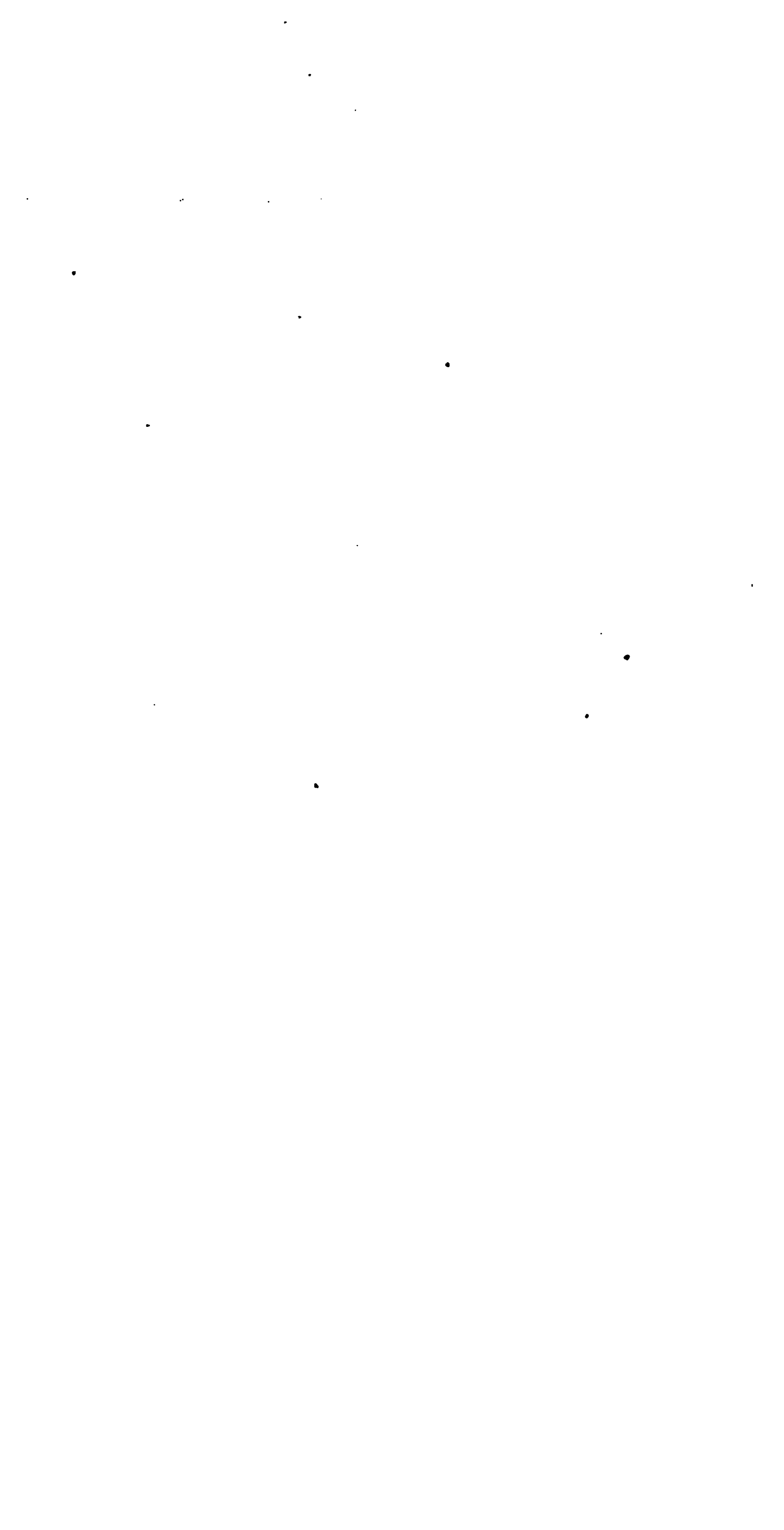


1037



Mosses of the mountains of the





HYPNUM atro-virens.

Dark Round-branched Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem diffuse, much branched. Leaves ovate, concave, entire, keeled, imbricated every way. Capsule drooping, obovate. Lid awl-shaped.

SYN. Hypnum atro-virens. *Dicks. Crypt. fasc. 2. 10. Sm. Fl. Brit. 1307. With. 864. Hull. 274. Turn. Musc. Hib. 169.*

H. denticulatum exiguum pendulum atro-virens. *Dill. Musc. 332. t. 43. f. 67.*

GATHERED on trees in Scotland, by Mr. Dickson, to whom we are obliged for this specimen. Dillenius had his from Patagonia. Dr. Scott is supposed to have found the same, though without fruit, in Ireland.

The stems and branches are much subdivided, leafy throughout, round, slender and rigid. Leaves of a remarkably dull and dark green, imbricated every way, broad-ovate, pointed, perfectly entire, concave, keeled, with a strong rib reaching to the point. Sheaths pale, closely imbricated, their leaves ovate, concave, entire, ribbed, with long taper points. Fruit-stalk hardly an inch long, smooth, dark red. Capsule drooping or pendulous, ovate at the base, contracted above, dilated at the mouth, brown, smooth. Lid, according to Dillenius, slender, awl-shaped, curved.

2422.



Jan. 20. 1861. 1874. J. L. K. H. S.



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Vertical line or mark on the left side of the blacked-out area.



[1859]

HYPNUM tenellum.

*Tender Awl-leaved Feather-moss.**CRYPTOGAMIA Musci.*

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem creeping, much branched. Leaves awl-shaped, ribless, entire. Capsule ovate, drooping. Lid awl-shaped.

SYN. *Hypnum tenellum.* *Dicks. Crypt. fasc. 4. 16. t. 11. f. 12.* *Sm. Fl. Brit. 1808.* *Turn. Musc. Hib. 170.* *Winch. v. 1. 110.*

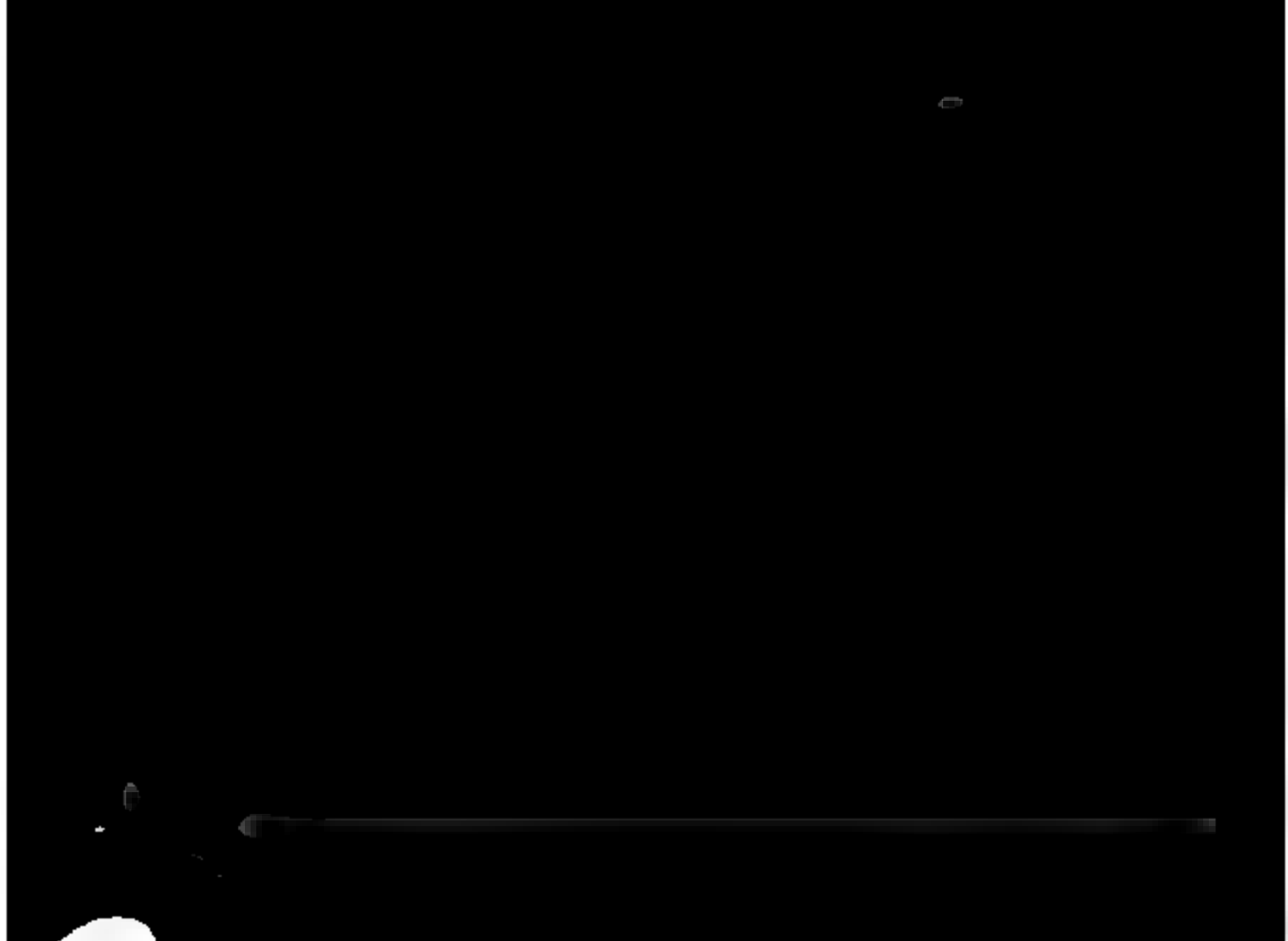
FIRST noticed by Mr. Dillwyn about the roots of trees in Kent. The Rev. Mr. Williams has found it on the under sides of projecting stones and roots on Acton Burnell hill Shropshire, and Mr. Stone on walls in Norwich. Our present specimens were gathered by Mr. Templeton, on limestone or flint, in moist shady places near Belfast, bearing fruit in April.

It forms small dense perennial tufts of creeping stems, throwing up several short erect branches; the whole being clothed with densely imbricated, slender, awl-shaped, entire leaves, of a full bright green, without any rib, except possibly near the base. Stalks from minute sheaths, red, half or three quarters of an inch long, erect, taller than the branches, at length curved at the summit. Capsule drooping or pendulous, ovate, short, obtuse, brown, smooth, with an awl-shaped lid, about its own length. The fine slender leaves essentially distinguish this species. Neither Hedwig, nor any other foreign botanist, seems to have known it.

1859



Funaria hygrometrica





[1500]

HYPNUM albicans.

Whitish Silky Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scaly sheath. Outer fringe of 16 teeth, dilated at the base: inner a variously-toothed membrane. Veil smooth.

SPEC. CHAR. Stem branched, ascending. Leaves imbricated, ovate, pointed, three-nerved. Capsule ovate, curved. Lid conical, pointed.

SYN. *Hypnum albicans*. Necker. *Musc.* 180. *Sm. Fl. Brit.* 1309. *Hedw. Sp. Musc.* 251. *Crypt. v.* 4. 13. t. 5. *Dicks. Crypt. fasc.* 1. 6. *H. Sicc. fasc.* 5. 21. *Wick.* 850. *Hull.* 269.

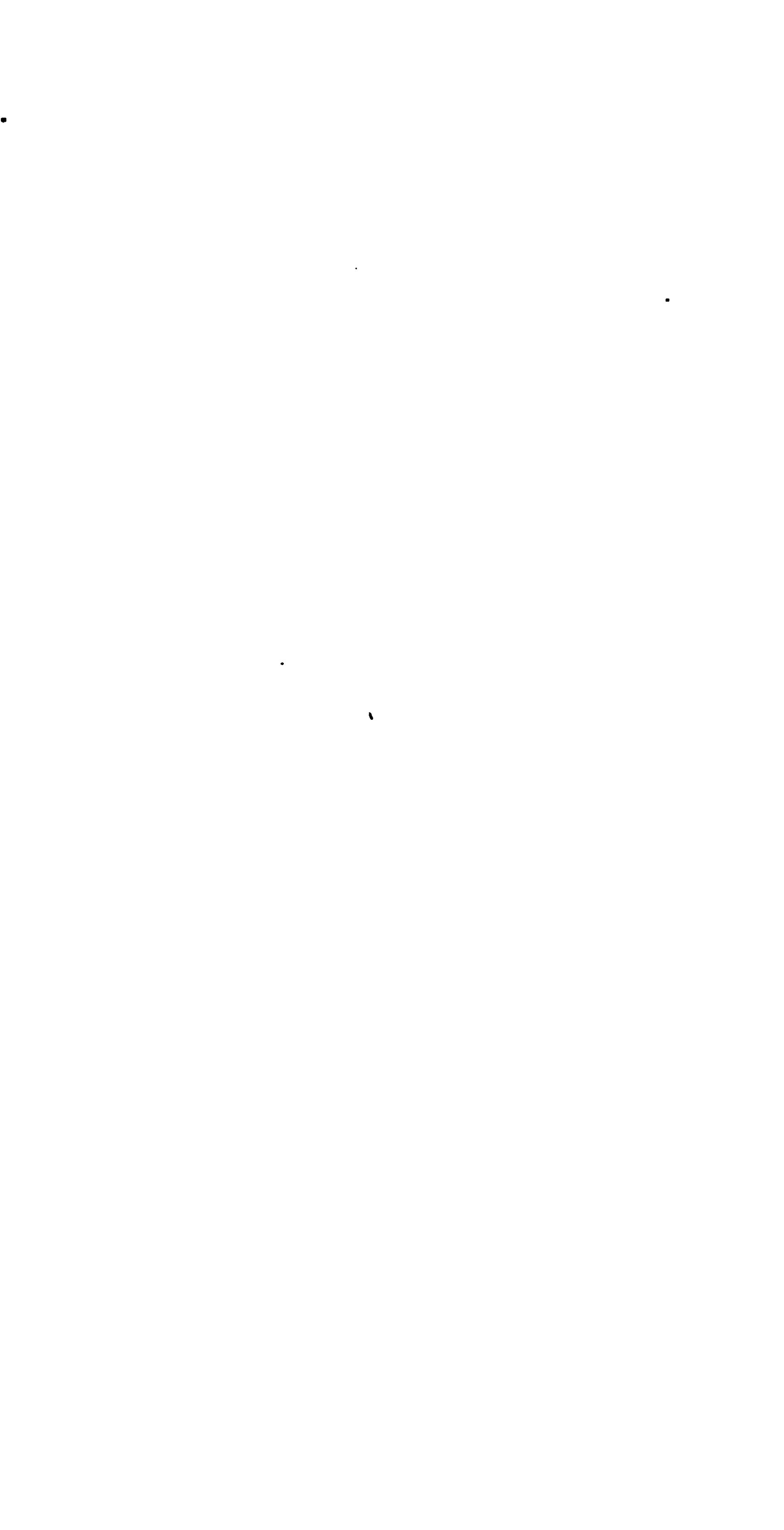
H. sericeum gracile albicans, capsulis subrotundis.
Dill. Musc. 328. t. 42. f. 63.

H. terrestre erectum humilius albicans, ramulis teretibus. *Dill. in Rari Syn.* 83.

GATHERED by Mr. Turner on the sandy cliffs at Gorleston near Yarmouth, where its fruit is to be found in March or April. In summer the leafy stems are common in the sandy

1500





[2071]

HYPNUM plumosum.

Rusty Silky Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scaly sheath. Outer fringe of 16 teeth, dilated at the base: inner a variously-toothed membrane. Veil smooth.

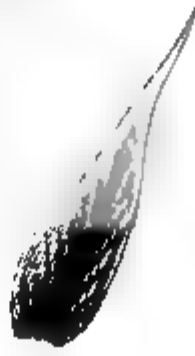
SPEC. CHAR. Stem creeping. Branches crowded, erect. Leaves ovate, pointed, entire, with a rib reaching half way. Capsule ovate, inclining. Lid conical.

SYN. Hypnum plumosum. *Huds. ed. 1. 423. Sm. Fl. Brit. 1310. Linn. Sp. Pl. 1592. With. 852. Hall. 270. Sibth. 296. Abbot. 247. Dick. H. Sicc. fasc. 5. 22. Turn. Musc. Hib. 172. t. 15. f. 1.*

H. sericeum 3. *Huds. 506.*

H. repens filicinum plumosum. *Dill. Musc. 280. t. 35. f. 16. Raii Syn. 86.*

277



1871. 12. 14. collected by J. S. H. & J. S. H.

2

v





HYPNUM implexum.
Green Matted Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scaly
stipit. *Oper. fringe* of 16 teeth, dilated at the base:
oper. a variably-toothed membrane. *Veil* smooth.

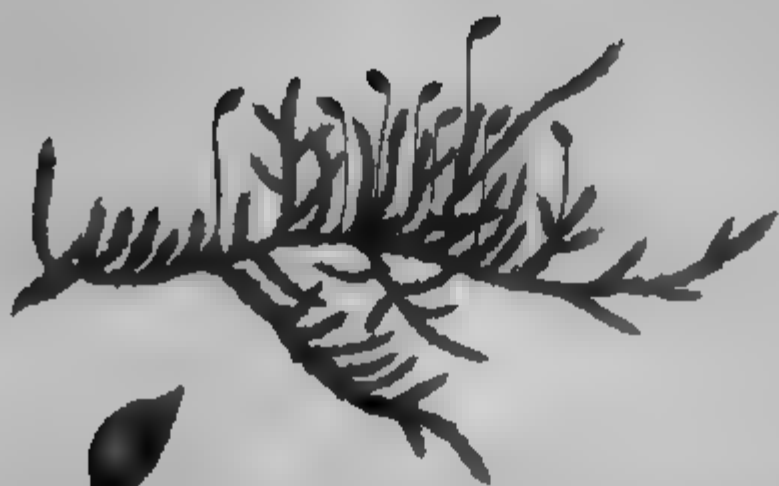
SPEC. CHAR. Stem creeping. Branches crowded,
erect. Leaves lanceolate, pointed, finely serrated,
single-celled. Lid coriaceous.

SEX. *Hypnum implexum.* Swartz. *Act. Holm. ann.* 1795.
Brit. Sm. Fl. Brit. 1810. *Turn. Musc. Hib.* 173.
 = 16.

H. pinussum. Swartz. *Musc. Suec.* 66.

COMMUNICATED by Mr. W. Brutton from stones near
 Bapton. It was originally noticed by Mr. G. Donn on a large
 stone near the foot of Ben Lawers, and afterwards in Angus-
 shire. It has also been found in Ireland and near Newcastle.

1684



Desm. ...

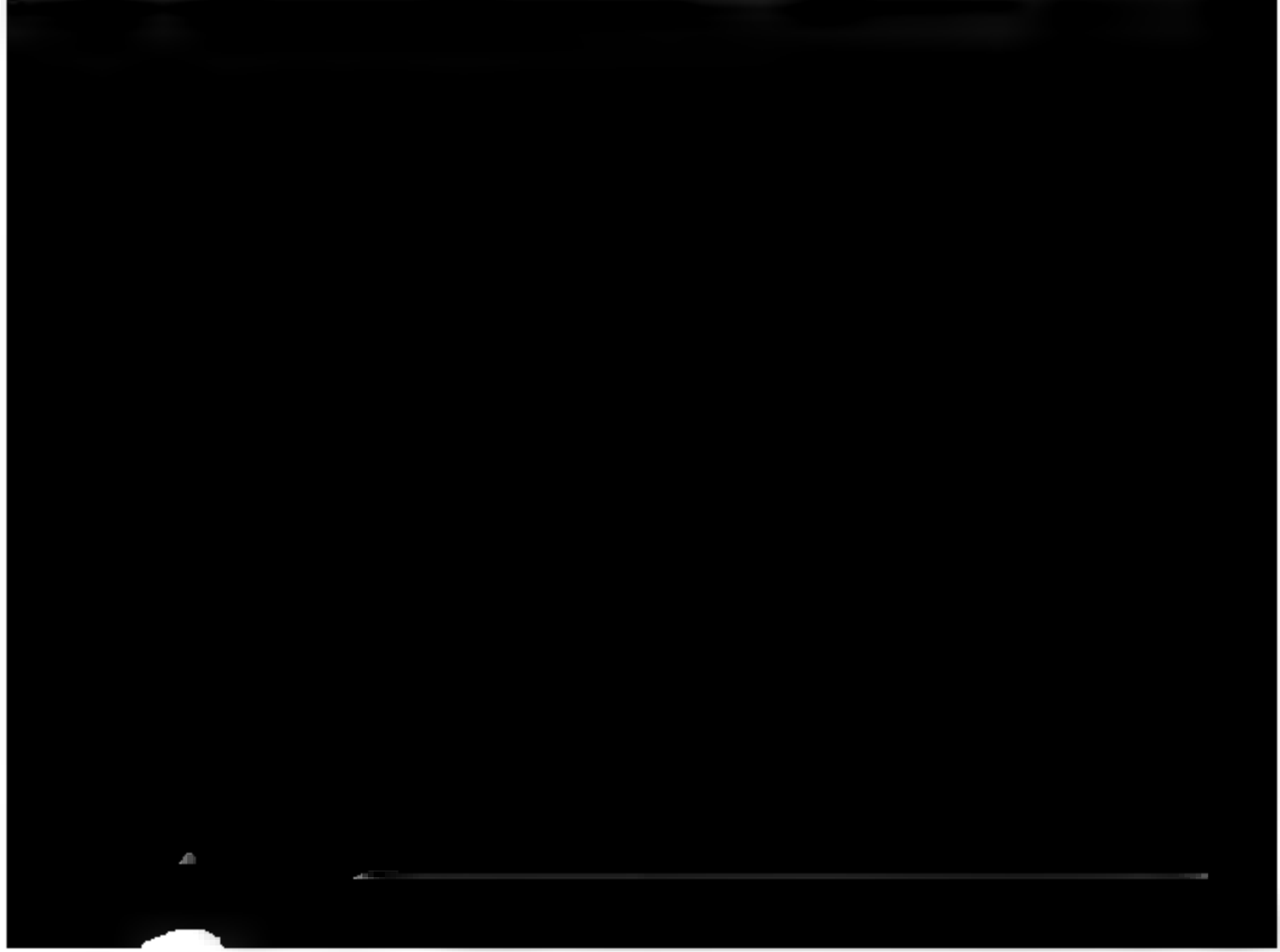
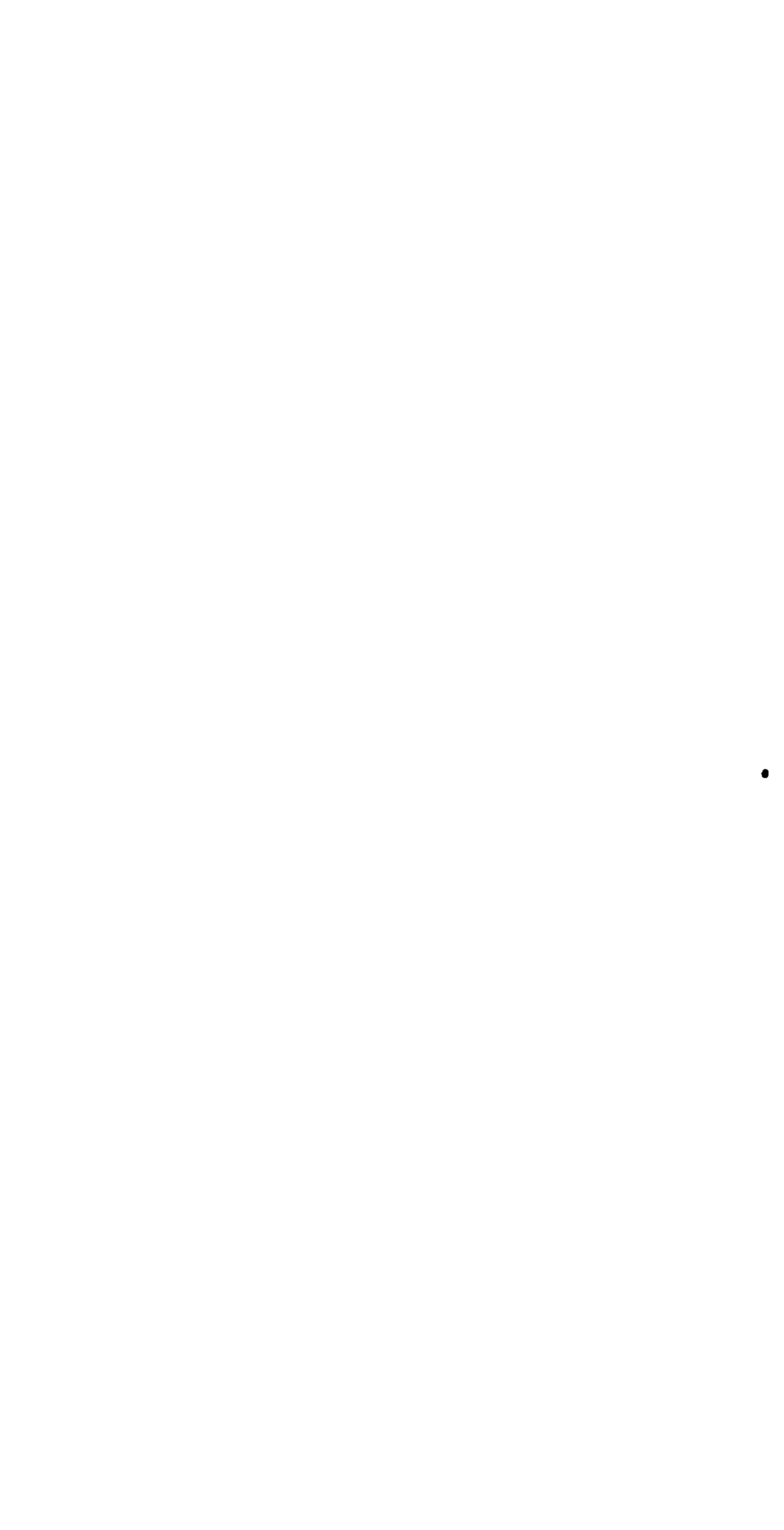








Fig. 1. *... ..*





2

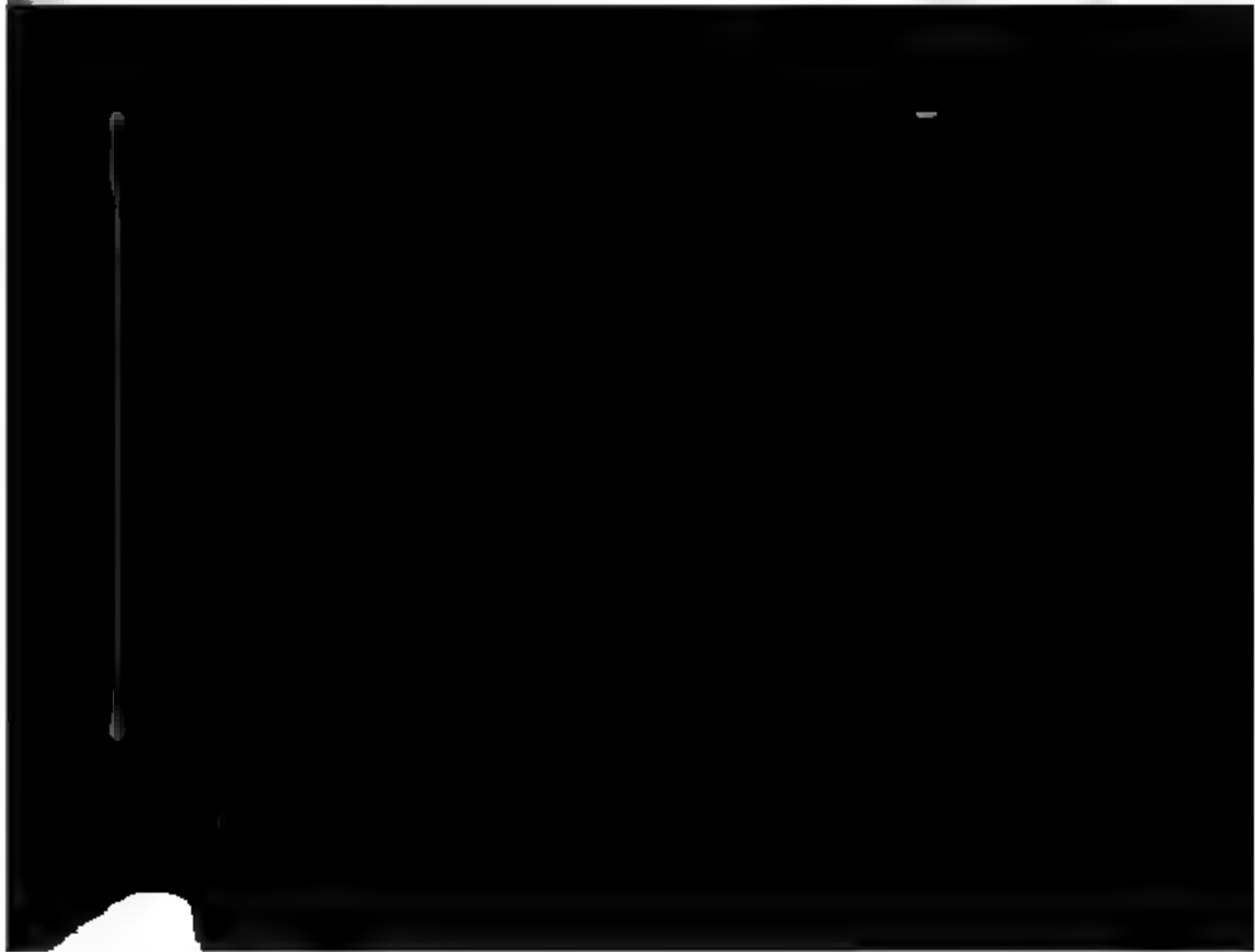
1944



1992



Mar. 1. 1892. Published by J. G. Smith, London.





HYPNUM purum.

Neat Meadow Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem pinnated. Leaves elliptical, inflated, obtuse with a small point, single-ribbed at the base. Lid conical, curved.

SYN. *Hypnum purum.* *Linn. Sp. Pl.* 1594. *Sm. Fl. Brit.* 1313. *Hedw. Sp. Musc.* 253. t. 66. f. 3—6. *Huds.* 504. *With.* 863. *Hull.* 273. *Relh.* 436. *Sibth.* 300. *Abbot.* 250. *Curt. Lond. fasc.* 3. t. 65. *Turn. Musc. Hib.* 175.

II. *cupressiforme vulgare, foliis obtusis.* *Dill. Musc.* 309. t. 40. f. 45.

II. *terrestre erectum, ramulis teretibus, foliis inter rotunda et acuta medio modo se habentibus.* *Raii Syn.* 81.

PLENTIFUL in moist and shady pastures, also about hedge banks, but not regularly producing capsules. Their most general season, according to Mr. Curtis, is November; we have also found them in the spring.

This is truly a beautiful moss, remarkable for the neat shining inflated appearance of its leaves. The stems form large light elastic tufts, growing seldom quite upright, often horizontally, and are subdivided, besides being branched in a pinnate manner. The branches are short, simple, round, acute, recurved. Both the stem and branches are clothed with closely imbricated (though inflated) broad elliptical obtuse entire leaves, each tipped with a little flat point, and marked at the base by one short nerve. Their colour is a light shining green, turning whitish with age. Sheaths cylindrical, of many pale narrow leaves. Fruitstalks solitary, red, 2 inches long, erect. Capsule elliptical, drooping, smooth, more or less curved, a little tumid at the base. Lid conical, with a curved point.

1599



7



HYPNUM illecebrum.

Glass-wort Feather-moss.

CRYPTOGAMIA Muri.

GEN. CHAR. Caps. ovata-oblong, from a lateral scaly
 base. Caps. fringe of 16 teeth, dilated at the base:
 over a variously docted membrane. Veil smooth.

SPEC. CHAR. Stem irregularly branched. Branches
 simple. Leaves elliptical, inflated, obtuse with a
 small point, and a single obsolete nerve.

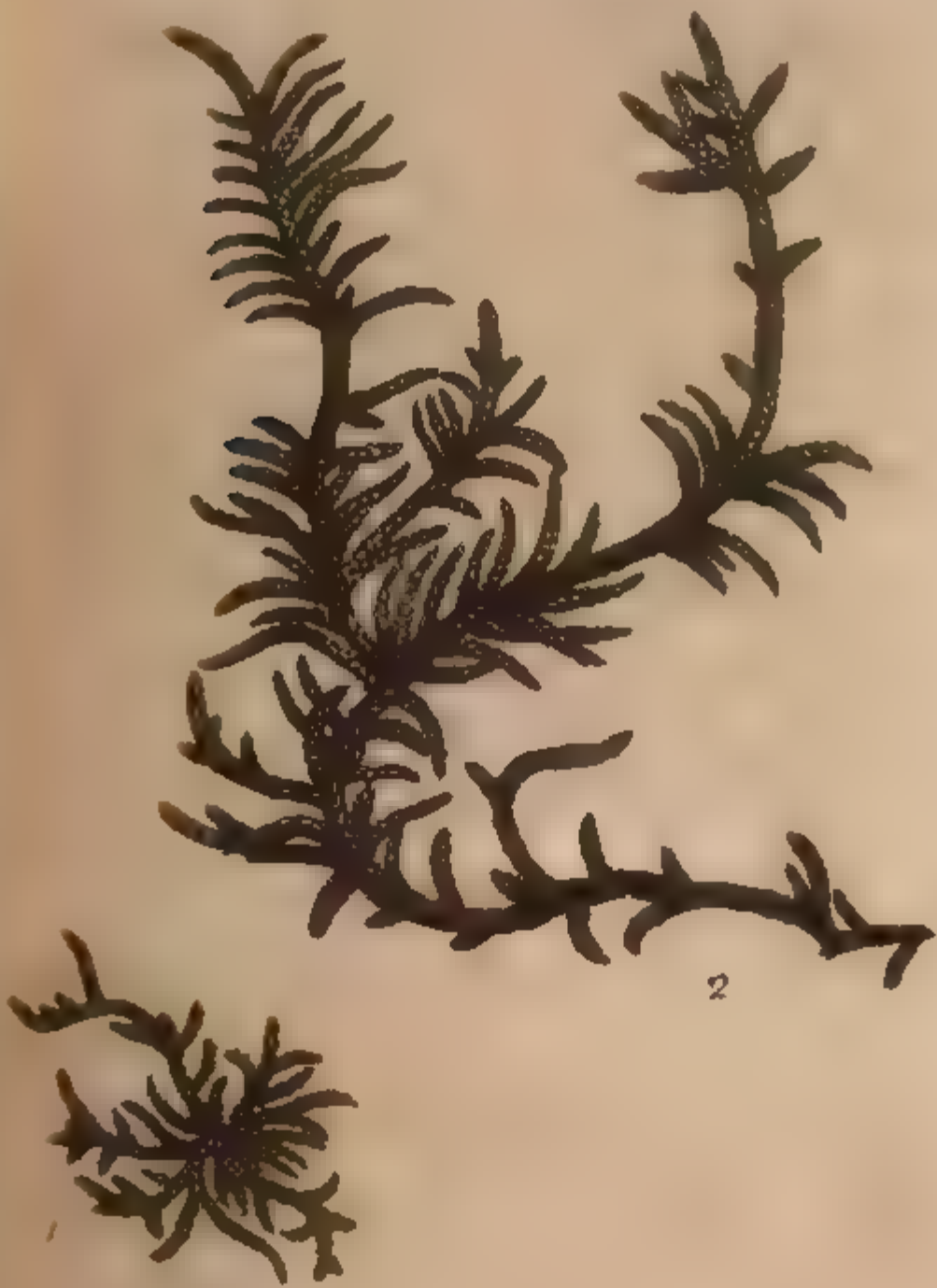
SYN. *Hypnum illecebrum.* Hedw. Sp. Musc. 252.
 = 46. t. 1. p. 2. Sm. Fl. Brit. 1314. Huds. 504.
 W. M. 923. Hedl. F. S. Seltz. 300. Schreb. Lips.
 35. W. M. v. 1. 110.

≡ *complanatum rotundius*, vel *illecebræ annulatum.*
 Hedl. Musc. 311. = 40. f. 46.

≡ *rotundius* Hedw., *ramulis brevibus, foliis subro-*
tundis abbreviatis cinctis. Boiss. Syn. 81, under
 2. 7.

REMARKS. Few plants have been more confused than this *Hypnum*,
 which is so very near *complanatum*, L. 1799, that many persons have
 thought it only a variety. It differs chiefly in its more turgid

2189







[1621]

HYPNUM Schreberi.

Schreberian Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scaly sheath. Outer fringe of 16 teeth, dilated at the base: inner a variously-toothed membrane. Veil smooth.

SPEC. CHAR. Stem pinnated, slightly compressed. Leaves elliptical, concave, slightly pointed, ribless. Lid conical, with a little straight point.

SYX. Hypnum Schreberi. Willden. Berlin. 325. Sm. Fl. Brit. 1315. Dicks. Crypt. fasc. 4. 18. Turn. Musc. Hit. 176.

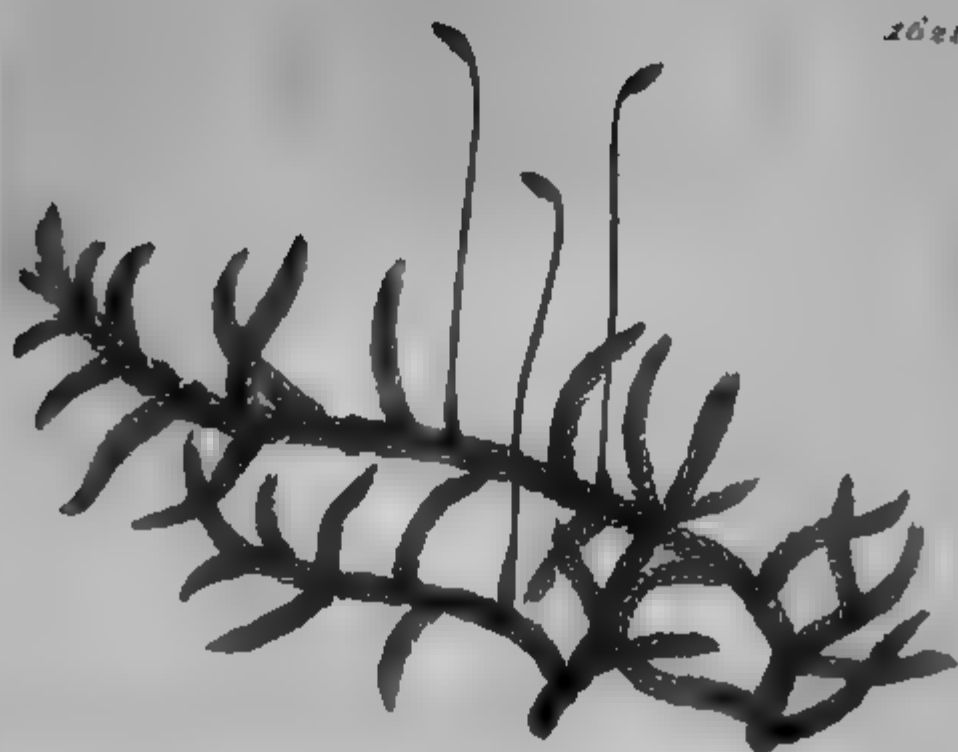
H. parum. Ehrh. Crypt. 311. Huds. 504, β . With. 263, var. 2. Hull. 273, var. 2.

H. cupressiforme tenuius et compressius. Dill. Musc. 312. t. 40. f. 47.

H. longum erectum, foliis angustis caulibus appressis. Raii Syn. 83.



2621



[Faint, illegible text]





[1646]

HYPNUM nitens.

Shining Yellow Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scaly sheath. Oper. fringe of 16 teeth, dilated at the base: ~~inner~~ a variably-toothed membrane. Veil smooth.

SPEC. CHAR. Stem erect. Branches short. Leaves lanceolate, pointed, striated. Capsule oblong, curved and inclining.

SYN. *Hypnum nitens*. *Scienc. Lib.* 92. *Sm. Fl. Brit.* 15:6. *Lin. f. Musci. Musc.* 34. *Hedw. Sp. Musc.* 255. *Dicks. Crypt. fasc.* 2. 12. *H. Sicc.* fasc. 1. 24. *Wick.* 552. *Hall.* 270.

*H. palustre erectum trichodes, ramulis crebris, luteo-
et rubro-virescentibus, glabris.* *Dill. Musc.* 303. t. 39.
t. 37.

GATHERED by the Rev. Mr. Dalton in marshy ground



1646



1891. 1891. Published by the Royal Society, London.



HYPNUM rufescens.

Shining Reddish Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scar: beneath. Outer fringe of 16 teeth, dilated at the base: inner a variously-toothed membrane. Veil smooth.

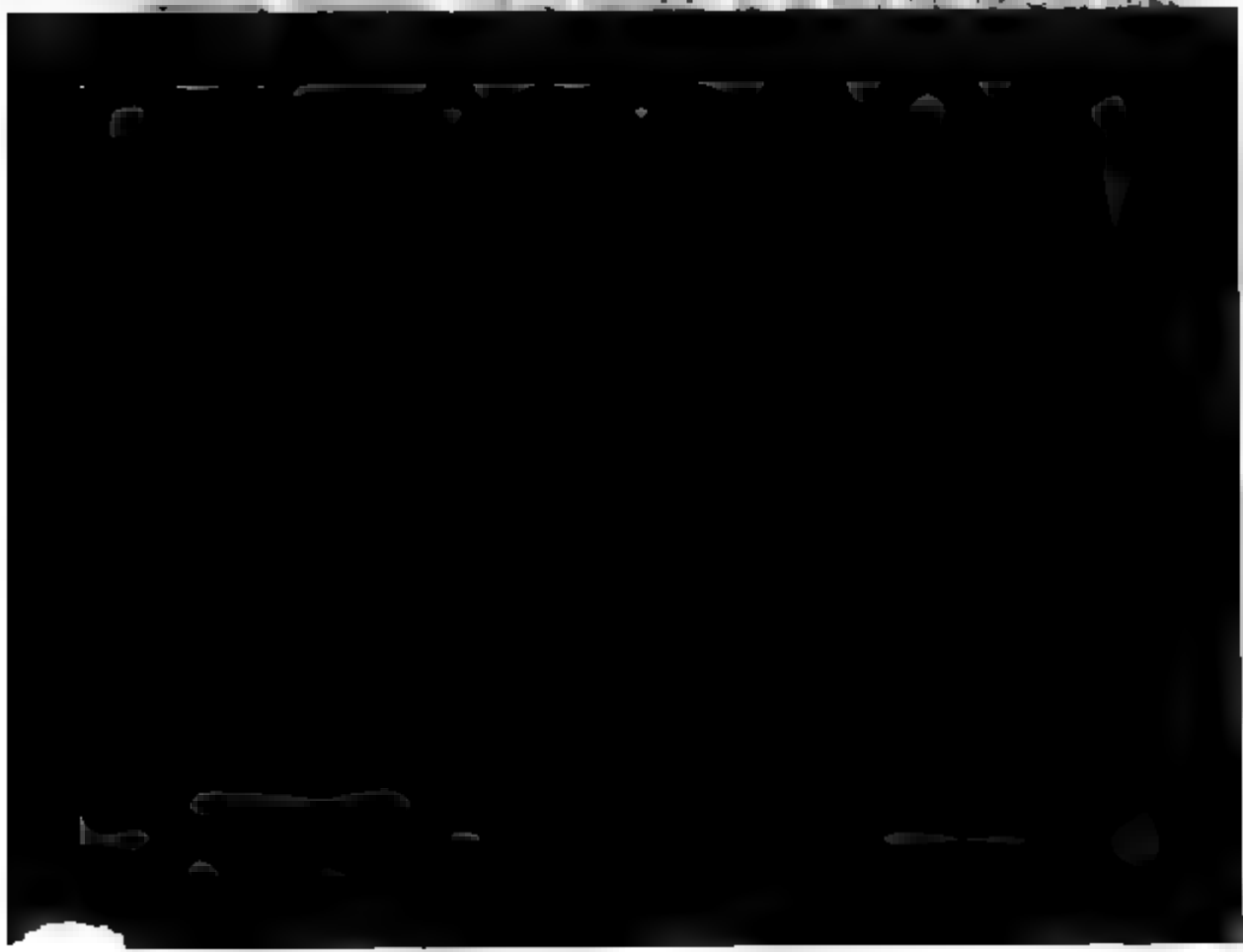
SPEC. CHAR. Stem erect. Branches elongated. Leaves imbricate, pointed, striated, entire. Capsule cylindrical. Lid conical.

SEX. *Hypnum rufescens* Sm. *Fl. Brit.* 1316. *Dich. Crypt. Jac.* 3. 9. t. 5. f. 4. *Willd.* 846. *Hull.* 269. *Engelm. Germ.* 7. 2. 53. under n. 16.

H. caudatum var. *rufescens* foliis subulatis aristatis, capsulis globosis. *Hall.* in *Act. Helvet.* t. 5. 12. p. 34.

H. l. 1784. *Hall. Hist.* 7. 3. 35; excluding the synonym of *Dübentia*.

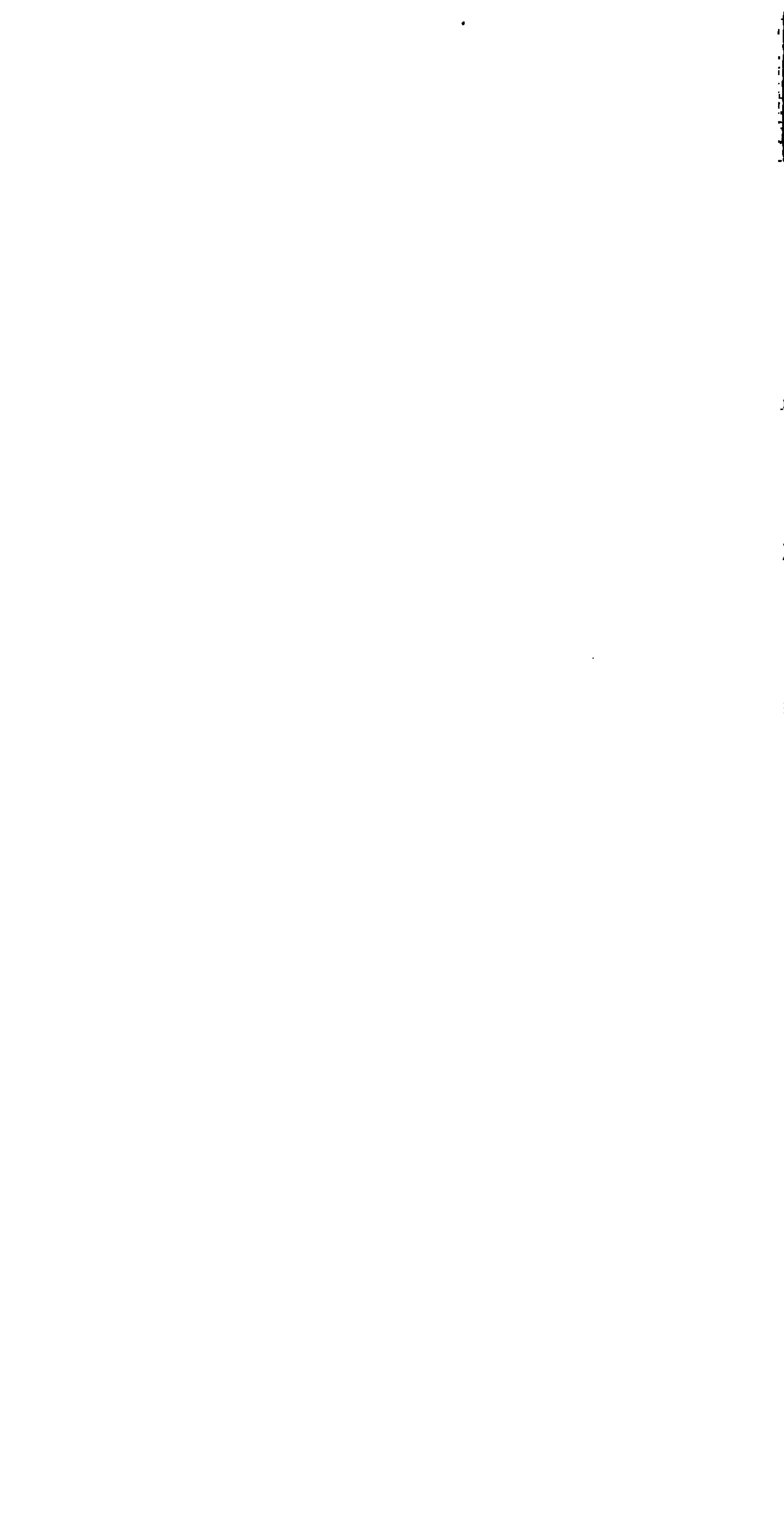
FERT. *noticed* by Mr. Dawson on wet rocks in the Highlands of Scotland. Mr. W. Borrer found it covering the perpendicular rocks by the falls of Mersey, and has favoured us with the only genuine fructification we have ever seen, which is a very good variety. Its supposed fruit and the accompanying description in *Fl. Brit.* from the Linnean Institution, appear to be those of an undescribed *Hypnum*, or



2890



In a drawing of the same



[1425]

HYPNUM cuspidatum.
Pointed Bog Feather-moss.

CRYPTOGAMA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base; *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem pinnate, round. Branches pointed. Leaves oblong-lanceolate, nerveless, smooth, imbricated every way. Lid conical, acute.

SYN. Hypnum cuspidatum. *Linn. Sp. Pl.* 1595. *Sm. Fl. Brit.* 1317. *Hedw. Sp. Musc.* 254. *Huds.* 505. *With.* 862. *Hull.* 273. *Relh.* 437. *Sith.* 300. *Abbot.* 250. *Dicks. H. Sicc. fasc.* 7. 20. *Turn. Musc. Hic.* 177.

H. palustre, extremitatibus cuspidatis et pungentibus. *Dill. Musc.* 300. t. 39. f. 34.

H. repens palustre, foliis triangularibus per caules expansis, extremitatibus convolutis et acuminatis. *Raii Syn.* 82.



110



111



[1916]

HYPNUM silesianum.*Silesian Feather-moss.***CRYPTOGAMIA Musci.**

GEN. CHAR. Caps. ovate-oblong, from a lateral staly sheath. Outer fringe of 16 teeth, dilated at the base: inner a variously-toothed membrane. Veil smooth.

SPEC. CHAR. Stem creeping, pinnated. Leaves loosely spreading, ovate, serrated, pointed, flattish, with two pinnae at the base; the upper ones curved.

Capsule cylindrical, inclining. Lid conical, short.

SYN. *Hypnum silesianum*. *Wet. and Mohr Fl. Germ.* 345.

Leskia Söngeri. Bruchl. Musc. t. 2 p. 2 47.

THIS moss, new to our British Flora, and undescribed by all authors but those we have cited, was gathered on Ben Loyal in Sutherland by our often-mentioned friends Messrs. Hooker and Borrer in the summer of 1908. The fruit was then fully ripe and had opened its lid.

It is a small creeping caudex branched species, which we

2016



May 1869. Published by J. Sowerby London.





[1447]

HYPNUM cordifolium.
Heart-leaved Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral sheath. Outer fringe of 16 teeth, dilated at base: inner a variously-toothed membrane, smooth.

SPEC. CHAR. Stem erect. Branches short. L. spreading, heart-shaped, bluntish, single-rib rather remote. Lid hemispherical, pointed.

SYN. Hypnum cordifolium. Hedw. Sp. Musc. Crypt. v. 4. 97. t. 37. Sm. Fl. Brit. 1318. Sw. Musc. Succ. 62. Roth. Germ. v. 3. 319.

THE above specimens are all that can be found for this
the Hypnum, which was equally unknown to Dillenius,
and all other botanists till Dr. Swartz found it
in Sweden, and the celebrated Hedwig in Germany. No
the lid of the cap

1497







HYPNUM fluitans.

Floating Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem somewhat pinnate. Leaves lanceolate, pointed, loosely spreading, single-ribbed. Lid convex, with a small point.

SYN. *Hypnum fluitans.* *Linn. Fl. Suec. ed. 2. 399.*
Sm. Fl. Brit. 1319. Hedw. Sp. Musc. 296.
Crypt. v. 4. 94. t. 36. With. 851. Hull. 270.
Relh. 432. Sibth. 298. Abbot. 245. Dicks. H.
Sicc. fasc. 16. 22. Turn. Musc. Hib. 182.

H. erectum aut fluitans, foliis oblongis perangustis acutis. *Dill. Musc. 299. t. 38. f. 33. Raii Syn. 82.*

THIS we also received from Mr. Winch of Newcastle in



1440



Proc. Linn. Soc. London







[1516]

HYPNUM piliferum.
Hair-pointed Feather-moss.

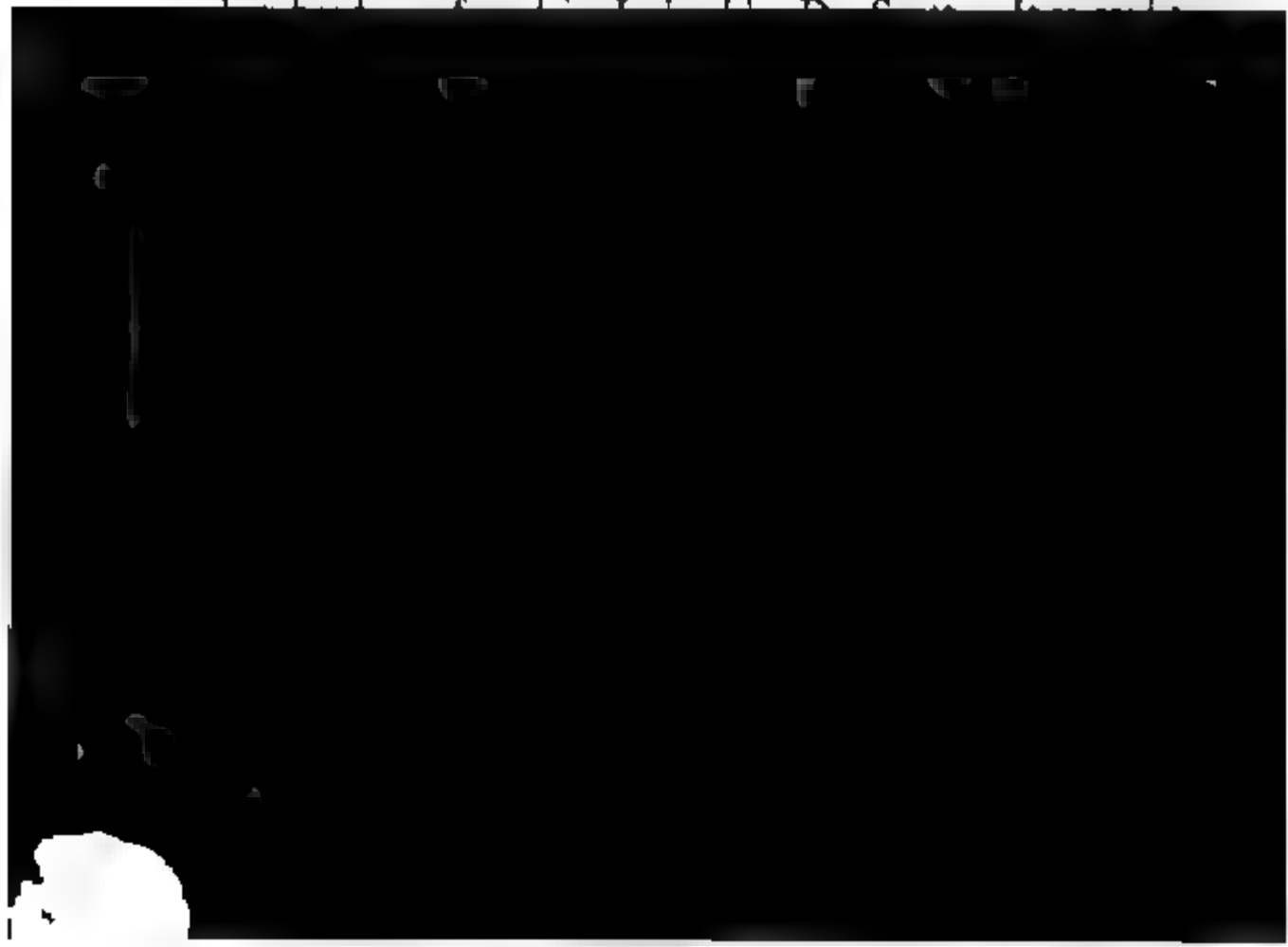
CRYPTOGAMIA Musci.

GEN. CHAR. *Fringe* double: outer of 16 tapering teeth: *inner* a toothed membrane. *Flowers* lateral. *Fruit-stalk* from a scaly sheath.

SPEC. CHAR. Branches scattered. Leaves ovate, concave, entire, with a single rib reaching half way from the base, and tipped with a hair. Lid swishaped.

SYN. *Hypnum piliferum.* Schreb. *Lips.* 91. Sm. *Fl. Brit.* 1319. Hedw. *Sp. Musc.* 275. *Crypt.* v. 4. 35. t. 14. Turn. *Musc. Hib.* 178.

SENT by our obliging friend Mr. Winch from Northumberland in July last. We have it also from the Rev. H. Davies,





Chara (L.) Bory de Saint-Vincent



[1647]

HYPNUM brevirostre.*Common Rough-stalked Feather-moss.**CRYPTOGAMIA Musci.*

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Branches straggling. Leaves ovate, pointed, slightly serrated, single-ribbed about half their length. Lid conical. Fruit-stalk granulated.

SYN. *Hypnum brevirostrum.* *Ehrh. Crypt.* 85.

H. Rutabulum. *Linn. Sp. Pl.* 1590. *Sm. Fl. Brit.* 1320. *Hedw. Sp. Musc.* 276. *Crypt. v. 4.* 29. *t.* 12. *Huds.* 496. *With.* 851. *Hull.* 270. *Relh.* 432. *Sibth.* 297. *Abbot.* 245. *Turn. Musc. Hib.* 179.

H. dentatum vulgatissimum, operculis obtusis. *Dill. Musc.* 295. *t.* 38. *f.* 29.

H. repens, triangularibus minoribus foliis. *Raii Syn.* 80.

ONE of the most common of Mosses about trees, hedges, and bushy places, bearing fruit in the spring.



1617



Agrostis puberula L. f. *Semen* L. f.

.

• -



HYPNUM striatum.

Common Striated Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scaly sheath. Outer fringe of 16 teeth, dilated at the base: inner a variously-toothed membrane. Veil smooth.

SPEC. CHAR. Branches straggling. Leaves triangular, somewhat ovate, pointed, minutely serrated, single-ribbed, striated. Lid awlshaped.

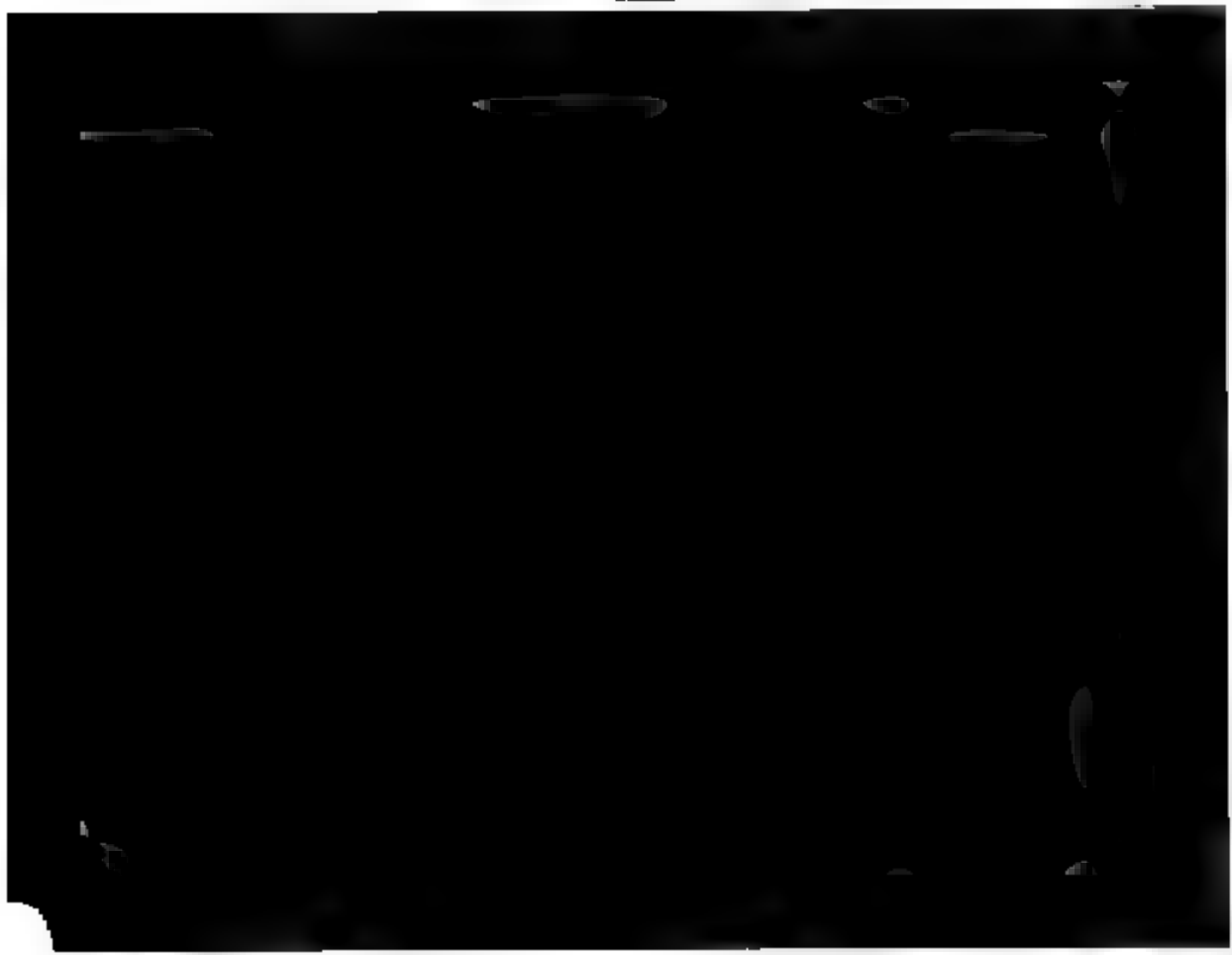
SYN. *Hypnum striatum.* Schreb. Lips. 91. Sm. Fl. Brit. 1821. Hedw. Sp. Musc. 275. Crypt. v. 4. 52. t. 13. With. 850. Hull. 270. Sibth. 415. Tern. Musc. Hist. 180.

H. longirostrum. Ehrh. Crypt. 75.

H. Rutabulum γ . Huds. 497. β . Relh. 433.

H. vulgare dentatum, operculis cuspidatis. Dill. Musc. 297. t. 38. f. 90.

H. repens, triangularibus minoribus foliis, pediculis et capitulis brevioribus et tumidioribus, minus. Raii Syn. 80.



1648



Leptochloa Purshii (L.) Griseb. & Speg.



[1302]

HYPNUM stellatum.

*Yellow Starry Feather-moss.**CRYPTOGAMIA Musci.*

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

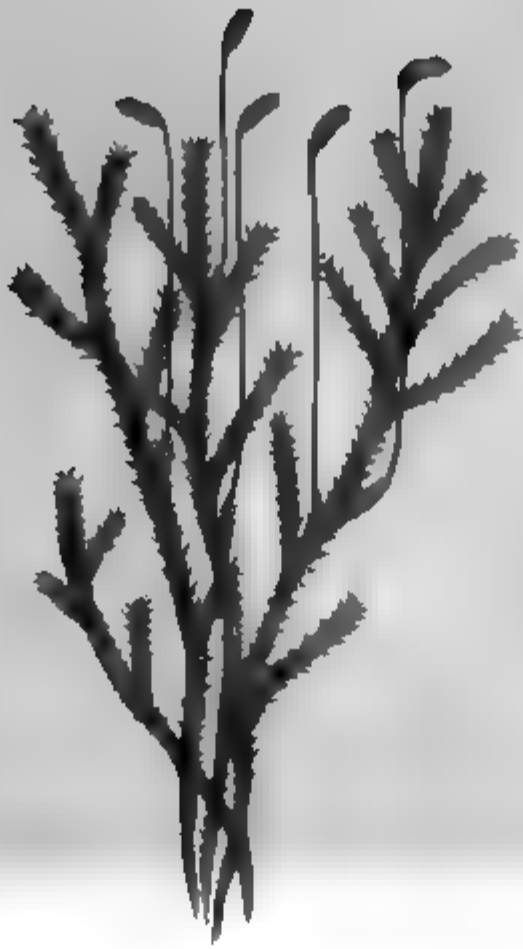
SPEC. CHAR. Stem erect, branched. Leaves ovate, pointed, entire, without nerves, very much spreading. Lid conical.

SYN. *Hypnum stellatum.* Schreb. *Lips.* 92. Sm. *Fl. Brit.* 1322. Hedw. *Sp. Musc.* 280. Dicks. *Crypt. fasc.* 1. 5. t. 1. f. 7. H. *Sicc. fasc.* 6. 23. With. 846. Hull. 268. Relh. 437. Sibth. 301. Abbot. 246.

H. comâ lutescente, extremitatibus stellatis. Dill. *Musc.* 302. t. 39. f. 35.

NOT uncommon in turfy bogs, but the fructification is not often to be found. The season for it is about March or April.

The stems grow erect, either in tufts or intermixed with other mosses, and are more or less branched, the branches



See also published by the University of Chicago



[1958]

HYPNUM squarrosum.
Drooping-leaved Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem branched, somewhat pinnated. Leaves ovate, pointed, keeled, recurved, without ribs. Lid conical.

SYN. *Hypnum squarrosum.* *Linn. Sp. Pl.* 1593. *Sm. Fl. Brit.* 1923. *Hedw. Sp. Musc.* 281. *Huds.* 502. *With.* 857. *Hull.* 271. *Relh.* 435. *Sibth.* 299. *Abbot.* 249.

H. repens, triangularibus reflexis foliis, majus. *Dill. Musc.* 303. t. 39. f. 98. *Raii Syn.* 82.

β.H. repens, triangularibus reflexis foliis, minus. *Dill. Musc.* 304. t. 39. f. 99. *Raii Syn.* 82.

H. squarrosum. *Swartz. Musc. Suec.* 59. *Ekrh. Crypt.* 36.

COMMON in shady damp woods, and under hedges, pro-



2053



Asplenium platyneuron L.





HYPNUM squarrosulum.

Little Spreading-leaved Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scaly sheath. Outer fringe of 16 teeth, dilated at the base = ~~with~~ a variously-toothed membrane. Veil smooth.

SPEC. CHAR. Stem procumbent, branched; the branches irregularly pinnated. Leaves awlshaped, entire, without a nerve, broad at the base, spreading widely and somewhat reflexed. Capsule drooping. Lid conical, short.

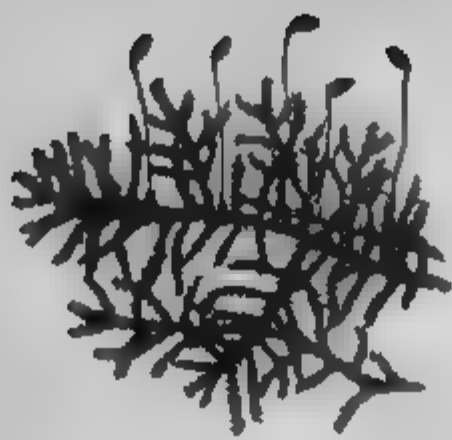
STR. Hypnum squarrosulum. *Bridel. Musc. v. 3. 149. t. t. f. 2.*

GATHERED in Mackershaw wood near Ripon by the late Mr. W. Brunton, and by no one else, to our knowledge, in Britain. It bears fruit in the early part of summer. The learned Beauclerk, who alone has published it, found it in Saxony and Switzerland.

The habit of the plant is somewhat like *H. serpens*, but it belongs to another section of the genus characterized by squarrose leaves, where it should stand near *H. squarrosulum*. The stems are perennial, creeping, green, producing many pinnated slender leafy branches. Leaves of a bright or yellowish green, small, spreading in every direction, at right angles with the branches, or a little reflexed. They are entire, with a broad base, destitute of any nerve or plait, and taper into a very fine point. Sheaths of rather broader and shorter leaves, also without nerves. Fruitstalks an inch long, red, smooth. Capsule drooping, ovate, somewhat curved. Lid, which Bridel never saw, short and conical. Mr. Brunton communicated at the same time a much smaller variety, but differing in no other respect.

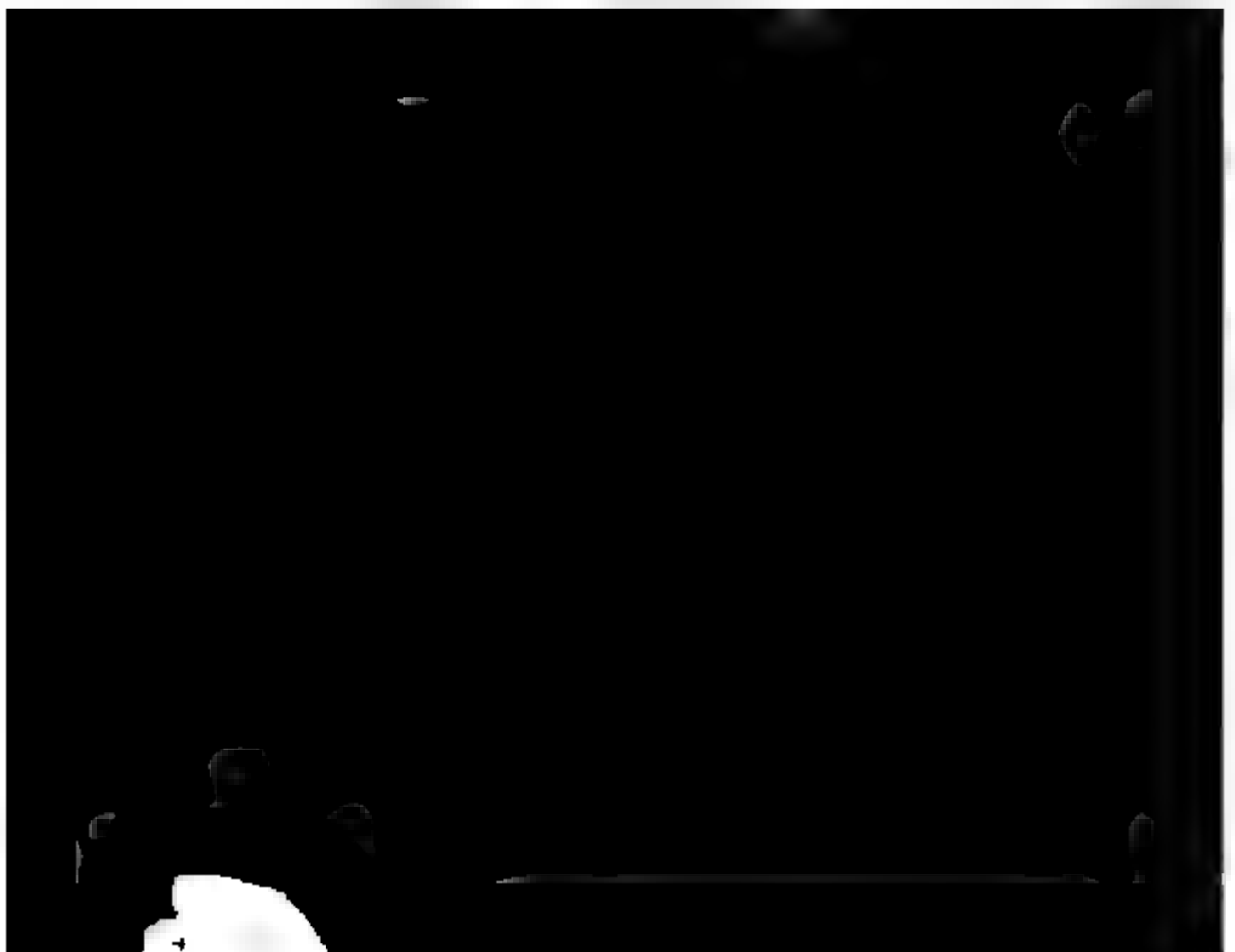
In the progress of a long work like this we might expect to have occasion from time to time to lament the loss of many veterans in science, but we have more frequently deplored the ravages of death among our more youthful associates. Mr. William Brunton of Ripon, whose favours we have often acknowledged, is now added to the melancholy catalogue. He was born Oct. 21, 1775, and died June 23, 1806, of a decline, which had long threatened his life. Early devoted to Botany and Chemistry in particular, he ardently pursued those studies to the last. Very strong natural parts, an excellent memory, acuteness and patience of investigation, formed his scientific character; his private one, as we are assured by an excellent friend, was no less estimable, and his relations have sustained an irreparable loss.

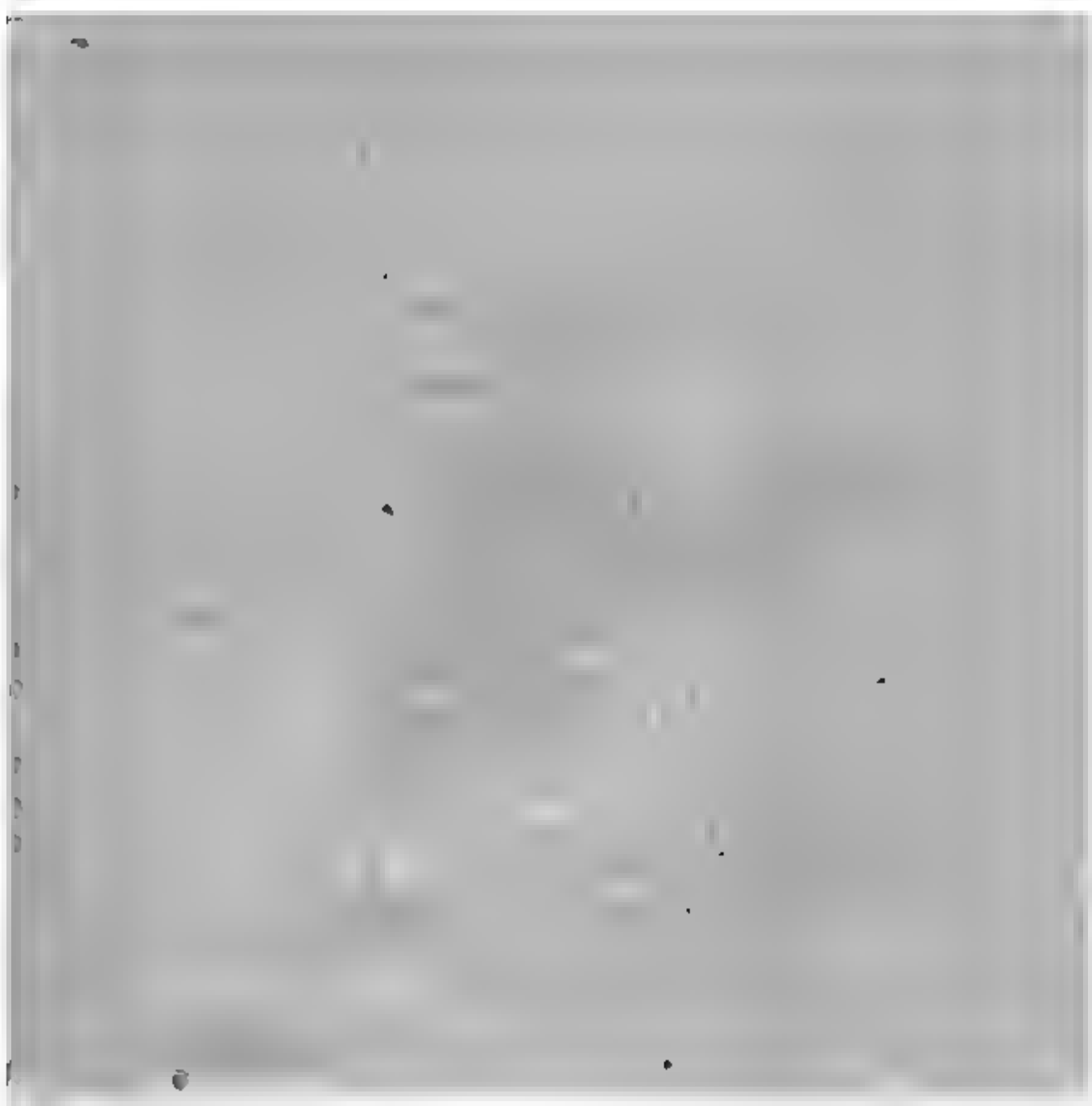
1709



Bot. 1709 of the British Museum, London







HYPNUM loreum.

Rambling Mountain Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scaly sheath. Outer fringe of 16 teeth, dilated at the base: ~~inner~~ a variously-toothed membrane. Veil smooth.

SPEC. CHAR. Stem procumbent, somewhat pinnate. Leaves awlshaped, recurved, pointing towards one side, with a broad striated base. Lid convex, with a small point.

SYN. Hypnum loreum. *Linna. Sp. Pl.* 1593. *Sm. Fl. Brit.* 1324. *Hedw. Sp. Musc.* 294. *Huds.* 502. *Wick.* 857. *Hull.* 272. *Belk.* 486. *Sibth.* 297. *Dicks. H. Sicc. fasc.* 7. 21. *Turn. Musc. Hib.* 185.

H. loreum montanum, capsulis subrotundis. Dill. Musc. 305. t. 39. f. 40.

H. repens, sarculis magis erectis, foliis reflexis longioribus cinctis, operculo capituli magno. Raii Syn. 12.

THIS Hypnum had not been noticed in Scotland till I found

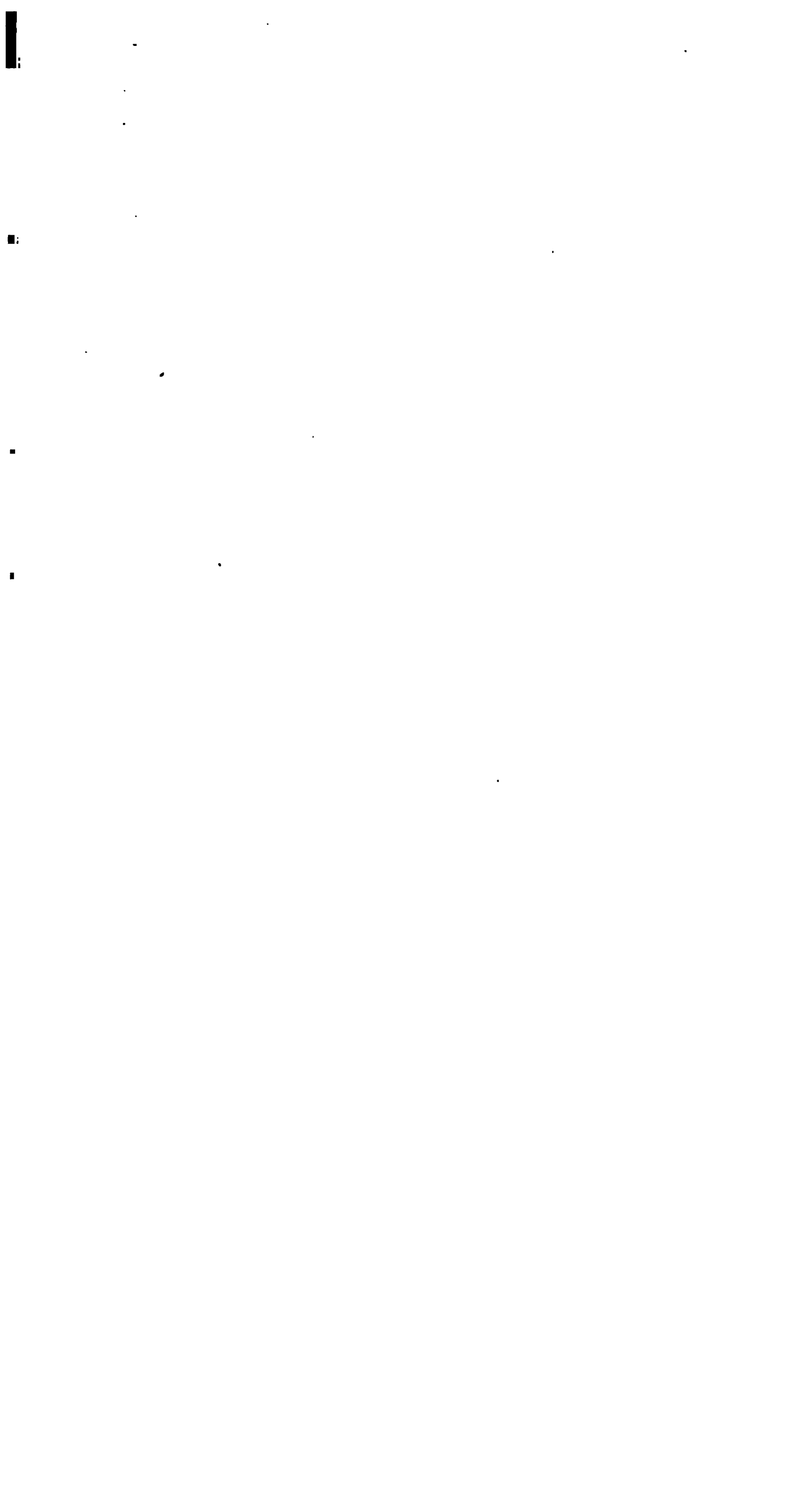


2172



Asplenium platyneuron







[1622]

HYPNUM triquetrum.

Great Triangular Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scaly sheath. *Caps. fringe* of 16 teeth, dilated at the base: *peristome* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. *Stems* ascending, somewhat pinnated. *Leaves* triangular, pointed, striated, spreading in every direction. *Lid* conical.

SYN. *Hypnum triquetrum*. *Lin.* Sp. Pl. 1589. *Sm.* Fl. Brit. 1325. *Hedw.* Sp. Musc. 256. *Huds.* 496. *Wick.* 350. *Hall.* 270. *Reh.* 433. *Sibth.* 296. *Frös.* 246. *Dicks.* H. Succ. fasc. 16. 21. *Turn.* Musc. Brit. 186.

H. vulgare triangulum, maximum et pallidum. *Dill.* Musc. 293. t. 38. f. 28.

H. repens, triangularibus majoribus et pallidioribus foliis. *Rat.* Syn. 80.

VERY common in woods and on heaths, bearing fruit in the winter and early spring. It is readily known from all our



Adiantum album L.





HYPNUM rugosum.

Yellow Wolf's-claw Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scaly sheath. Outer fringe of 16 teeth, dilated at the base: inner a variously-toothed membrane. Veil smooth.

SPEC. CHAR. Stem procumbent, somewhat pinnate. Leaves folded, keeled, falcate, twisted, furrowed, pointed, single-ribbed. Lid conical.

SYN. Hypnum rugosum. *Linn. Mant.* 131. *Sm. Fl. Brit.* 1325. *Dicks. Crypt. fasc.* 2. 12. *H. Sicc. fasc.* 1. 23. *With.* 856. *Hull.* 271. *Winch. v.* 1. 111. *Swartz. Musc. Suec.* 57.

H. lutescens crispum, Lycopodii facie. *Dill. Musc.* 289. *t.* 37. *f.* 24.

WATERY places about Loch Rannoch, Perthshire, a celebrated spot for botany, first afforded Mr. Dickson the present *Hypnum*, which Dillenius knew in Germany only, and for which Hedwig, Ebrhart, and many of less note, have mistaken a different moss, whose leaves are transversely corrugated, not known in Britain. Mr. Winch has favoured us with the true *rugosum*, from Prestwick Car in Northumberland.

The stems are procumbent, imperfectly pinnate, leafy, the branches upright, obtuse, slightly hooked. Leaves of a yellow or tawny green, rusty or black with age, closely imbricated, strongly curved to one side, and in some degree twisted. They are lanceolate, entire, with a long taper point, compressed, keeled, single-ribbed throughout, furrowed lengthwise, when dry, but not across. Sheaths close, of shorter broader leaves. Fruitstalk two inches long, erect, dark purple. Capsule inclining, a little curved, cylindrical, ovate at the base, dilated at the mouth. Lid conical, short, acute.

2250



Not a new publication by J. S. Lundy, London.

✓





HYPNUM scorpioides.

Scorpion Hypnum.

CRYPTOGAMIA Musci.

GEN. CHAR. *Fringe* double: *outer* of 16 tapering teeth: *inner* a toothed membrane. *Flowers* lateral. *Fruit stalk* from a scaly sheath.

SPEC. CHAR. Stem procumbent. Branches scattered, swelling upwards. Leaves ovate, acute, concave, curved all one way, without a midrib. Capsules drooping. Lid conical.

SYN. Hypnum scorpioides. *Linn. Sp. Pl.* 1592. *Huds.* 501. *With.* 856. *Hull.* 271. *Retz.* 412. *Abbot.* 249. *Dicks. H. Sicc. fasc.* 3. 22. *Hedw. Sp. Musc.* 295.

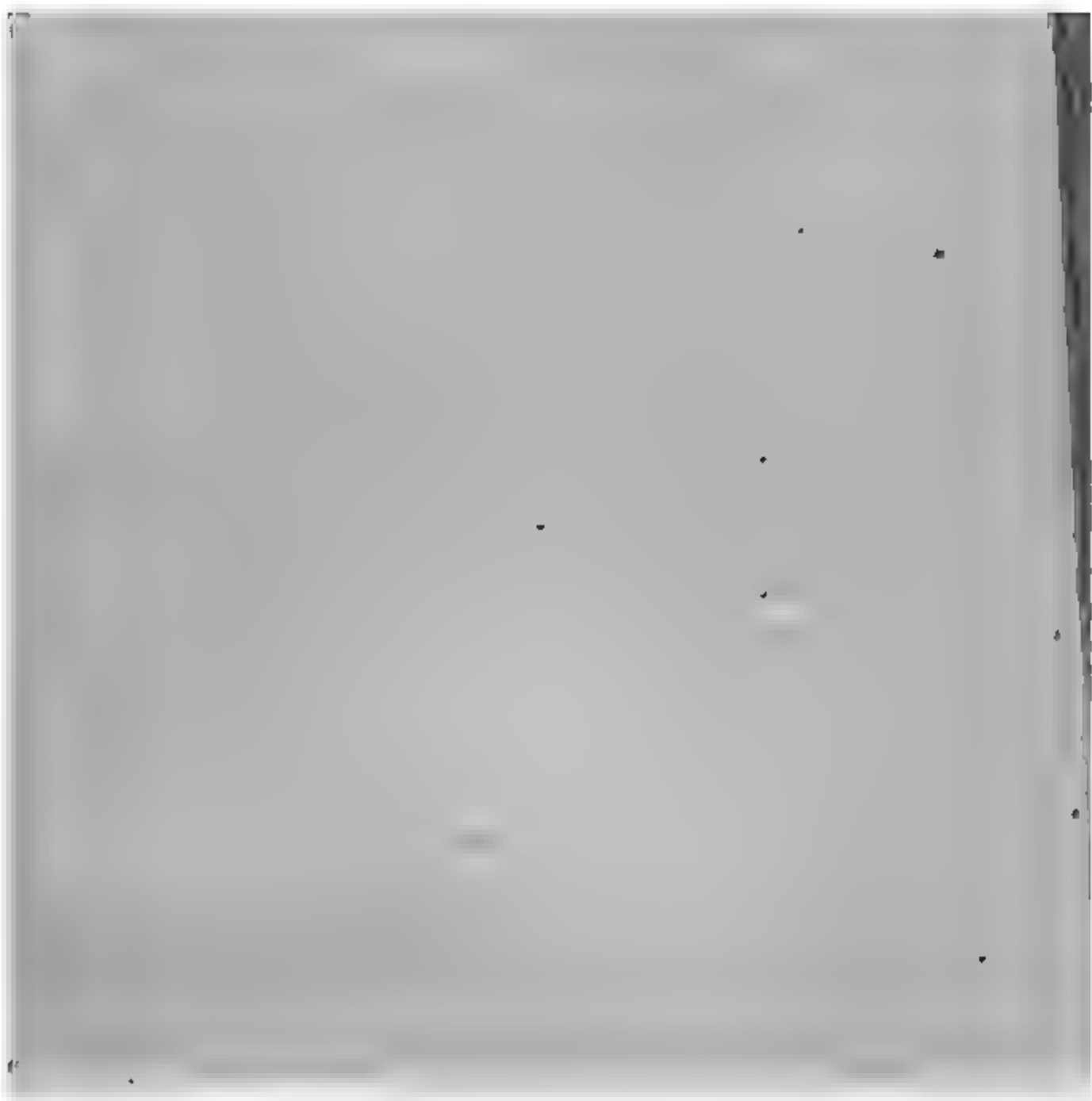
H. scorpioides palustre magnum, Lycopodii instar sparsum. *Dill. Musc.* 290. t. 37. f. 25.

COMMUNICATED from Cambridgeshire by the Rev. Mr. Hemsted. It grows on turfy bogs, and is said to be more frequent in the mountainous or northern counties than with us. Mr. Pitchford and the Rev. Mr. Bryant found it long ago on Felthorpe bogs 5 or 6 miles north of Norwich, where many

1039



Handwritten text, possibly a name or description, mostly illegible.



HYPNUM revolvens.
Curling-leaved Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scaly sheath. Outer fringe of 16 teeth, dilated at the base: inner a variously-toothed membrane. Veil smooth.

SPEC. CHAR. Stem nearly erect, pinnate. Leaves awlshaped, compressed, twisted into a sickle-shape, single-ribbed; striated when dry. Lid conical.

SYN. Hypnum revolvens. Swartz. Musc. Succ. 58 and 101. t. 7 f. 14. Sm. Fl. Brit. 1327. Turn. Musc. Hib. 188. Winch. Guide. v. 1. 111.

FIRST observed by the late Dr. Scott in boggy places near Swanlinbar, Ireland, but without fructification. Our specimens were communicated from Prestwick Car, Northumberland, by Mr. J. Thornhill in 1804, and Mr. Winch in 1806. They agree precisely with others sent by the original describer of this species, Professor Swartz.

The plant before us has something of the habit of *H. scorpioides*, t. 1039, not so well expressed in that plate as we could have wished, the specimens not having acquired their rich tawny colour. This is much smaller, more erect, and of a still darker hue, almost black, except the young branches, whose leaves are pale green, soon becoming tawny. The branches are short, alternate, and spreading. Leaves rather shining, closely imbricated, curved to one side, lanceolate or ovate, with an awlshaped acute termination, compressed, keeled, much curved and twisted, single-ribbed; when dry striated. Sheath pale brown, slender, close. Fruit-stalk above 2 inches high, red, wavy. Capsule cylindrical, curved, drooping, of a rusty hue, becoming slightly but irregularly furrowed by drying. Lid conical, short, with a little point.

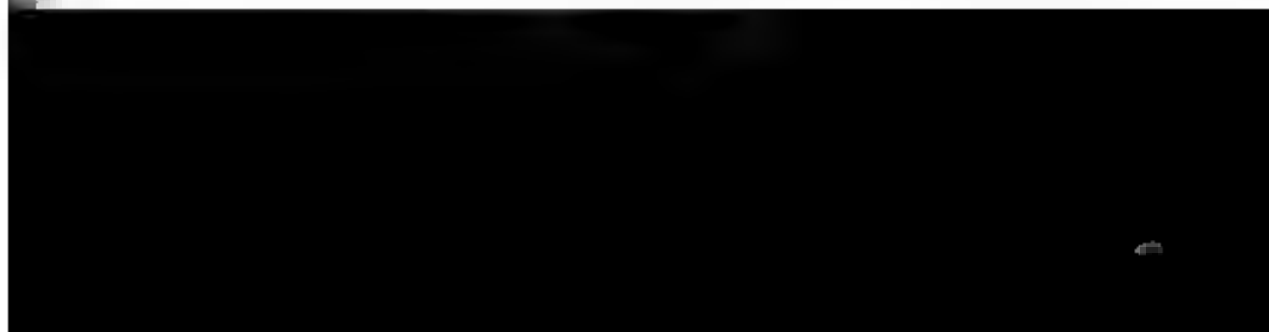
The compressed carinated leaves, and dark colour, distinguish this from *H. octocornu*, which is moreover a smaller plant.

2073



18. *Asplenium adnigrum* L.

✓





HYPNUM uncinatum.

Procumbent Hooked Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem procumbent, pinnated. Leaves tapering, sickle-shaped, single-ribbed, striated. Lid conical. Capsule constricted.

SYN. *Hypnum uncinatum.* *Hedw. Sp. Musc.* 289. *Crypt.* 1. 4. 65. t. 25. *Sm. Fl. Brit.* 1328. *Dicks. Crypt. fasc.* 4. 19. *Turn. Musc. Hib.* 190.

THIS grows in watery stony places in the north, and appears to be not unfrequent, particularly in Yorkshire. Mr. William Brunton communicated it from Moss Dale Head, Wensley Dale, in that country. It bears capsules in August and September.

The stems are procumbent and pinnated, forming loose, perennial, matted tufts. Leaves of a pale shining green, often verging towards yellow, closely imbricated, but leaning all to one side, and often so remarkably curved as each to form a complete circle; they are lanceolate with a long point, compressed, single-ribbed, striated and entire; the uppermost are rolled together into a sort of hook. Fruitstalks red, above an inch long. Sheath of many long slender pale leaves. Capsule drooping, curved, smooth, cylindrical, mostly contracted under the mouth, which is much dilated. Lid conical, short, acute. We exhibit in the plate a morsel of the inner fringe highly magnified, to show its curious structure, which indeed is common to many of the genus. Hedwig represents the intermediate teeth in pairs.

2011







[1665]

HYPNUM palustre.
Creeping Marsh Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem creeping. Branches erect. Leaves lanceolate, concave, nerveless, curved to one side, some of them spreading. Capsule drooping. Lid conical.

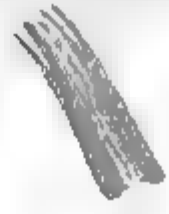
SYN. Hypnum palustre. *Linn. Sp. Pl.* 1593. *Sm. Fl. Brit.* 1329. *Huds.* 502. *With.* 857. *Hull.* 272. *Turn. Musc. Hib.* 191.

H. luridum. *Hedw. Sp. Musc.* 291. *Crypt. v.* 4. 99. *t.* 38. *Dicks. Crypt. fasc.* 4. 18.

H. heterophyllum aquaticum polycephalum repens. *Dill. Musc.* 293. *t.* 37. *f.* 27, A, not B. *Herb. Dill.*

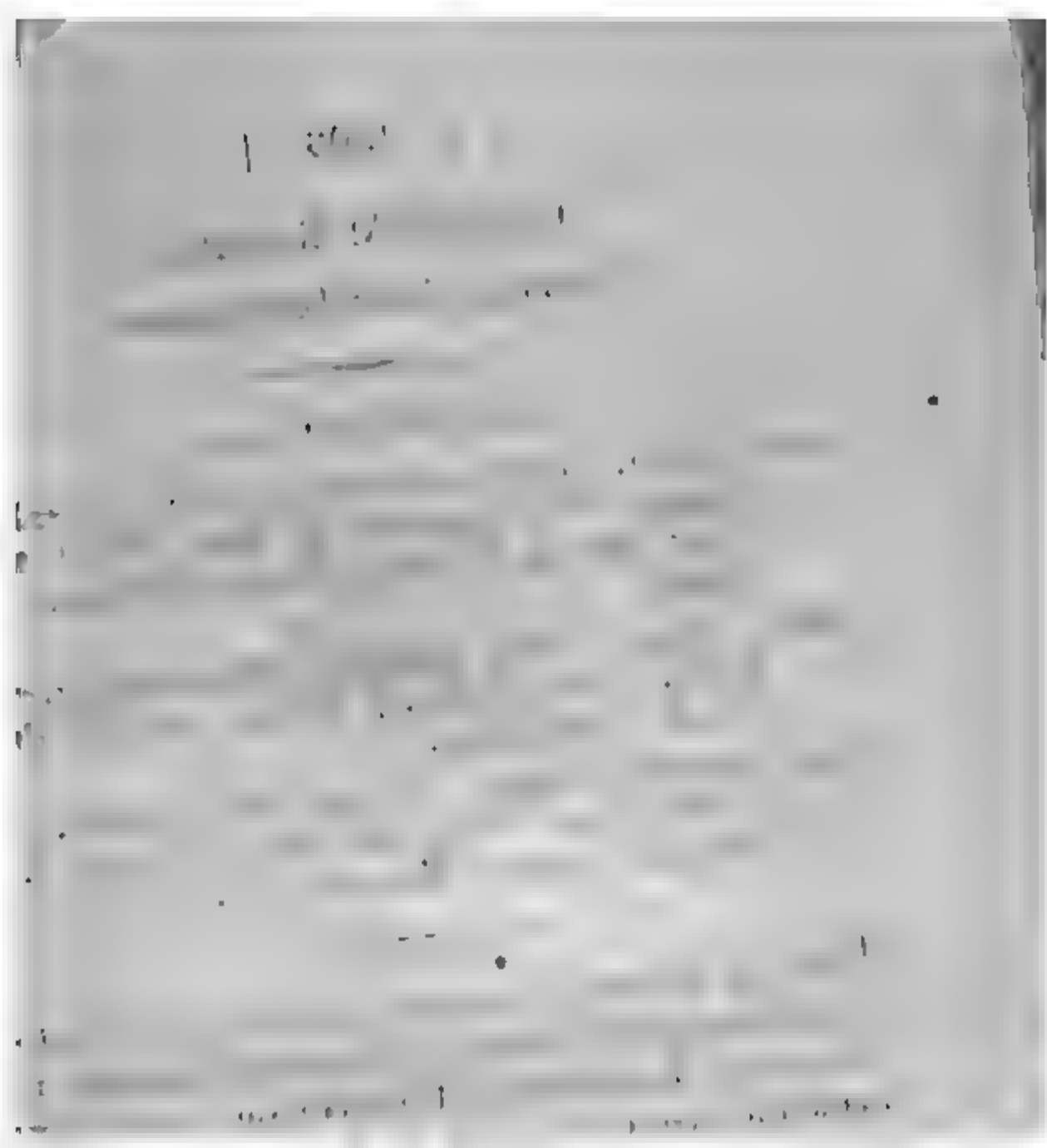
FOUND in marshy or watery places, generally growing on stones, or rotten wood, and bearing fruit in June and July. Our specimens were gathered near Arundel by Mr. Turner

1665



Not sold Published by J. S. Severy, London.





[1303]

HYPNUM fluviale.
Creeping River Feather-moss.

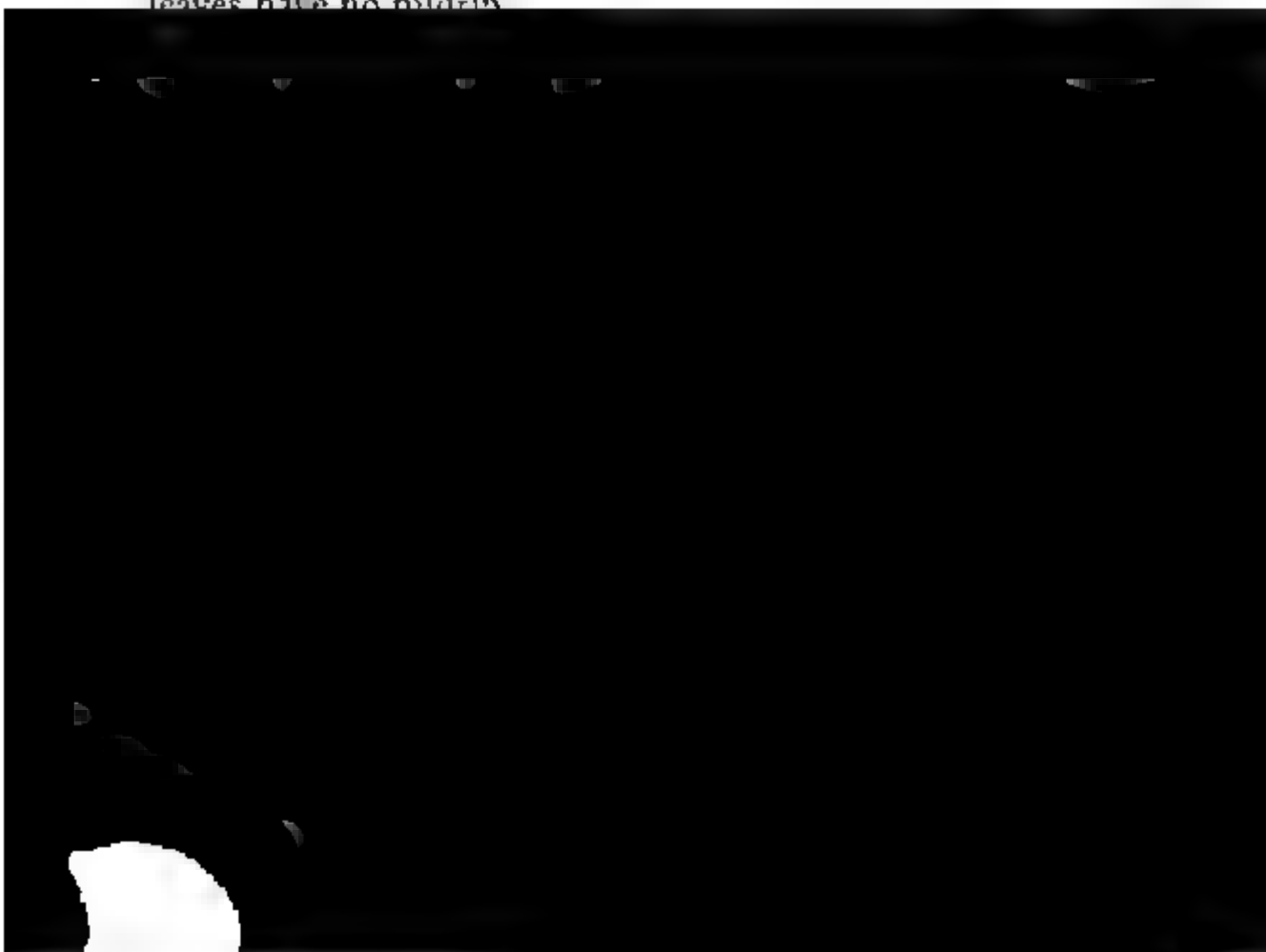
CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem creeping. Branches elongated, flaccid. Leaves ovate, concave, single-ribbed, curved. Lid convex.

SYN. *Hypnum fluviale.* Swartz. *Musc. Suec.* 63. Sm. *Fl. Brit.* 1390. Hedw. *Sp. Musc.* 277. t. 71. f. 4.
H. luridum. Swartz. *Musc. Suec.* 58.

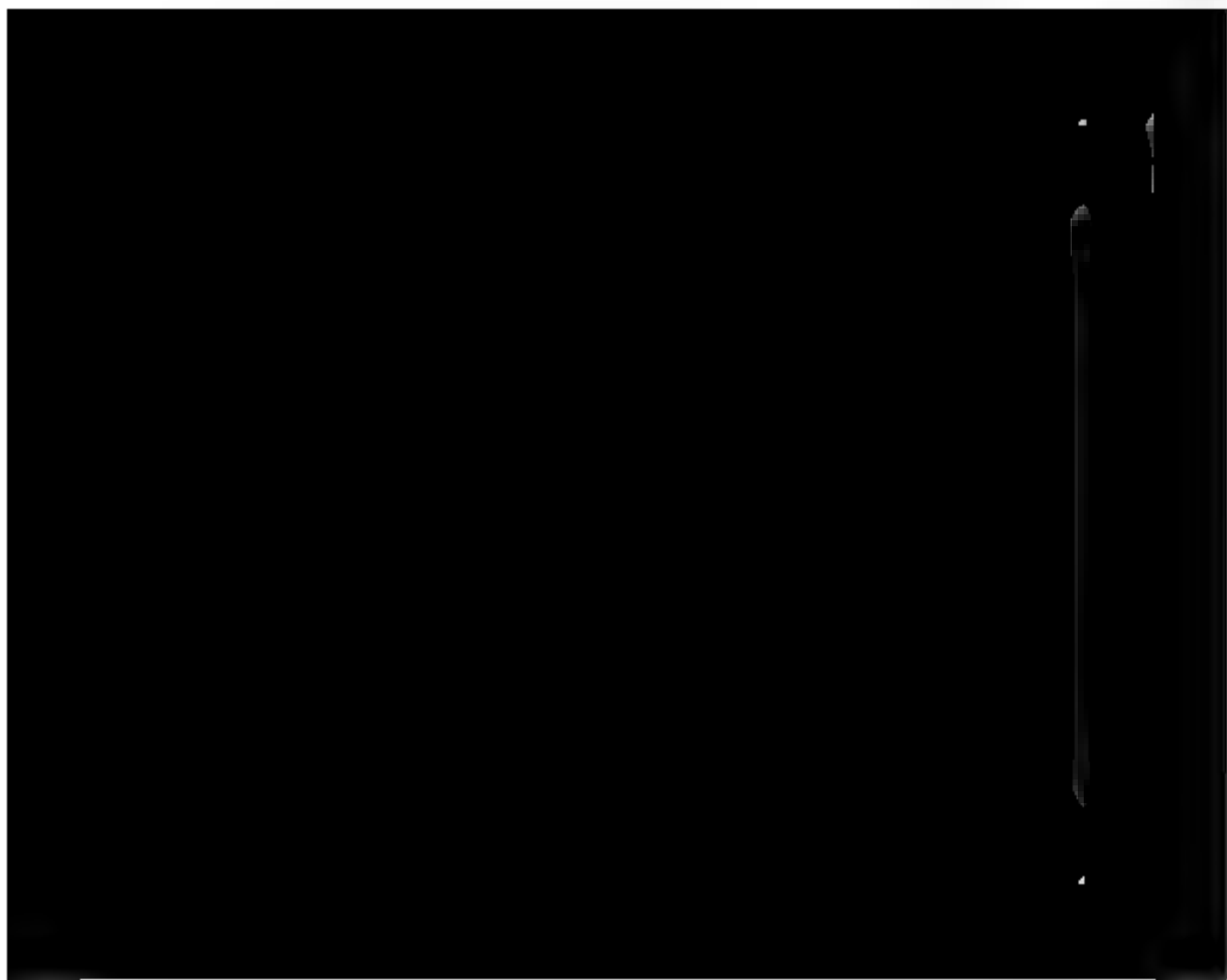
FOR this rare moss, a new acquisition to the British Flora, we are obliged to Mr. Turner, who is about to describe it in his work on Irish Mosses. It grows upon stones in rivers, and was discovered in Ireland by Dr. Scott and Mr. R. Browne. Specimens from Dr. Swartz himself have determined it to be his *H. fluviale* as well as his *luridum*; but the *luridum* of Hedwig is the *palustre* of Linnæus, an erect species, whose leaves have no midrib.



1303



20. 1. 1876





HYPNUM alpinum.
Alpine-torrent Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem creeping. Branches clustered. Leaves ovate, concave, pointed, with one rib reaching to the middle; the upper ones curved.

SYN. *Hypnum alpinum.* *Sm. Fl. Brit.* 1390. *Turn. Musc. Hib.* 192.

H. flagellare. *Hedw. Sp. Musc.* 282. t. 73. f. 1—3; the synonyms all wrong.

SENT by Mr. Winch from the north of England. Mr. Turner had previously observed it on rocks in the alpine regions of Snowdon, washed by the torrent of Llyn Fynnon Las, and had also received it from Ireland. Mr. Dickson found it in the alpine rivulets of Scotland, intermixed with his real *H. flagellare*, and the latter was the more abundant.

440



Salicornia virginica L.





[1860]

HYPNUM cupressiforme.
Cypress-branched Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scale
size. Outer fringe of 16 teeth, dilated at the base
into a variously-toothed membrane. Veil smooth.

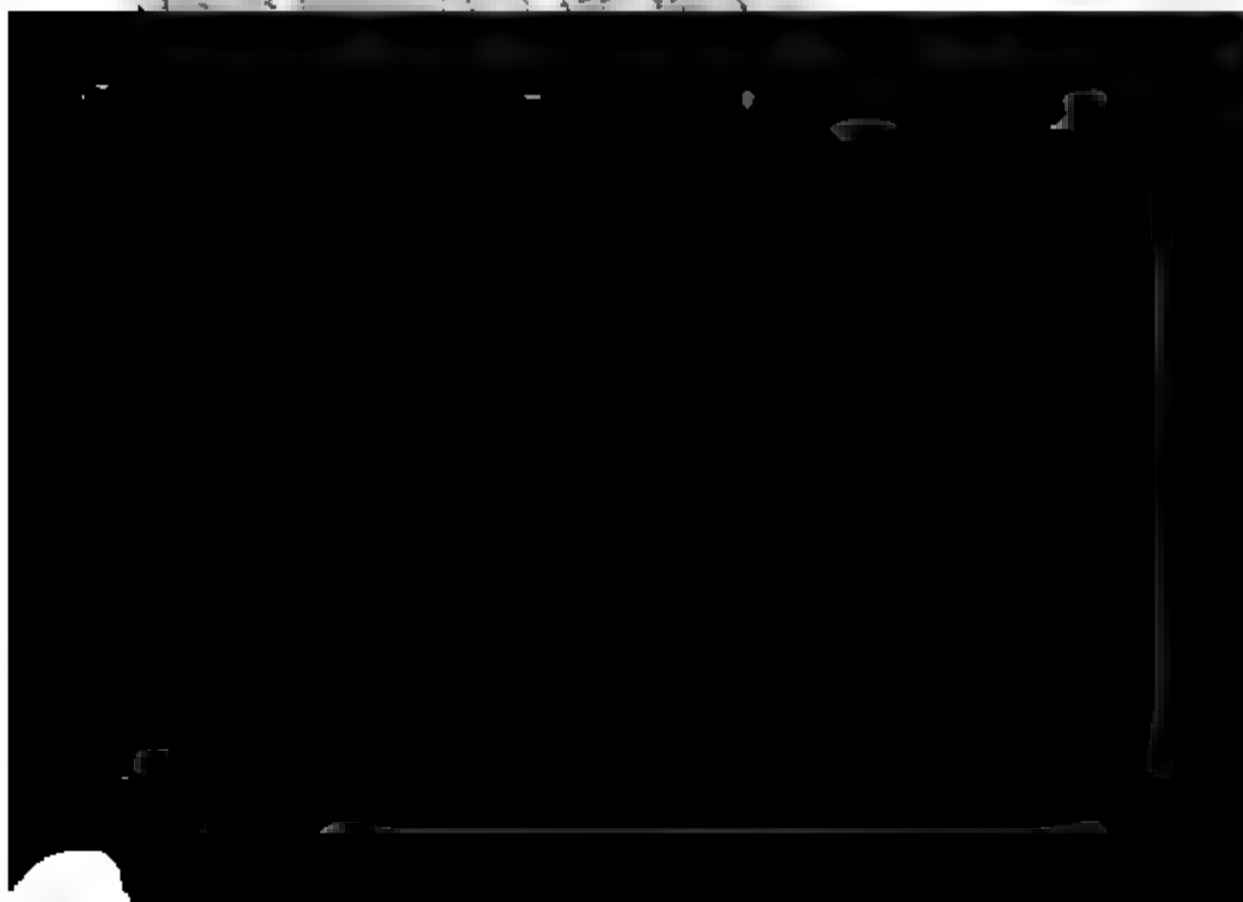
SPEC. CHAR. Stem prostrate, pinnated. Leaves lance-
ovate-shaped, concave, ribless, curved to com-
size. Lid beaked.

SEX. *Hypnum cupressiforme.* Linn. Sp. Pl. 1592.
Sw. Fl. Brit. 1331. Hedw. Sp. Musc. 291. Crypt.
t. 4. 59. t. 23. Huds. 500. With. 858. Hull. 272.
Reit. 435. Sibth. 298. Atbot. 248. Dicks. H.
Sec. fasc. 8. 21. Turn. Musc. Hit. 193.

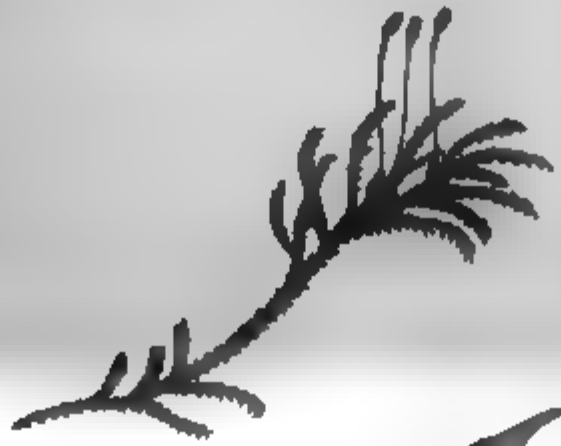
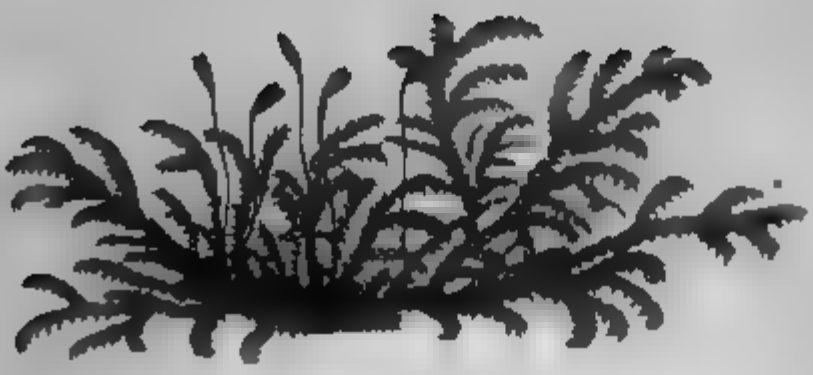
H. crispum cupressiforme, foliis aduncis. Dill. Musc.
287. t. 37. f. 23.

H. repens crispum cupressiforme. Raii Syn. 89.

VERY common about the roots of trees and on rocks and
stones in dry woods, where it forms broad elastic patches,
easily separable from what they grow upon, and bearing



1860



Blatt. 1860. Published by the U.S. Government, Wash. D.C.





HYPNUM dubium.

Fine Curve-leaved Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, from a lateral scaly sheath. Outer fringe of 16 teeth, dilated at the base inner a variously-toothed membrane. Veil smooth.

SPEC. CHAR. Stem prostrate, pinnate. Leaves ovate, pointed, single-ribbed, curved towards one side; the uppermost sickle-shaped. Lid conical.

SYN. Hypnum dubium. Necker. *Musc.* 161. Sm. *Fl. Brit.* 1332. Dicks. *Crypt. fasc.* 3. 10. H. Sicc. *fasc.* 13. 23. With. 854. Hull. 271. Turn. *Musc. Hib.* 195. Hoffm. *Germ. v.* 2. 71. Bridel. *Musc. v.* 3. 64.

H. filicinum β . Huds. 498.

H. repens filicinum trichodes palustre. Dill. *Musc.* 286. t. 36. f. 21. Raii *Syn.* 85. n. 31 & n. 28.

Leskea incurvata. Hedw. *Sp. Musc.* 216. t. 53. f. 8—14.

OUR figure is drawn from a specimen in Mr. Turner's collection, gathered by the late Dr. Scott in a rivulet at Luttrell's town, Ireland.

The stems are 2 or 3 inches long, prostrate, leafy, irregularly pinnated, with short, curved branches. Leaves of a dull yellowish green, ovate, pointed, entire in their lower part, finely serrated upward, with a strong rib; those on the stem broad, closely imbricated; those on the branches more or less falcate, curved to one side, and longer-pointed; all of them frequently furnished with a fold or furrow on each side of the rib. Fruitstalks an inch and half long, wavy, purple. Sheath of several pale, ovate, striated, acute leaves, justly observed by Mr. Turner to be finely toothed, at least near the point. Capsule ovate inclining to cylindrical, brown, smooth, drooping, finally curved; a little contracted below the mouth. Lid, according to Hedwig and Dillenius, conical and short.



Massia collected by P. S. Ravenel







HYPNUM fallax.
Fallacious Feather-moss.

CRYPTOGAMIA Musci.

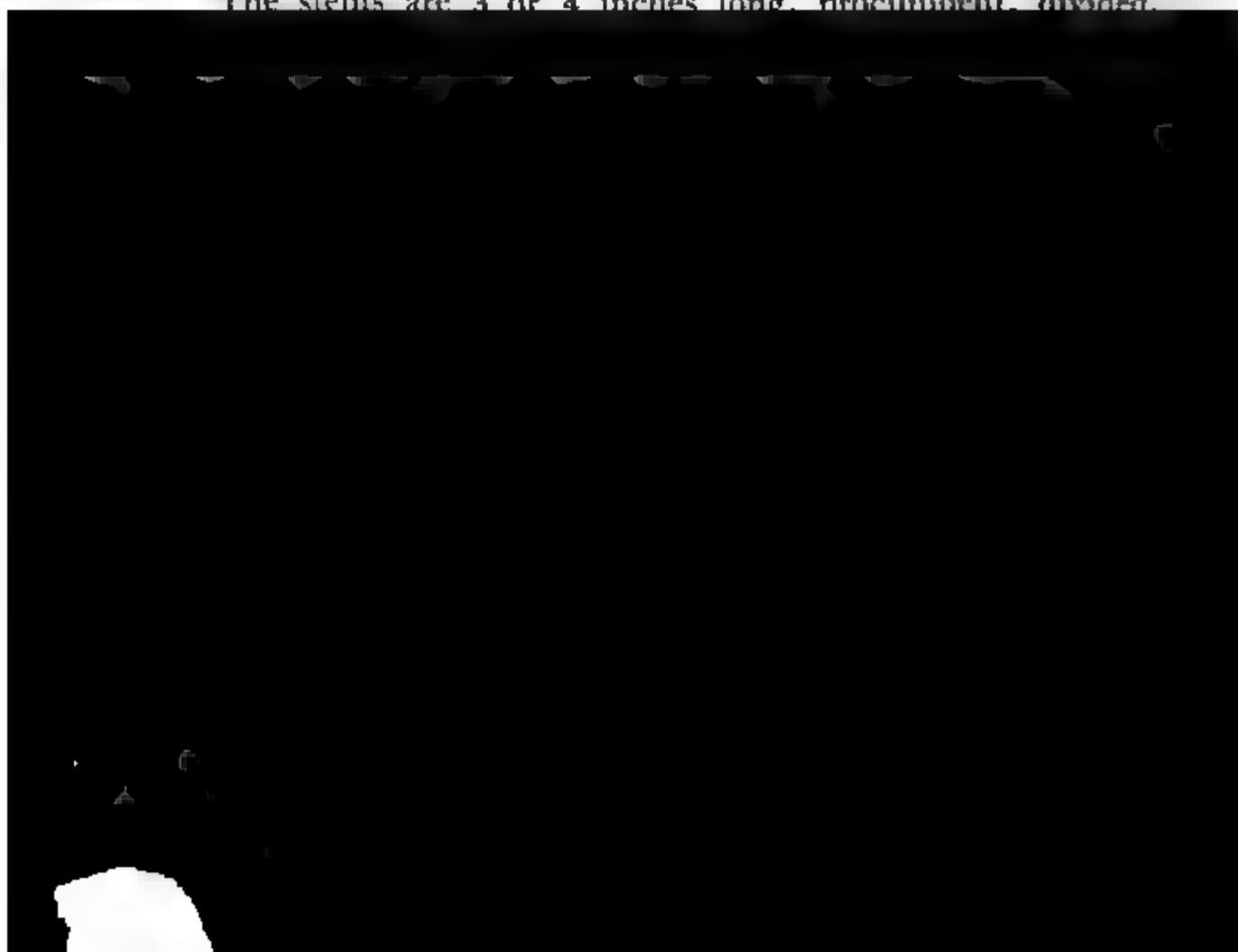
GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stems procumbent, divided, unequally pinnate; branches crowded, sometimes compound. Leaves lanceolate, broad at the base, pointed, strongly ribbed, curved, spreading. Capsule oblong, curved. Lid pointed.

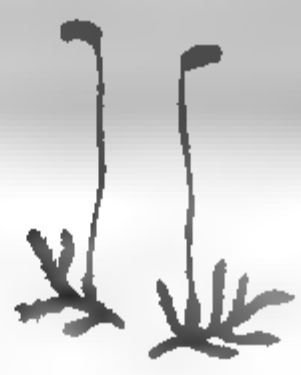
SYN. *Hypnum fallax.* *Bridel. Musc. v. 3. 66. t. 2. f. 1.*

THIS new addition to the British *Flora* was discovered at Copgrove, Yorkshire, in 1806, by the Rev. Mr. Dalton. Mr. Turner had received it the preceding year from Cambridge, but it was sent accidentally, as a package for other things.—
 It grows in bogs.

The stems are 3 or 4 inches long, procumbent, divided.



1127



1128





[1569]

HYPNUM commutatum.

Larger Curled Fern Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem procumbent, pectinated. Leaves ovate, pointed, curled, ribbed almost to the extremity, beardless. Lid convex, pointed.

SYN. Hypnum commutatum. *Hedw. Sp. Musc.* 284. *Crypt. v. 4.* 68. *t.* 26. *Sm. Fl. Brit.* 1333. *Turn. Musc. Hib.* 196.

H. repentis filicini crispus varietas B, C, D. *Dill. Musc.* 283. *t.* 36. *f.* 19, B—D.

THIS elegant moss grows in watery and marshy places on a calcareous soil. At Hackfall in Yorkshire, from whence the Rev. Mr. Dalton communicated our specimens, it is plentiful, and frequently bears fruit in April and May.

The stems are perennial, from 4 to 8 inches or more in length, simple or divided, rusty, the ascending branches pinnated with a number of short hooked ones, all densely clothed with leaves, which are small, of a rich somewhat tawny green, not shining, curved towards one side, and always, whether wet or dry, curled and crisped. They are ovate, entire, long-pointed, beardless, furnished with a rib which disappears before it reaches the point, and marked with a few short ribs or plaits at their base. Sheath pale; its inner leaves long and striated. Fruitstalk an inch and half long, of a fine crimson and yellow. Capsule arcuate and drooping, nearly cylindrical, with a spreading mouth. Lid convex, scarcely conical, with a short straight point.

2-27



.....



Several small, dark, irregular marks or artifacts are scattered across the right side of the page, appearing as faint, scattered dots and short horizontal dashes.

74.

HYPNUM filicinum.

Lesser Golden Fern Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem procumbent, imperfectly pectinated. Leaves ovate, pointed, bearded, ribbed, curved to one side. Lid convex, pointed.

SYN. Hypnum filicinum. *Linn. Sp. Pl.* 1590. *Sm. Fl. Brit.* 1334. *Hedw. Sp. Musc.* 285. t. 76. f. 5—10. *Crypt. v. 4. t. 26. f. A, B.* *Huds.* 498. *With.* 854. *Hull.* 271. *Relh.* 433. *Sibth.* 294. *Abbot.* 247. *Turn. Musc. Hib.* 197.

H. repens filicinum crispum. *Dill. Musc.* 282. t. 36. f. 19, A, E, F. *Raii Syn.* 85.

EVEN Dillenius confounded this with the preceding, from which it differs in being rather smaller, less accurately pectinated, of a more golden or tawny hue, and its branches more densely clothed with rusty down. More precise differences are found on minute examination. The leaves of *H. filicinum* are furnished with a rib even to their points, and tipped with a minute hair. They are falcate, or curved to one side, in a wet as well as dry state, but in the latter only are they also curled or crisped. The fruitstalks are nearly two inches long, and proceed from the main stem. Capsule cylindrical, curved and drooping. Lid convex, with a small point.

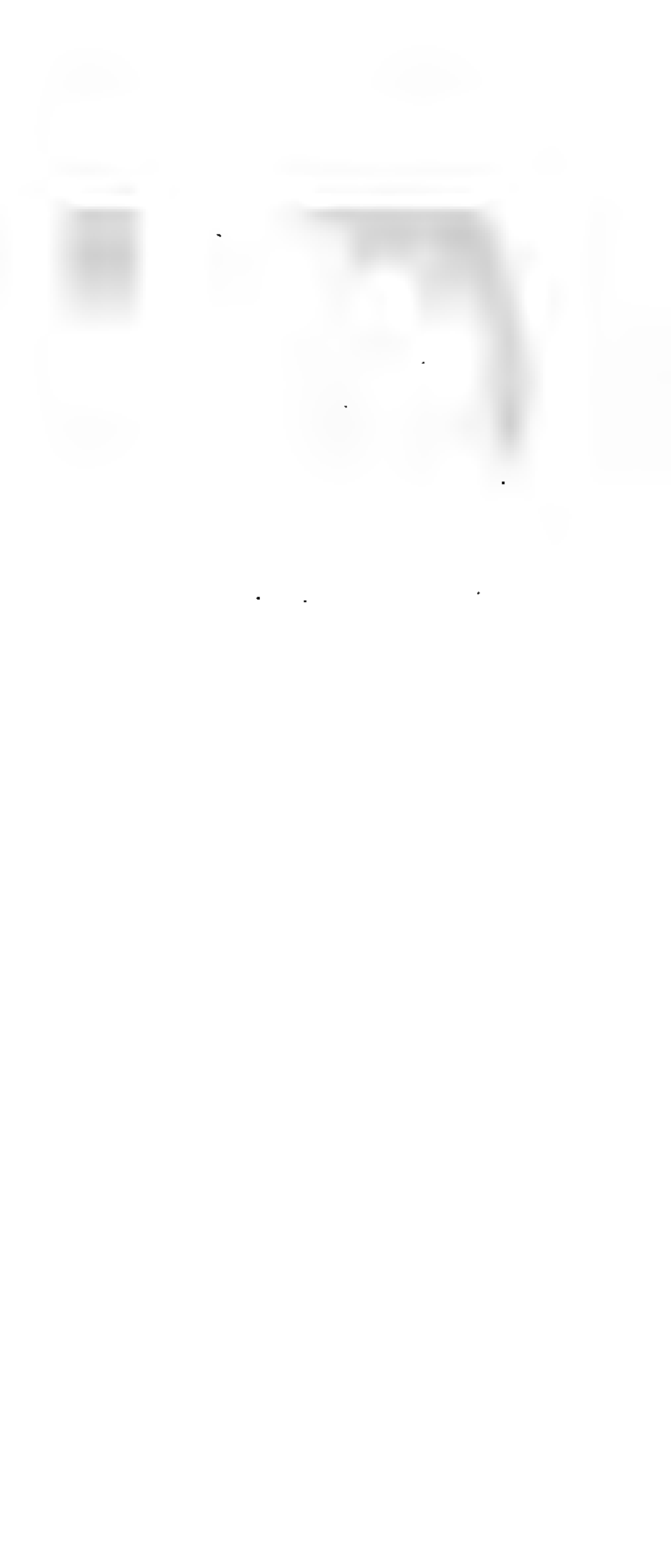
This species is not rare in watery mountainous places, bearing fruit, though not universally, in April or May.

1870



Myrica maritima L.





[1827]

HYPNUM molluscum.

Plumy Crested Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem procumbent, pectinated. Leaves ovate-awlshaped, curved, without ribs. Capsule ovate, drooping. Lid conical.

SYN. Hypnum molluscum. *Hedw. Sp. Musc.* 289. *Crypt. v. 4.* 56. *t.* 22. *Sm. Fl. Brit.* 1335. *Turn. Musc. Hibern.* 198.

H. Crista-castrensis. *Huds.* 498. *With.* 854. *Hull.* 271. *Relh.* 434. *Sibth.* 295. *Abbot.* 247. *Dicks. Fl. Sicc. fasc.* 11. 20.

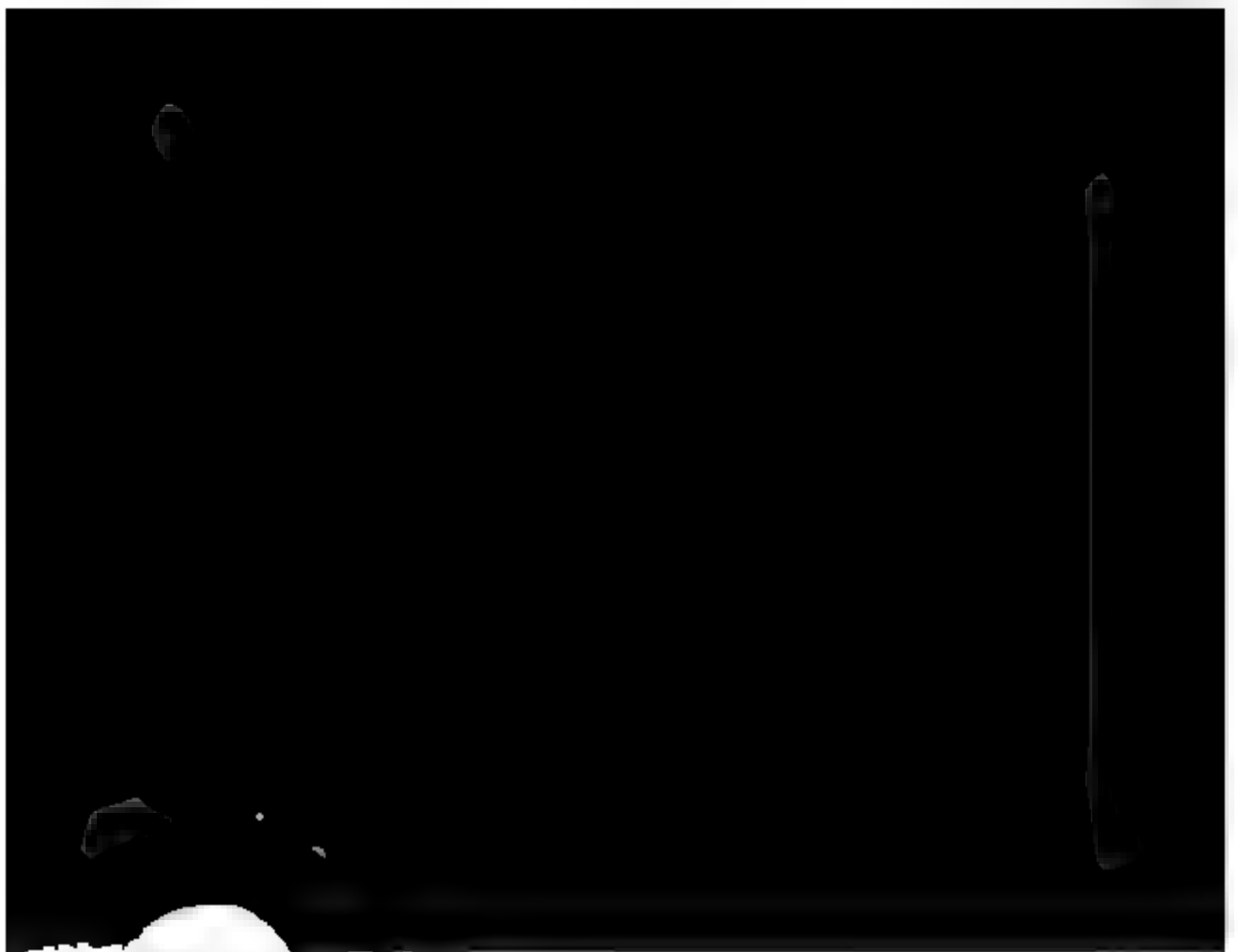
H. filicinum, cristam castrensem representans. *Dill. Musc.* 284. *t.* 36. *f.* 20, A.

Muscus filicifolius luteus, folio crasso et undulato. *Raii Syn.* 86, sub *n.* 32.

1570



Handwritten text, possibly a name or description, mostly illegible.





HYPNUM *Crista-castrensis*.
Ostrich-plume Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem procumbent, closely pectinated. Leaves lanceolate, curved, nearly entire, plaited, without ribs. Capsule oblong, drooping. Lid conical, short.

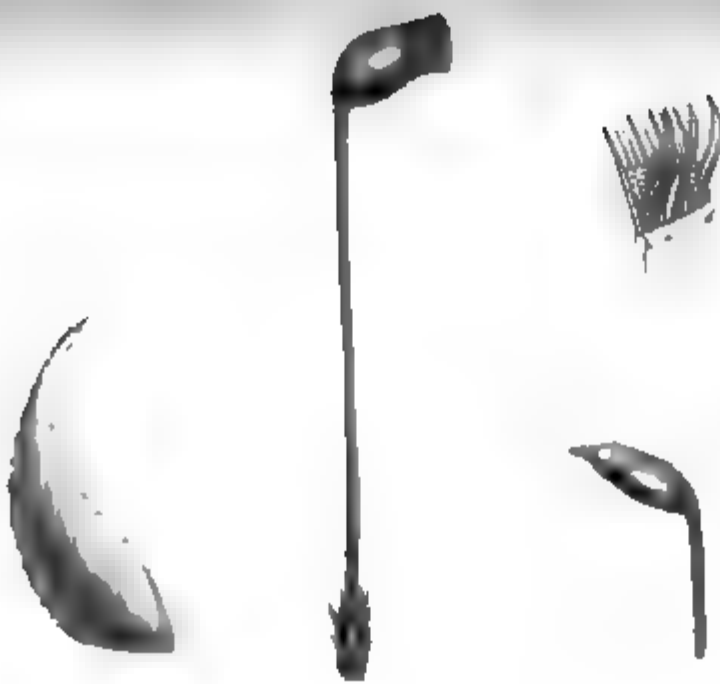
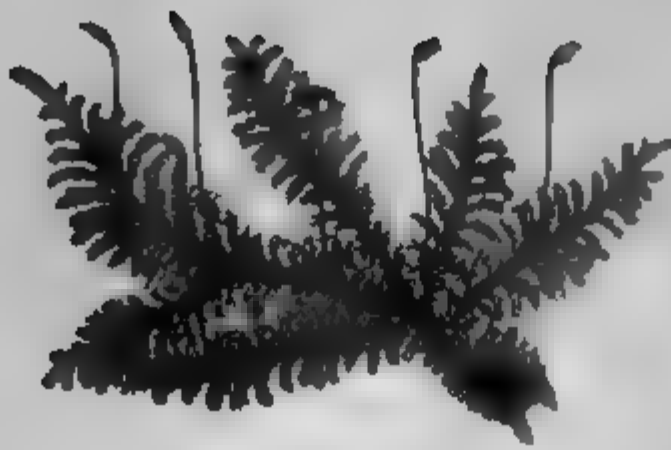
SYN. *Hypnum Crista-castrensis*. *Linn. Sp. Pl.* 1591.
Hedw. Sp. Musc. 287. t. 76. f. 1—4. *Ehrh. Crypt.* 6.

H. n. 1768. *Hall. Hist.* v. 3. 34.

THE first British specimens we ever saw of this fine moss were gathered by Mr. G. Don, several years ago, but since the publication of *Fl. Brit.*, in woods in Scotland. That in our plate was sent from a wood at the head of Hawes-water, Cumberland, by the Rev. Mr. Dalton to Mr. Turner, in 1809. We have been obliged to draw the fruit from one of Mr. Davall's beautiful Swiss specimens.

We find by the Linnæan herbarium that Hedwig was right in the above name; see *H. molluscum*, t. 1327, which English botanists had mistaken for *Crista-castrensis*. We have supposed Dillenius's t. 36. f. 20, B, might be the latter, but it may not be so, and therefore we decline a positive reference to that figure.

The present is a much larger and handsomer plant than the *molluscum*, more accurately and closely pectinated, and elegantly curved, truly like an ostrich plume. The leaves are narrower and longer in proportion, scarcely serrated except at their points, destitute of a rib, but plaited, and very strongly curved. Fruit-stalks an inch and half high, or more, red. Capsule elongated and almost cylindrical, drooping and curved. Lid considerably shorter than in *molluscum*, quite straight, without any elongated point.





[1902]

HOOKERIA lucens.

Shining Hookeria.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate, reticulated and dotted, from a lateral scaly sheath. Outer fringe of 16 teeth: inner membranous, with 16 teeth. Veil reticulated, cellular, undivided.

SPEC. CHAR. Leaves in three rows, elliptical, uniform, entire, without ribs.

SYN. Hookeria lucens. Sm. MSS. apud Soc. Linn.

Hypnum lucens. Linn. Sp. Pl. 1589. Sm. Fl. Brit. 1295. Hedw. Fund. v. 1. 13. t. 1. f. 4—6. Sp. Musc. 243. Huds. 495. With. 845. Hull. 268. Lightf. 743. Turn. Musc. Hib. 155. Dick. H. Succ. fasc. 2. 22.

H. pennatum aquaticum lucens, longis latisque foliis. Dill. Musc. 270. t. 34. f. 10.

H. repens filicifolium ramosum, foliolis majoribus magisque crebris. Dill. in Raii Syn. 88.

GATHERED on Holt heath, Norfolk, laden with capsules, in February 1803, by Mr. W. Jackson Hooker, F.L.S. the discoverer of *Burbaumia aphylla*, to whom I am happy to dedicate this new genus; more especially as the reticulated habit, for which it is conspicuous, so nearly agrees with the *Jungermanniæ*, a tribe concerning which Mr. Hooker is preparing a very elaborate and scientific work.

I have long ago hinted, Fl. Brit. 1295, that this moss might constitute a new genus, since which the observations of M. Labillardiere prove *Anictangium bulbosum* of Hedwig to belong to the same, and I am indebted to Mr. Menzies for 6 more species, all agreeing in their reticulated capsules, which I find the most essential generic mark, and more or less closely in habit and the other characters above given.

Hookeria lucens grows in wet shady places, most frequently in the northern counties. The stems form tufts among grass, creeping, partly ascending. Leaves generally in 3 ranks, vertical, spreading in 2 rows, elliptical, entire, pale, pellucid, juicy, most beautifully reticulated, but without rib or veins. Sheaths solitary or in pairs, of ovate, pointed leaves. Stalks red. Capsule somewhat drooping, ovate, brown, shining, all over reticulated, as well as its conical lid, the margin of which is fringed with a chain-like ring. Veil conical, tight, crenate, whitish, all over reticulated, and very



In 1800 published by Lewis & Clarke

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2

FONTINALIS antipyretica.

Greater Water-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Capsule with a lid and veil, sessile, enclosed in an imbricated calyx.

SPEC. CHAR. Leaves pointed, folded so as to form a keel, disposed in three ranks. Fructification lateral.

SYN. Fontinalis antipyretica. *Lin. Sp. Pl.* 1571.

Huds. Fl. An. 467. *With. Bot. Arr.* v. 3.75.

Relh. Cant. 395. *Sibth. Ox.* 293.

F. major, foliis triangularibus complicatis, capitulis in foliorum alis sessilibus. *Raii Syn.* 79.

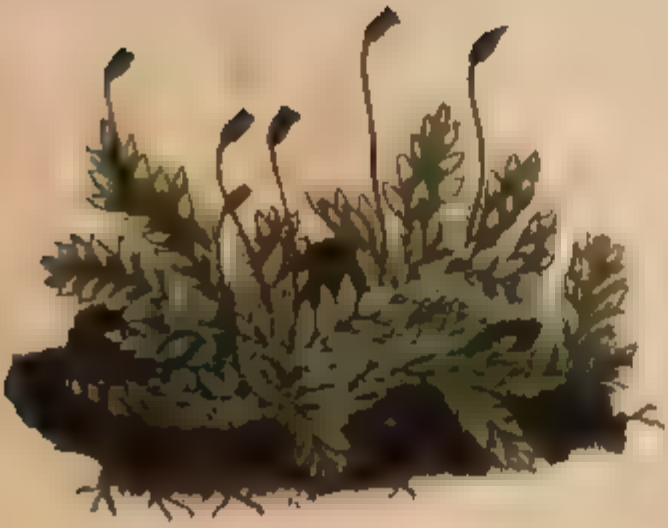
F. triangularis major complicata, e foliorum alis capsulifera. *Dill. Musc.* 254. t. 33. f. 1.

NOT uncommon in slow deep waters, growing upon rocks, posts, &c. floating with the stream considerably below the surface, and very rarely producing any fructification.

The root is small, but strong, and perennial. Stem slender, tough and wiry, much branched, from 3 or 4 inches to a foot long, clothed with numerous leaves, which are imbricated generally in three rows, of an ovate sharp-pointed form, but compressed so as to become acutely carinated, entire in the margin, their colour a deep transparent green. Capsules lateral, solitary, on very short scaly flower-stalks, elliptical, entirely invested with imbricated scales, and their orifice ciliated with about 16 red taper teeth. The lid is conical, and the veil of the same form, but rather longer.

Linnaeus informs us, in his *Flora Suecica*, that the Swedes "stuff in this moss between their chimneys and wooden walls, to guard the latter from fire:" a passage which English writers have greatly misapprehended; for, without supposing any thing very incombustible in its nature, it may answer the purpose above described merely by preventing the passage of air.

1902



Ant. & Sch. Polypodium, - 18. m. n. Linn.



[1861].

FONTINALIS squamosa.*Shining Scaly Water-moss.***CRYPTOGAMIA Musci.**

GEN. CHAR. *Caps.* oblong, lateral, enclosed in a scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* reticulated.

SPEC. CHAR. Leaves imbricated, lanceolate, pointed, concave. Scales of the sheath blunt, as well as the lid.

SYN. *Fontinalis squamosa.* *Linn. Sp. Pl.* 1571. *Sm. Fl. Brit.* 1336. *Hedw. Sp. Musc.* 299. *Crypt. v. 3.* 32. *t.* 12. *Huds.* 467. *With.* 788. *Hull.* 275. *Lightf.* 696. *Dicks. H. Sicc. fasc.* 5. 25. *Turn. Musc. Hib.* 199.

F. squamosa tenuis sericea atro-virens. *Dill. Musc.* 258. *t.* 33. *f.* 3.



1867



Herbarium Published by J. C. Sowerby, London

1861



MariaHS Publish L by Jd Society London





2432



Hy. in part. by J. S. G. G. G.





BRYUM hygrometricum.

*Yellow twisting Bryum.**CRYPTOGAMIA Musci.*

GEN. CHAR. *Caps.* with a lid. *Veil* smooth. *Flower-stalk* from a terminal tubercle.

SPEC. CHAR. Stem none. Capsule drooping, pear-shaped. Veil oblique, angular, with a slender beak. Leaves ovate, collected together at their points.

SYN. *Bryum hygrometricum.* *Huds. Fl. An.* 488.

Mnium hygrometricum. *Linn. Sp. Pl.* 1575. *With. Bot. Arr.* v. 3. 86. *Relh. Cant.* 399.

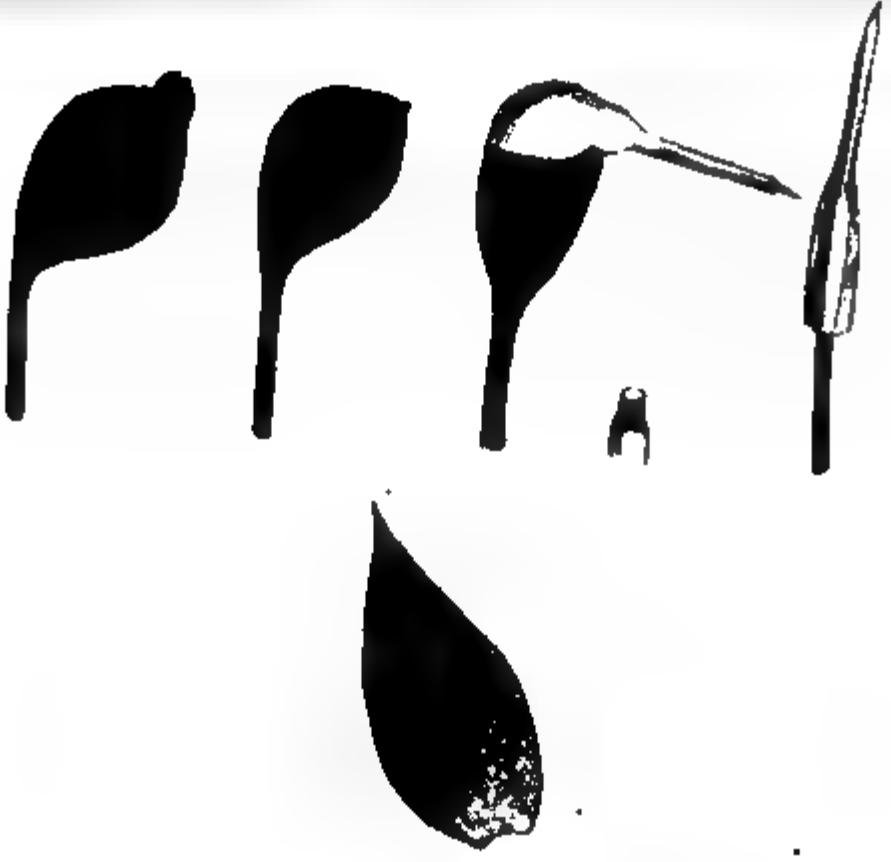
Funaria hygrometrica. *Sibth. Ox.* 288.

Bryum aureum, capitulis reflexis piriformibus, calyptra quadrangulari, foliis in bulbi formam congestis. *Raii Syn.* 101.

B. bulbiforme aureum, calyptra quadrangulari, capsulis piriformibus nutantibus. *Dill. Musc.* 407. t. 52. f. 75.

EXTREMELY common on moist garden walks and neglected flower-pots, waste ground, heaths, &c. producing its capsules in the spring and early part of summer abundantly.

Roots long, simple, downy. Stem none, or very short, bearing a few broad, ovate, entire, acute, pellucid leaves, so



FUNARIA Muhlenbergii.

Hair-pointed Cord-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* obovate. *Outer fringe* of 16 oblique teeth, cohering at their tips: *inner* of 16 flat teeth. *Flowers* terminal. *Veil* beaked.

SPEC. CHAR. Leaves concave, finely serrated, hair-pointed. Capsule oblique. Veil cylindrical. Lid slightly conical.

SYN. *Funaria Muhlenbergii.* *Turn.* in *Annals of Botany*, v. 2. 198.

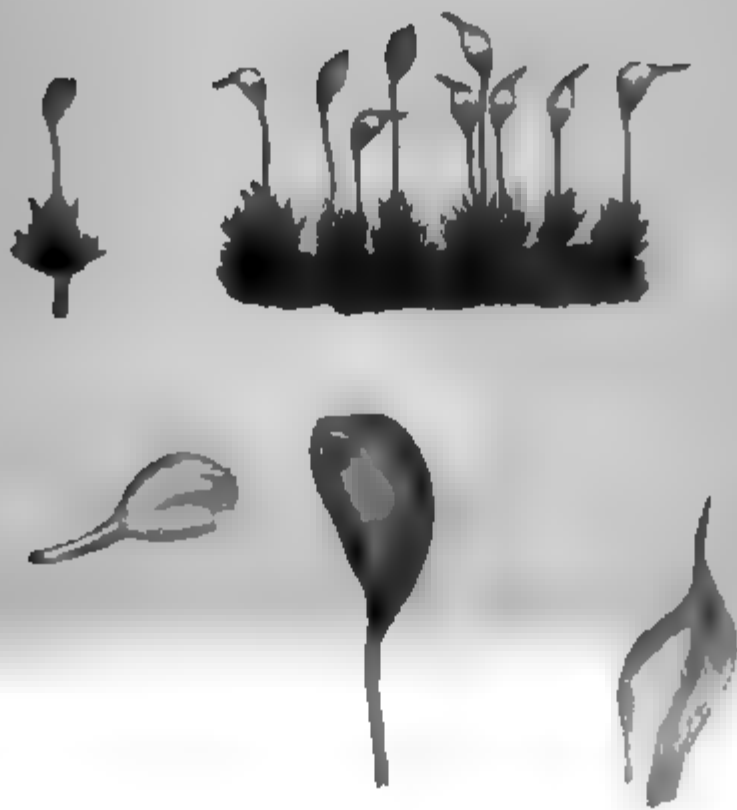
FOR this new and highly interesting addition to the Flora of Britain we are obliged to the Rev. Mr. Dalton of Copgrove, who found it in that neighbourhood. It was first discovered near Lancaster in Pennsylvania by the Rev. Dr. Muhlenberg, and is mentioned by Mr. Turner in his work on Irish Mosses, p. 106, as well as in Dr. Sims, and Mr. König's *Annals of Botany*. It makes only the third species hitherto known of the very distinct and natural genus to which it belongs, one of which species is common in Europe, and is figured in our 5th volume, t. 342, and the remaining one, from Hispaniola, is in the Linnæan herbarium.

The plants of the present species grow in a scattered manner, and at first sight greatly resemble the *Gymnostomum pyriforme*, t. 413, but are of a darker green. The stem is short and simple. Root brown, long, probably annual. Leaves scarcely at all spreading, concave, ovate, finely serrated, acute, with a strong rib terminating in a hair-like point; their substance more reticulated than in *F. hygrometrica*. Stalk terminal, not an inch long, of a fine red, somewhat curved. Capsule nearly upright, pear-shaped, oblique, smooth, green. Lid of a short conical form, red at the edge. Outer fringe red; inner pale green. Veil bent obliquely, inflated at the base, its beak cylindrical, not quadrangular.



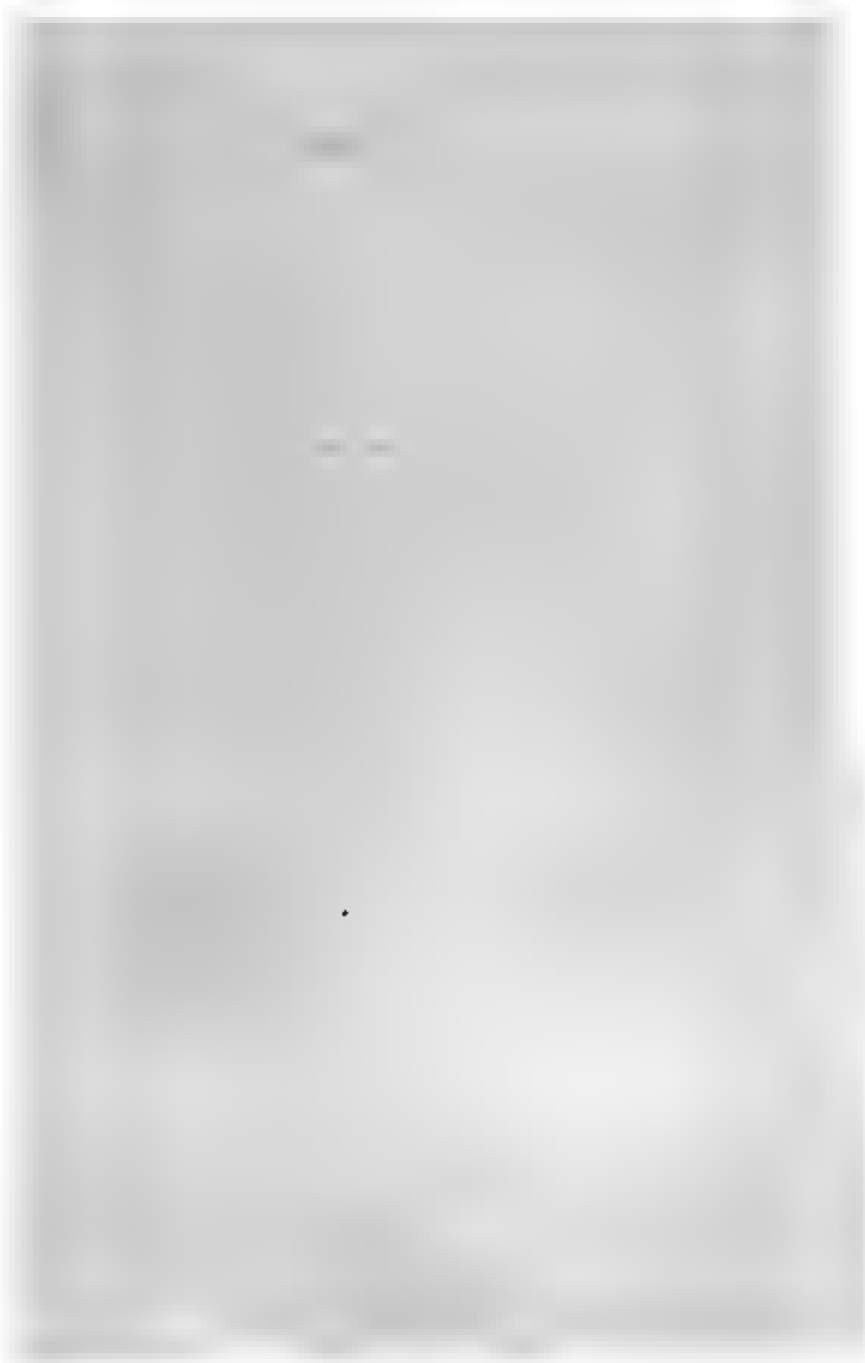


2417



1848. *Salix glauca* L. - *arvensis* L.





FUNARIA Templetoni.

Long-fruited Cord-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. obovate. Outer fringe of 16 oblique teeth, cohering at their tips: inner of 16 flat teeth. Flowers terminal. Veil beaked.

SPEC. CHAR. Stem elongated, somewhat branched. Leaves spreading, ovate, entire. Capsule obovate, tapering at the base.

DISCOVERED by our worthy friend Mr. Templeton near Belfast; and we gladly accede to the wishes of Mr. Turner, in calling it after the discoverer, especially as we have sought in vain for any thing similar, among several nondescript exotic *Funariæ* now in our possession.

This species differs widely from the only two of its genus already described as British, see t. 342 and 1497, in its caulescent habit, and scarcely oblique fruit, the form of which is far more slender than in those, with an elongated tapering base. The proliferous and occasionally branched stem shows this moss to be perennial. The leaves differ from *F. hygrometrica* in being expanded and nearly flat; from *F. Muhlenbergii* moreover in being entire, and, though pointed, destitute of a hair-like termination.—The fringe is quickly deciduous and very tender, nor have we had an opportunity of examining it critically. The veil is sufficiently like the rest of the genus, though not, as in the original species, quadrangular.

2524



Ascomyces puberulus J. A. Swartz, *Bot. Beech.*





BARTRAMIA Halleriana.

*Lateral Bartramia.**CRYPTOGAMIA Musci.*

GEN. CHAR. *Capsule* spherical, at length furrowed. *Outer fringe* of 16 tapering teeth; *inner* a plaited membrane.

SPEC. CHAR. Fruit-stalks lateral, curved, shorter than the leaves. Leaves linear-awlshaped, without lateral nerves.

SYN. *Bartramia Halleriana.* Hedw. *Crypt.* v. 2. 111. t. 40. Swartz. *AE. Holm. ann.* 1795. 268.

Bryum laterale. Hudf. 483. *Lightf.* 727. *Witb.* 823. *Hull.* 254. *Dicks. H. Sicc. fasc.* 5. 20.

FOUND in the moist stony parts of mountainous woods in Scotland, Wales, and the north of England, but not commonly. Mr. Griffith sent our specimens from Wales in July 1800, at which season the seeds are for the most part ripe.

This moss forms broad patches of dense, upright, branched stems, near two inches high, and entirely clothed from top to bottom with leaves, which are a little more inclined to one side than the other. The lower part of the stems is also clothed with dense brown woolly radicles. The leaves suddenly taper from a broad base into a linear-awlshaped slender figure, serrated at the edge, and sharply hooked, having one fine





March 1, 1884. J. Alford, Esq. London







[998]

BARTRAMIA pomiformis.

*Apple Bartramia.**CRYPTOGAMIA Musci.*

GEN. CHAR. Capsule spherical, at length furrowed. Outer fringe of 16 tapering teeth; inner a plaited membrane.

SPEC. CHAR. Fruit-stalks erect, longer than the stems. Leaves awlshaped.

SYN. Bartramia pomiformis. Swartz. *Act. Holm. ann.* 1795. 268.

Bryum pomiforme. *Lim. Sp. Pl.* 1580. *Huds.* 474. *Witb.* 822. *Hull.* 259. *Reib. Suppl.* 3. 10. *Abbot.* 240. *Dicks. H. Sicc. fasc.* 10. 20.

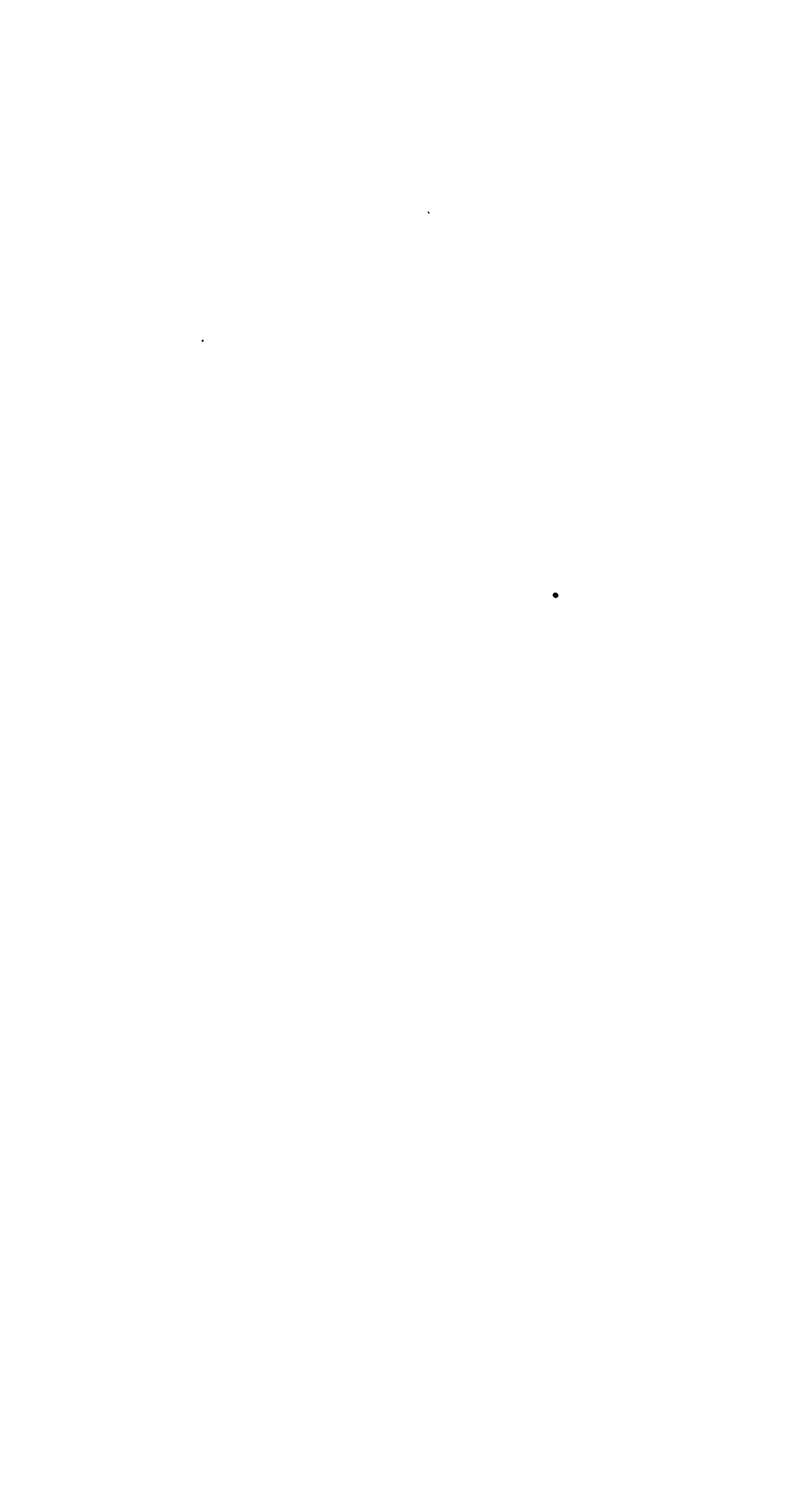
B. capillaceum, capsulis sphaericis. *Dill. Musc.* 339. t. 44. f. 1.

B. trichoides virescens, erectis majusculis capitulis maliformibus. *Raii Syn.* 97.

THIS elegant moss is found here and there on sandy shady banks, or in black boggy mould in the clefts of rocks, bearing its green round fruit about April, which in the following month discharges the seeds, becoming brown, more oblong, and marked with 16 parallel furrows as in the preceding. There



March 1 1861 Published by J. G. Smith, London





[1526]

BARTRAMIA *crispa*.

Frizzled Bartramia.

CRYPTOGAMIA *Musc.*

GEN. CHAR. Capsule spherical, at length furrowed. Outer fringe of 16 tapering teeth; inner a plaited membrane.

SPEC. CHAR. Fruit-stalks erect, longer than the stems. Leaves serraceous, broad at the base, curled when dry. Capsule somewhat oblique. Lid obtusely conical.

SYN. *Bartramia crispa* Swartz. *Musc. Svec.* 73.
Flora of Bor. v. 1. 587.

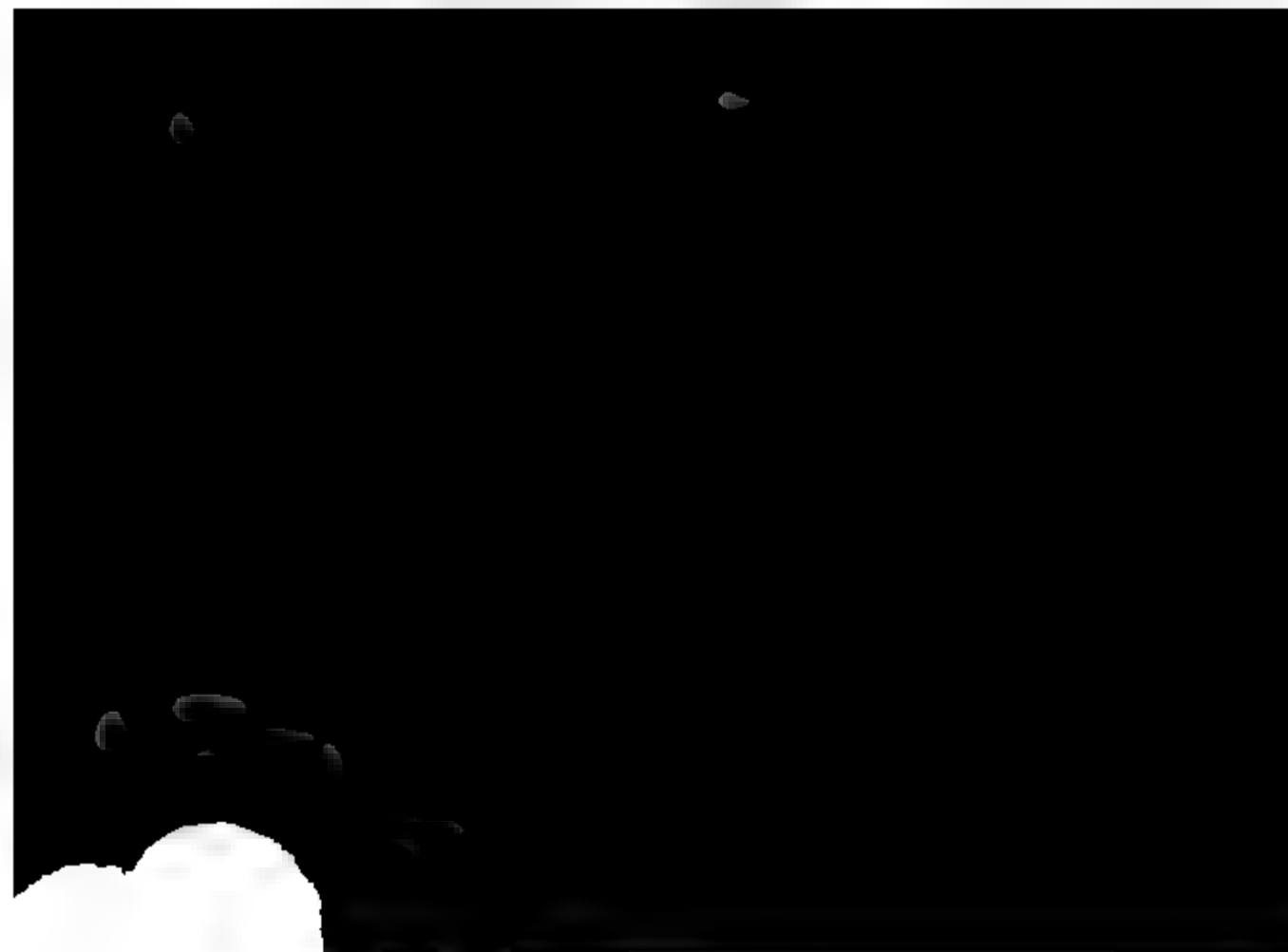
One specimen of this moss was sent by Mr. Winch from Newfoundland. It is a very recent acquisition to the British Flora, having been discovered by that gentleman in Healyfield, and in company with Mr. Richard Waugh, in Alendale and Cleburn in that county. Mr. Turner, in the valuable periodical publication of Dr. Sims and Mr. König above quoted, has fully described it, and clearly established it as a distinct species from the more common *B. pomiformis*, figured in v. 14. : 996.

The stems form tufts, vary in height from half an inch to 2 or 3 inches, and are not more branched. Leaves pale green, dilated at their base, then suddenly contracted into a tapering or sub-ovate form, narrower than those of *B. pomiformis*, serrated, and furnished with a strong rib. When dry they become much curled and contracted. Fruit-stalks rising above the stems, are at first long, erect or yellow, shining. Capsules oblique, at first globose, then somewhat oblong and flattened. Lid scarcely conical, rather more prominent than in the above-named species. Outer fringe bright red.

1526



Handwritten text, likely a specimen label or description, partially obscured by the drawing.





BARTRAMIA *ithyphylla*.
Straight-leaved Bartramia.

CRYPTOGAMIA Musci.

GEN. CHAR. *Capsule* spherical, at length furrowed. *Outer fringe* of 16 tapering teeth; *inner* a plaited membrane.

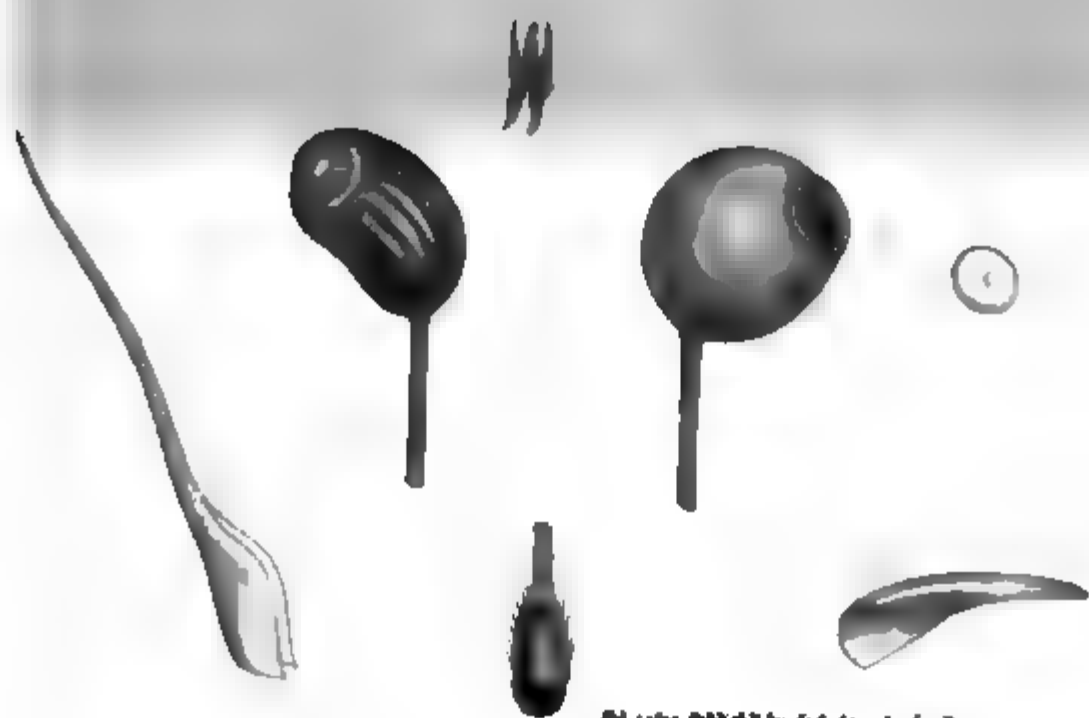
SPEC. CHAR. *Fruit-stalks* erect, longer than the stems. *Leaves* capillary, with a very broad base, entire, very straight when dry.

SYN. *Bartramia ithyphylla.* *Bridel. Musc. v. 4. 192. t. 1. f. 6.* *Turn. and Dillw. Bot. Guide, 790.* *Winch. Bot. Guide, 113.*

MR. SOWERBY informs me that this moss was first found in Great Britain by his 2d son Mr. George Sowerby, in May 1805, at Llan-rach, near Pont-nedd-vechan, in South Wales, since which it has been sent him by the Rev. Mr. Dalton from Yorkshire, and Mr. Winch from Northumberland. It is probably, as Bridel observes, not uncommon in Europe, having been easily overlooked for *B. pomiformis*, v. 14. t. 995. and according to him, taken for the latter even by the excellent Professor Swartz.

It differs from the species just mentioned in having longer, narrower, quite capillary, and almost perfectly entire leaves, (though very much dilated at the base,) which in every state of the plant, whether dry or wet, always remain perfectly straight, and this is known by experience to be a good specific difference. The capsules grow on long, terminal, upright, though not quite straight, fruitstalks, and are larger than those of *S. pomiformis*. When ripe they are deeply and regularly marked with 16 furrows.

1710



Pub. by the British Museum, London



88.
[1826]

BARTRAMIA gracilis.

Tall Slender Bartramia.

CRYPTOGAMIA Musci.

GEN. CHAR. Capsule spherical, at length furrowed. Outer fringe of 16 tapering teeth; inner a plaited membrane.

SPEC. CHAR. Fruit-stalks erect, taller than the stems. Leaves lanceolate, revolute, single-ribbed, serrated towards the point. Stems elongated.

SYN. Bartramia gracilis. Flörk in Schrad. Journ. v. 2. 171. Sm. Fl. Brit. 1341.

B. Oederiana. Swartz MSS.—Mohr. Ind. 5.

Bryum Oederi. Retz. Prod. 261. Fl. Dan. t. 478.

IN the year 1788 I received from my worthy friend Mr. Dickson a Scottish specimen of this moss, as a probably new species, which agreeing with original ones from the authors above quoted, caused me to admit it into the *Fl. Brit.*; with mention of Ireland also as its native country on the authority of Dr. Scott and Mr. Turner. But while my final sheet was under correction, my correspondent last-named informed me, with his usual candour, of his having made a mistake, and I therefore, p. 1407, struck out this species as foreign to our *Flora*, at that moment not adverting to Mr. Dickson's specimen. It remains however on his original authority, now confirmed by Mr. G. Don, who finds it on the summits of some of the highland mountains, bearing ripe fruit in August, and to whom we are obliged for this specimen.

The stems are much taller than those of *B. pomiformis*, t. 998, as well as more slender, compact, and usually less branched. The leaves are very different, being more broadly lanceolate, revolute; when dry recurved and twisted; serrated towards the point. Their colour is darker than in that plant. Fruit-stalks red. Capsules smaller, and more evidently curved towards one side when ripe.

Mr. Turner's Irish specimen, which led to the above error, is figured in his *Musc. Hil.* t. 10. f. 1, as a probable variety of *B. fontana*, with which it seems to us not well to accord, and we should rather assent to his suggestion of its being a new species.

1826



Dessey, published by J. G. Smith, London



✓





B R Y U M fontanum.

Fountain Bryum.

CRYPTOGAMIA Musci

GEN. CHAR. *Caps.* with a lid. *Veil* smooth. *Flower-stalk* from a terminal tubercle.

SPEC. CHAR. Capsule oblique, roundish. Stem branched. Leaves ovate, acute, a little remote, entire.

SYN. *Bryum fontanum.* *Huds. Fl. An.* 475. *Sibth. Ox.* 289.

B. palustre, scapis teretibus stellatis, capsulis magnis subrotundis. *Dill. Musc.* 340. t. 44. f. 2.

Mnium fontanum. *Lim. Sp. Pl.* 1574. *Witb. Bot. Arr.* v. 3. 85. *Lightf. Scot.* 708.

Muscus palustris Adianto aureo affinis, scapis tenuibus, foliolis brevibus. *Raii Syn.* 98.

FREQUENT in the boggy soil about clear cold springs on mountainous commons and heaths, very conspicuous at a distance from the wide yellowish patches it forms in such situations, and often occupying the whole course of a rivulet through a small alpine meadow.

Roots perennial, tufted, brown, stems erect, thickly clustered together, leafy, slender, generally once divided into 3 or more branches from one centre, with now and then a straggling branch besides, so that we could scarcely have believed Linnæus had intended the same moss, were not his own Lapland specimens now before us. The leaves are small, ovate, sharp-pointed, but little spreading, frequently so thinly set that the red stem appears between them. Male flowers in large terminal heads, consisting of numerous yellow antheræ, surrounded by a circle of large spreading leaves. Fruit-stalks from the divarication of the branches on a different plant from the male flowers, long, slender, each bearing a large globose oblique capsule, with a small beaked lid. These capsules are to be found throughout the summer.

We do not hesitate to refer this and the preceding to the genus *Bryum* rather than *Mnium*, as the male flowers of the latter ought to be quite naked. Linnæus ran counter to that definition in reckoning every thing a *Mnium* in which male flowers were discoverable at all, whether naked or leafy.







BARTRAMIA marchica.

Bog Bartramia.

CRYPTOGAMIA Murci.

GEN. CHAR. Capsule spherical, at length furrowed. Outer fringe of 16 tapering teeth; inner a plaited membrane.

SPEC. CHAR. Fruit-stalks erect, taller than the stems. Leaves lanceolate, finely serrated, imbricated in five rows. Branches clustered, slender, upright.

SYN. *Bartramia marchica*. *Web. and Mohr. Ind. Mus. 5.*
Swartz in Schrad. Journ. for 1800. 180.

Leskia marchica. *Willd. Berol. 319.*

Mnium marchicum. *Hedw. Crypt. v. 2. 108. t. 99.*

DISCOVERED at the falls of Moness by Aberfeldy, in the Highlands of Scotland, in 1808, by Mr. W. Borrer and Mr. W. J. Hooker, but without fructification. That deficiency we have supplied from East Indian specimens, exactly agreeing with the British ones, which we have the authority of our intelligent friend last named to say, are what is called by mistake *B. fontana* in his paper on Nepal Mosses, *Tr. of L. Soc. v. 9. 317.*

This species has extremely the aspect of *B. fontana*, (*Bryum fontanum*,) *t. 390*, but when examined with a common magnifying glass, the leaves are found much more closely imbricated, ranged in 4 or 5 spiral rows, lanceolate, with longer more taper terminations, and when more highly magnified they prove to be finely serrated, which Mr. J. D. Sowerby has first detected, for Hedwig represents them entire. Several young, short, leafy, angular branches are clustered round the base of each fruitstalk, which rises much above them, being near 2 inches long, red, rather stronger than in the *fontana*. The capsule is somewhat smaller and more globular, but scarcely any difference is observable in the lid.

2178



125 1844 published by J. Hancock London





BARTRAMIA arcuata.

*Curve-stalked Bartremia.**CHEPTOGAMIA* Muri

GEN. CHAR. Capsule spherical, at length furrowed.
 Outer fringe of 15 tapering teeth; inner a plain
 membrane.

SPEC. CHAR. Fruit-stalks recurved. Leaves lanceolate,
 many-nerved, finely serrated. Branches scattered,
 spreading.

SYN. *Mnium arcuatum*. *Dicks. Crypt. fasc. 3. 2. 17.*
f. 3. H. Sec. fasc. 6. 19. With. 803.

M. chrysocommum. *Hedr. Sp. Musc. 74.*

Hymnium chrysocommum. *Dicks. Crypt. fasc. 2. 12.*

H. palustre erectum, coma lutea, basi nigricante. *Dill.*
Musc. 302. : 39. f. 36. Raii Syn. 83.

Bryum arcuatum. *Hedl. 255.*

THIS elegant moss is a native of alpine bogs. It was known,



1257



Ver. 3. 1808. Published by J. Sowerby, London.

[1237]

BARTRAMIA arcuata.
Curve-stalked Bartramia.

CRYPTOGAMIA Musci.

GEN. CHAR. *Capsule* spherical, at length furrowed. *Outer fringe* of 16 tapering teeth; *inner* a plaited membrane.

SPEC. CHAR. Fruit-stalks recurved. Leaves lanceolate, many-nerved, finely serrated. Branches scattered, spreading.

SYN. *Mnium arcuatum.* *Dicks. Crypt. fasc. 3. 2. t. 7. f. 3.* *H. Sicc. fasc. 6. 19. With. 803.*

M. chrysocomum. *Hedw. Sp. Musc. 74.*

Hypnum chrysocomum. *Dicks. Crypt. fasc. 2. 12.*

H. palustre erectum, comâ luteâ, basi nigricante. *Dill. Musc. 302. t. 39. f. 36. Raii Syn. 83.*

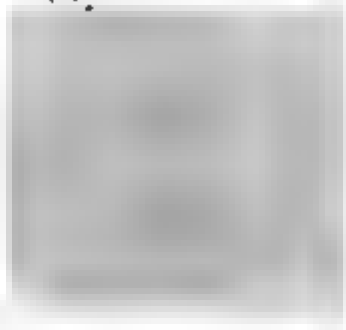
Bryum arcuatum. *Hull. 255.*

THIS elegant moss is a native of alpine bogs. It was known, without fructification, to Richardson and Dillenius; but the





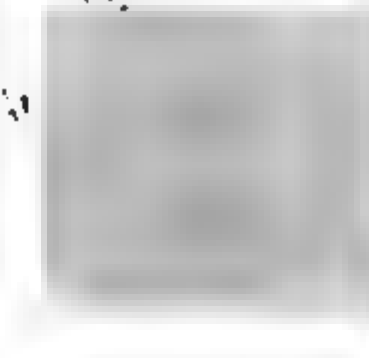
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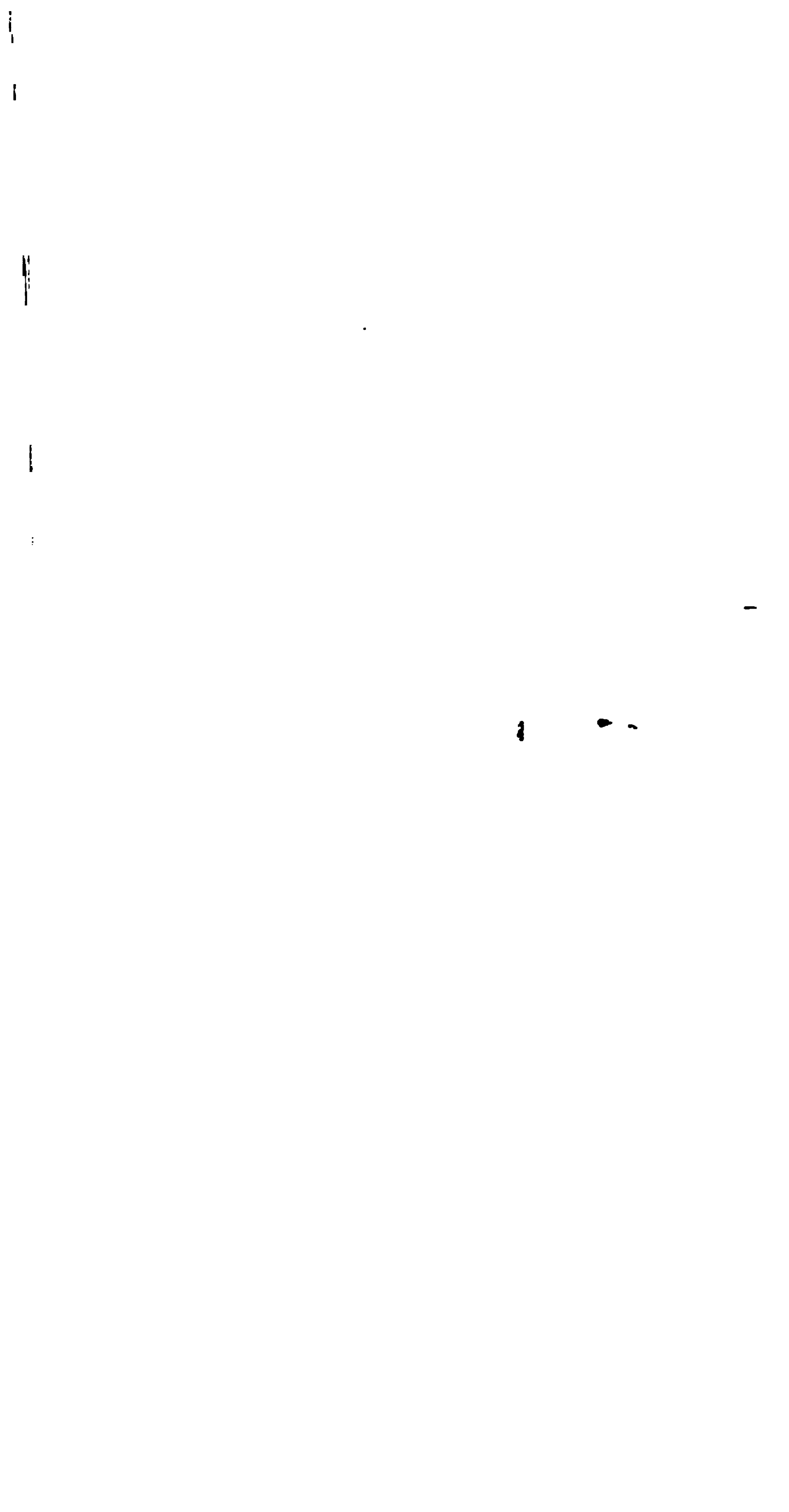


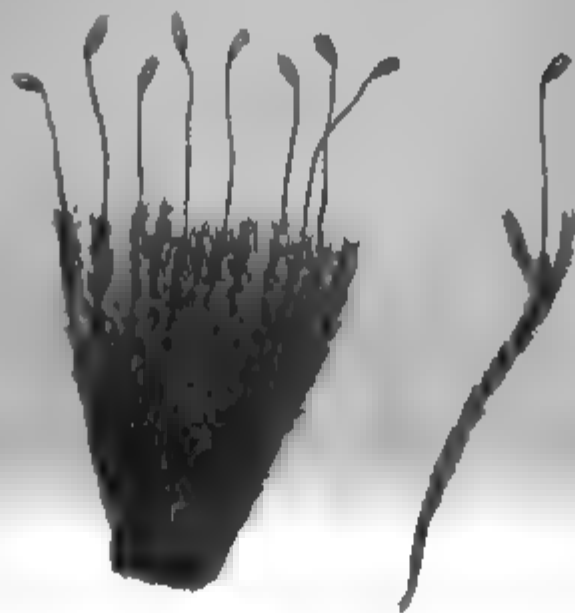
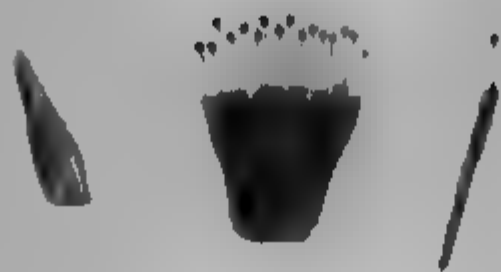
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[1238]

MNIUM androgynum.
Narrow-leaved Spring-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* cylindrical, at length furrowed. *Outer fringe* of 16 tapering teeth; *inner* a lacinated membrane. *Veil* smooth. *Flowers* terminal.

SPEC. CHAR. Monoecious. Capsule straight. Lid conical. Leaves imbricated every way, spreading, toothed at the point.

SYN. *Mnium androgynum.* *Linn. Sp. Pl.* 1574. *Huds.* 472. *Hedw. Theor.* 149. *t.* 12. *f.* 48--50.

M. perangustis et brevibus foliis. *Dill. Musc.* 230. *t.* 31. *f.* 1. *Raii Syn.* 78.

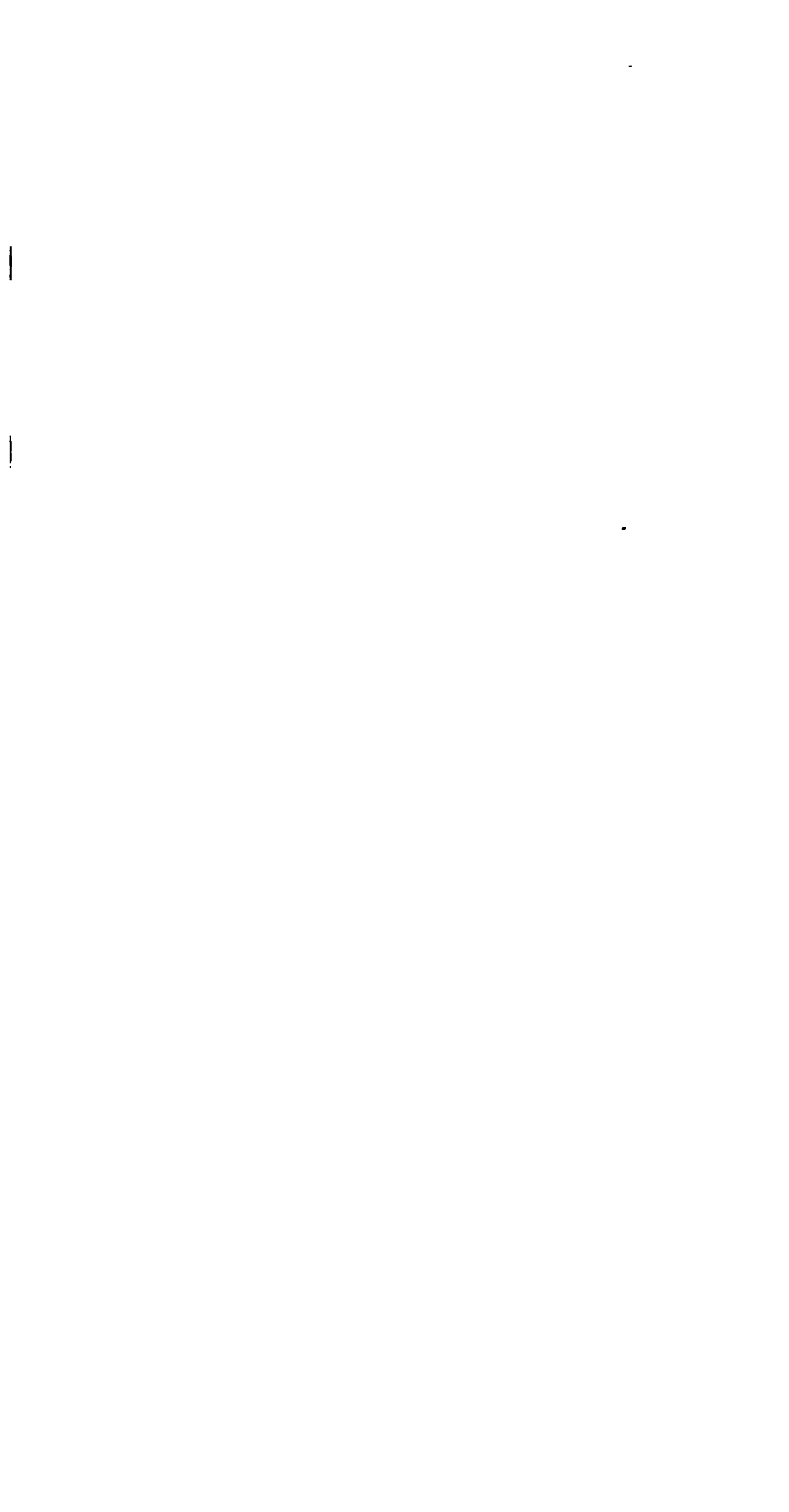
Bryum androgynum. *Hedw. Sp. Musc.* 178. *With.* 836. *Hull.* 262. *Abbot.* 238.

IT was with singular pleasure I found, on a careful scrutiny of the genera of mosses for the *Flora Britannica*, that the original genus of *Mnium* in Dillenius ought on every account to be preserved separate from *Bryum*, and that the furrowed capsule formed its decisive and unexceptionable character. No real *Bryum* has any signs of this character, nor could I have

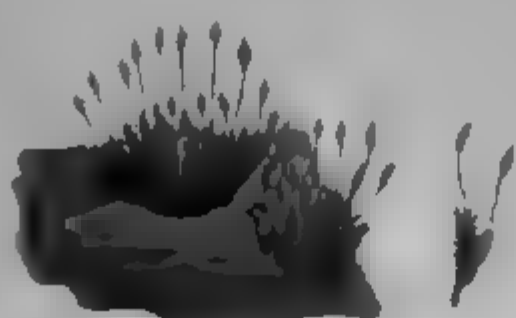


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1234



Nov 1 1803 Published by J. G. Smith, London



[1239]

MNIUM conoideum.
Club-fruited Spring-moss.

CRYPTOGAMIA Musci.

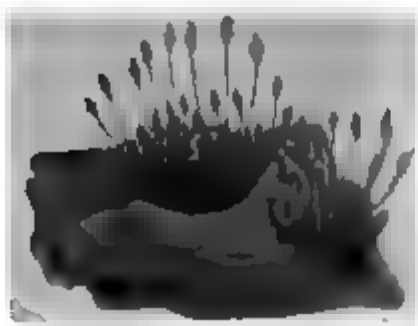
GEN. CHAR. *Caps.* cylindrical, at length furrowed. *Outer fringe* of 16 tapering teeth; inner a lacinated membrane. *Veil* smooth. *Flowers* terminal.

SPEC. CHAR. Monoecious? Capsule straight, obovate. Lid awl-shaped. Leaves imbricated every way, spreading, entire.

SYN. *Bryum conoideum.* *Dicks. Crypt. fasc. 4. 9. t. 11. f. 2.*

THIS moss unquestionably belongs to the same genus with the preceding, with which it agrees closely in habit, especially in the peculiar round dots of its leaves, as well as in the essential generic character of the furrowed capsule. Mr. Dickson found it on the trunks of Beeches near Inverary. Our specimens were gathered by Mr. Templeton, on Pear-trees in his orchard near Belfast; and it is to this gentleman, through Mr. Turner, we are entirely indebted for a knowledge of the inner fringe, which he describes and delineates in fine capil-

1880



Nov 7. 1883. Published by J. S. Sowerby, London

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BRYUM palustre.*Marsh Bryum.***CRYPTOGAMIA Musci.**

GEN. CHAR. *Caps.* with a lid. *Veil* smooth. *Flower-stalk* from a terminal tubercle.

SPEC. CHAR. Capsule oblique, oblong. Stem branched and forked. Leaves lanceolate, pointed, wavy, entire.

SYN. *Mnium palustre.* *Linn. Sp. Pl.* 1574. *Huds. Fl. An.* 472. *With. Bot. Arr. v. 3.* 85. *Relh. Cant.* 398. *Lightf. Scot.* 708.

M. majus, ramis longioribus bifurcatis. *Raii Syn.* 78. *Dill. Musc.* 233. t. 31. f. 3.

COMMON in boggy meadows and the moist parts of heaths, producing its fructification in May and June.

Its stems form thick tufts, and they are matted together by a dense brown woolliness which clothes their lower part; they are two or three times branched or forked, thickly clothed with



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[1240]

BRYUM nutans.*Silky Pendulous Thread-moss.***CRYPTOGAMIA Musci.**

GEN. CHAR. *Caps.* ovato-oblong, smooth. *Fringe* double: *outer* of 16 teeth, broad at their base: *inner* a toothed membrane. *Flowers* terminal.

SPEC. CHAR. Stem mostly simple. Leaves lanceolate, acute, keeled. Capsule obovate, pendulous, obtuse.

SYN. *Bryum nutans.* Schreb. *Lips.* 81. Swartz. *Musc. Succ.* 46. Roth. *Germ.* v. 3. 252.

B. sericeum. With. 839. Hull. 265. Sibth. 292.

B. trichodes læte virens, capitulis cernuis oblongis. Dill. *Musc.* 391. t. 50. f. 61. Raii *Syn.* 100.

Webera nutans. Hedw. *Sp. Musc.* 168. *Crypt.* v. 1. 2. t. 4.

FOUND on mountainous heaths, ripening its fruit in July and August. Dillenius gathered it near Woolwich; the Rev. Dr. Abbot in Apsley wood, Bedfordshire; and Mr. Turner near Dublin. We have seen it about rocks on Cromford moor, near Matlock.

1240



Nov 1 1868 Published by J. L. Sowerby London





96.

[389]

B R Y U M aureum.

Golden Bryum.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* with a lid. *Veil* smooth. *Flower-stalk* from a terminal tubercle.

SPEC. CHAR. Capsule drooping, pear-shaped with a stricture in the middle. Leaves bristle-shaped.

SYN. *Bryum aureum.* *Hudf. Fl. An.* 487. *Dicks. H. Sicc. fasc.* 8. 19.

Mnium pyriforme. *Linn. Sp. Pl.* 1576. *Witb. Bot. Arr.* v. 3. 89.

B. trichodes aureum, capsulis piriformibus nutantibus. *Dill. Musc.* 391. t. 50. f. 60.

THE rare and elegant little moss here delineated was originally found by Dr. Deering on the rocks of Nottingham-park, and sent by him to Dillenius. Mr. Hudson seems never to have gathered it. Mr. Crowe and Mr. Dickson found it some years ago in Surrey, and Dr. Smith met with it very unexpectedly in 1790, as well as repeatedly since, on the inside of the walls of some frames for green-house plants, in the garden of Messrs. Lee and Kennedy, Hammer-smith, perfecting its capsules in July, as the Rev. Mr. Wood of Leeds likewise observed them in Wales.

The stems grow erect, in little tufts, to the height of $\frac{1}{2}$ of an inch, and are clothed with light green, very delicate and slender, tapering, entire leaves, some of the uppermost of which are much longer than the rest, forming a tuft or star, in the centre of which stand the anthers in some individuals, and in others the fruit-stalk (for so the *pedunculus* may properly be called in this tribe), which arises, from an oblong tubercle, to the height of above an inch. This stalk is capillary, slightly waved, of a vivid gold or orange colour. Capsules pear-shaped, green when young, ripening into the same bright colour as the stalk, closed with an hemispherical lid, covered when young with a white slender veil, which Dillenius never saw. The capsule is bordered with 16 spreading white teeth, and closed with other unequal ones besides, according to Hedwig's character of *Bryum*.



Fig. 109. *Phlox pilularis*, *var. pilularis*

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BRYUM elongatum.
Elongated Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Outer fringe* of 16 teeth, broad at the base: *inner* a toothed membrane. *Flowers* terminal. *Capsule* ovate-oblong, smooth. *Veil* smooth.

SPEC. CHAR. Stem nearly simple. Leaves linear-lanceolate, thick-edged. Capsule inclining, cylindrical, tapering at the base.

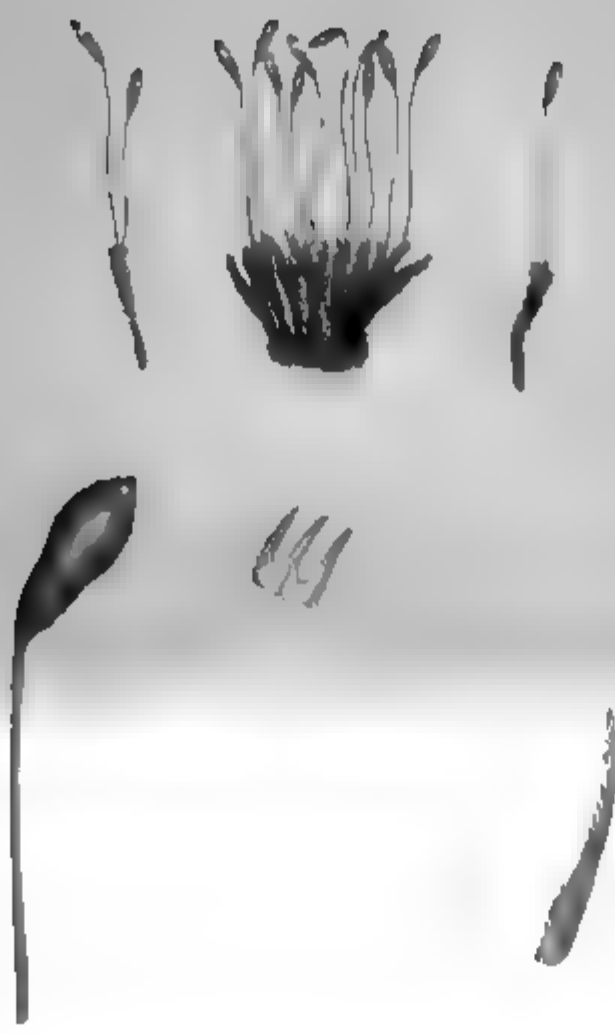
SYN. *Bryum elongatum.* *Sm. Fl. Brit.* 1349. *Dicks. Crypt. fasc.* 2. 8. *With.* 832. *Hull.* 263. *Turn. Musc. Hib.* 114.

Pohlia elongata. *Hedw. Sp. Musc.* 171. *Crypt. v.* 1. 96. *t.* 36. *Ehrh. Crypt.* 64.

DILLENIIUS gathered this moss on Clogwyn y garnedd, North Wales, as appears from his herbarium, and confounded it with *B. nutans*, his N^o 61, from which it is very distinct. Our specimens were collected on Ingleborough, Yorkshire, by Mr. W. Brunton. The capsules ripen in June and July.

Roots slender, tufted, black, perennial. Stems erect, slender, generally about half an inch high, simple, leafy, sometimes, from luxuriance, branched. Leaves dark shining green, rather spreading, lanceolate or linear-lanceolate, acute, beardless, single-ribbed, with an entire, somewhat thickened margin. Fruitstalk an inch or inch and half high, mostly solitary, upright, of a shining tawny red, yellowish at the top. Capsule more or less inclining, not pendulous; when young, obovate and a little curved; when ripe longer, and almost cylindrical, its lower half, or thereabouts, consisting of an inversely conical base. The mouth is narrow, the lid short, conical and acute, of an orange hue. Outer fringe rather short, pale brown; inner white, simply toothed, as Hedwig describes it.

1603



Plantae et Animalia in Juss. Florae Indicae





ERYUM trichodes.
Long Capillary Thread-moss.

CRYPTOGAMA Musci.

GEN. CHAR. *Fruct* double: outer of 16 teeth, broad
in their base: inner a toothed membrane. *Flowers*
perianth. *Capitulum* oblong, smooth. *Veil* smooth.

SPEC. CHAR. *Stem* in the leaf branched. *Leaves* linear,
rigid. *Capitula* obtuse, incurved, inclining.
Fruit-stalk very long.

SPEC. ERYUM trichodes. *Lin. Sp. Pl.* 1585. *Sm.*
P. Brit. 1551. *Deix. Crypt. fasc.* 2. 7. *H. Sicc.*
tab. 5. 2. *Fend.* 269.

B. trichodes *Musc.*, *capitula* incurvis obtusis in
seu *longis.* *Deix. Musc.* 309. t. 43. f. 58.

Musc. nigrescens. *Walt.* 300.

Musc. nigrescens. *Holtz. Sp. Musc.* 173. *Crypt. v.* 1. 1.
= 2, 2.

THIS moss, to which Hedwig has devoted the 2 first plates
of his *Musc. Europ.* is remarkable for having longer fruit-stalks,





Ant's Moss. Subgenus by J. S. Sowerby. London.





BRYUM dealbatum.
Pale-leaved Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Outer fringe of 16 teeth, broad at the base: united by a toothed membrane. Flowers terminal. Capsule ovate-oblong, smooth. Veil smooth.*

SPEC. CHAR. *Stem very short, simple. Leaves lanceolate, reticulated, obscurely serrated at the point. Capsule obovate, inclining.*

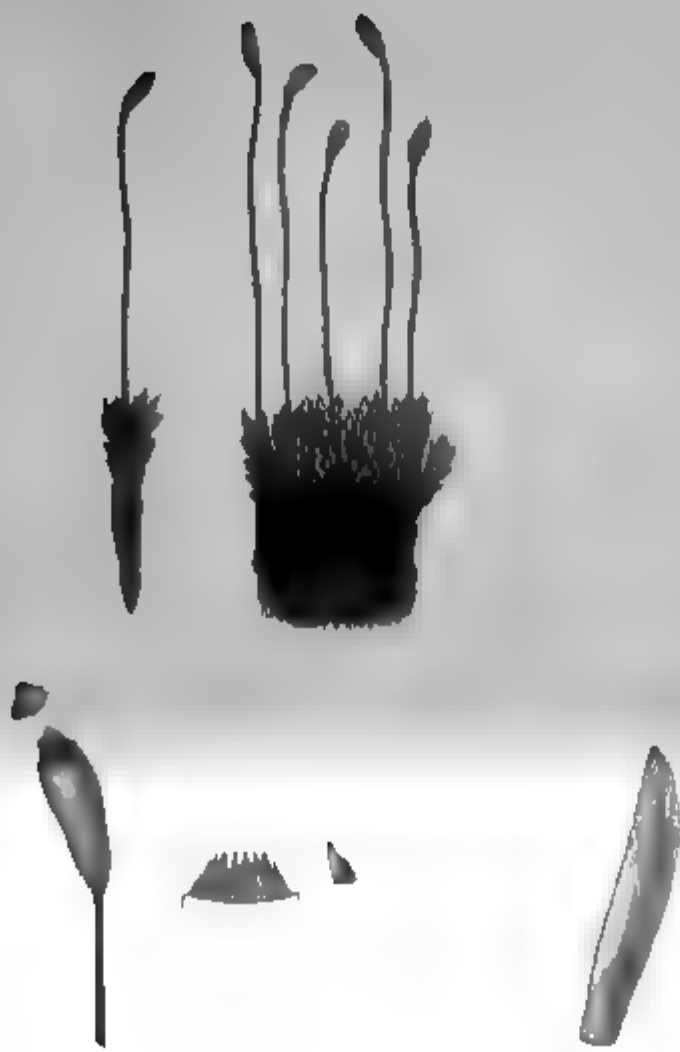
SYN. *Bryum dealbatum. Sm. Fl. Brit. 1350. Dicks. Crypt. fasc. 2. 3. t. 5. f. 3. With. 816. Hull. 258. Don. Herb. fasc. 4. 90.*

Meesia dealbata. Swartz. Musc. Suec. 44. 94. t. 5. f. 10. Hedw. Sp. Musc. 174. t. 41. f. 6—9.

COMMUNICATED by our very intelligent and indefatigable friend Mr. G. Don from a marshy spot in the King's Park, Edinburgh. It bears its capsules in the spring and summer, and is presumed to be perennial. Mr. Crowe gathered the same on sandy turfy ground at St. Faith's near Norwich.

It is known by the pale whitish hue of its leaves. The stems are short and simple. Leaves pellucid, of a membranous appearance, reticulated with rather coarse veins, lanceolate, acute, single-ribbed, very obscurely serrated near the point only. Fruitstalk solitary, an inch and half high, terminal, erect, red, rather wavy. Capsule inclining, particularly when dry, pear-shaped with a contracted base, curved, obtuse, brown, opaque, not polished. Lid convex, almost hemispherical. Outer fringe short, reddish; inner twice as long, yellowish, formed of 16 teeth united by a reticulated base.

1872



March 1 1868 Published by J. Sowerby, London





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BRYUM triquetrum.

Long-stalked Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Outer fringe of 16 teeth, broadest at the base; inner a toothed membrane. Flowers terminal. Capsule ovate-oblong, smooth. Veil smooth.*

SPEC. CHAR. *Stem subdivided. Branches simple, erect. Leaves spreading in three rows, ovato-lanceolate, sharp-pointed, finely serrated. Capsule slender-pearshaped, oblique and incurved. Lid conical.*

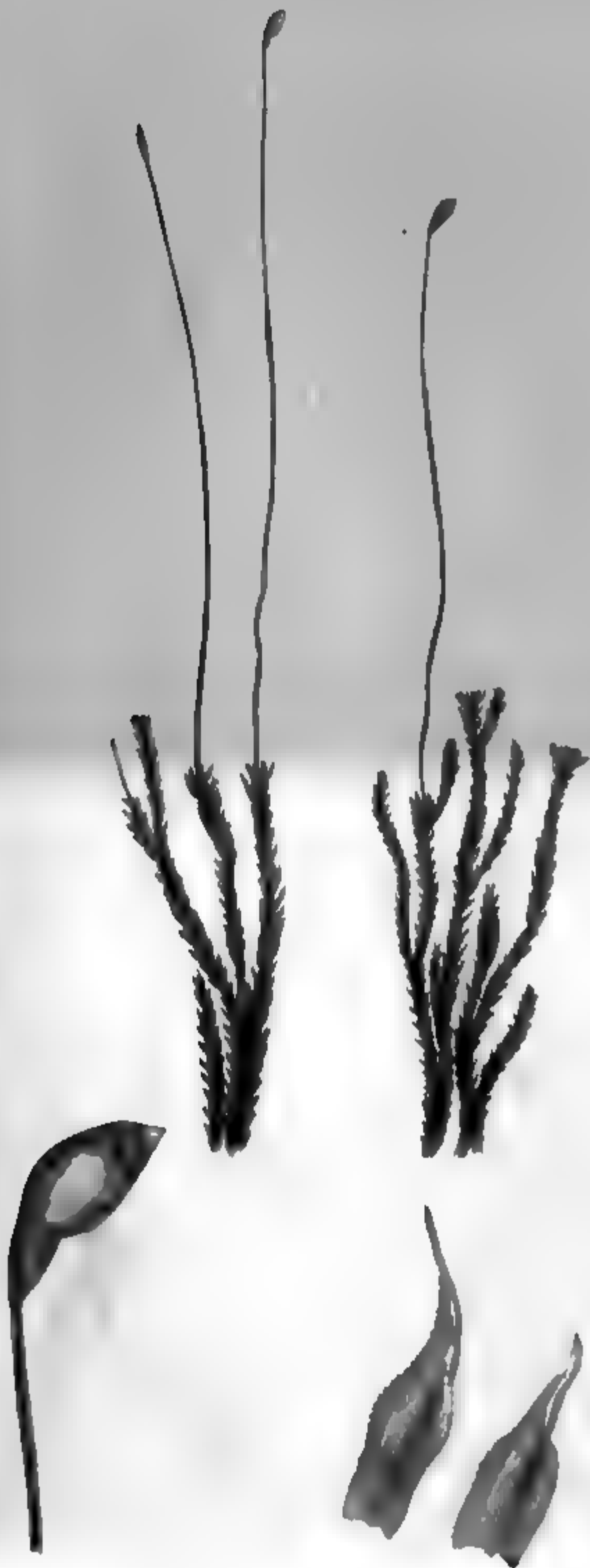
SYN. *Bryum triquetrum. Turn. Musc. Hib. 115.*

Mnium triquetrum. Linn. Sp. Pl. 1578, excluding the synonyms. Ehrh. Phytoph. 59.

Meesia longiseta. Hedw. Sp. Musc. 173. Crypt. v. 1. 56. t. 21, 22. Swartz. Musc. Succ. 43.

WE introduce this stately moss to the acquaintance of British botanists, on the authority of Mr. Turner, who mentions it as discovered by Dr. Scott, "about the borders of some lake in the north of Ireland." It bears fruit in July, and is perennial, growing always in a spongy peat soil. Having never seen Irish specimens, we are obliged to have recourse to Swedish and Swiss ones, in very fine preservation; by which we are enabled to correct certain inaccuracies in our predecessors.

The stems grow in tufts, and are several inches high; not simple, but branched; the annual shoots indeed are usually simple and upright. Leaves in three rows, spreading, light green, nearly ovate, keeled, with a sharp point more or less elongated, a strong rib, but no awn; the edges under a high magnifier prove to be finely serrated, by no means entire. The leaves of former seasons are permanent, blackened, intermixed with rusty-black down. Young flowers, encompassed with star-like leaves, terminate the branches. These seem destined to bear fruit in the following summer. The fruitstalks are terminal, solitary, uncommonly long, (even three or four inches,) somewhat wavy, red and very elegant. Capsule pale brown, smooth, pearshaped, a little oblique, bent where its cavity reaches the solid base, or spurious apophysis. Lid conical, short, acute. *Outer fringe short and blunt, as described by Hedwig.*

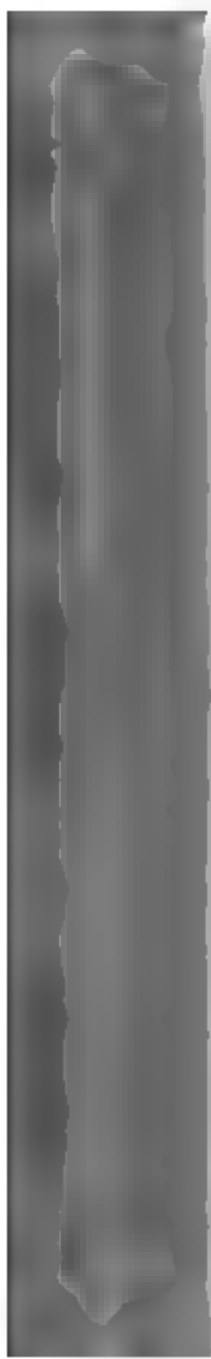


Asplenium platyneuron





1307 *U. n. n. f. l. n. n. n.*





102

[1623]

BRYUM alpinum.
Red Alpine Thread-moss.

CERATOPHYLLUM *Moss.*

GEN. CHAR. *Capitulum* fringe of 16 teeth, broad at the base: near a thickened membrane. *Flowers* terminal. *Capsule* ovate-oblong, smooth. *Veil* smooth.

SPEC. CHAR. *Stem* branched, erect. *Leaves* ovate-lanceolate, acute, imbricated. *Capsule* oblong, pendulous.

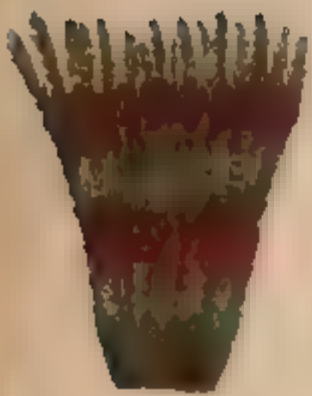
SYN. *Bryum alpinum.* *Linn. Mant.* 309. *Sm. Fl. Brit.* 1353. *Huds.* 490. *With.* 841. *Hall.* 254. *Legey.* 733. *Torr. Misc. Bot.* 125.

B. hypocidus pendulum sericeum, comâ insigni stramine. *Dal. Misc.* 394. t. 50. f. 64.

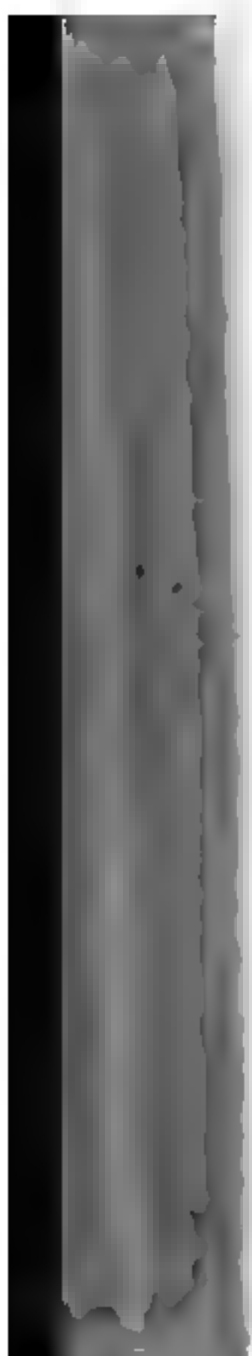
Not mentioned on the highest alpine rocks of Britain.



1623



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[1904]

BRYUM caespitium.
Lower Matted Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Outer fringe of 16 teeth, broad at the base: ~~with~~ a toothed membrane. Flowers terminal. Capsule ovate-oblong, smooth. Veil smooth.

SPEC. CHAR. Stem branched from the base, tufted. Leaves ovate-lanceolate, flat, hair-pointed, entire. Capsule obovate, pendulous.

SYN. *Bryum caespitium*. Sm. Fl. Brit. 1354. Linn. Sp. Pl. 1556. Hedw. Sp. Musc. 180. Huds 488. Hb. 256. Schreb. 290. Lightf. 736. Curt. Lond. Jacq. 3. t. 67. f. 1. Turn. Musc. Hib. 120.

B. pendulum ovatum caespiticium et pilosum, seti baccati. Des. Musc. 396. t. 50. f. 66, A—E.

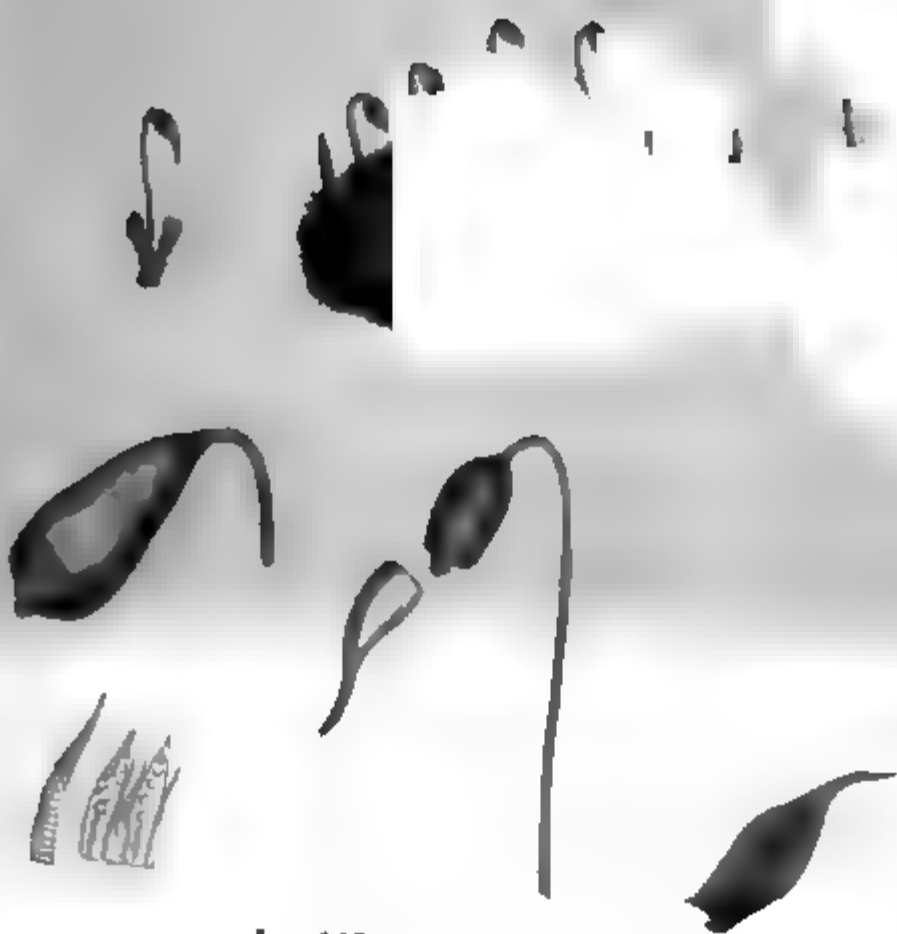
B. trichoides capitulis reflexis, pediculis imâ medietate rebis, summa luteo-virentibus. Raii Syn. 100.

Mosses caespitium. Relh. 421. With. 807. Abbot. 235.

COMMON on walls and roofs, sandy banks and gravelly grassy places, bearing fruit from February to April.

The stems are perennial, and form dense cushion-like tufts, their branches dividing from the very base, each about 3 or 4 lines long, simple, spreading, leafy, obtuse and terminated by a starry head of leaves larger than the rest. Leaves all bright green, ovate-lanceolate, flattish, entire, with a single rib which ends in a hair-like point. Fruit-stalks solitary from the base of the branches, capillary, upright, an inch or more in height, their lower part crimson, the upper green. Capsule pendulous, ovate when young; then obovate, with a convex, pointed lid; at length dilated at the mouth. Fringe of pale yellow, very acute teeth. Veil taper, sharp-pointed.

It will be seen by referring to t. 1601 how different *Bryum bicolor* is from this species.



And. Lab. 20000 by J. L. Smith, London.

[1601]

BRYUM bicolor.

*Two-coloured Thread-moss.**CRYPTOGAMIA Musci.*

GEN. CHAR. *Outer fringe of 16 teeth, broad at the base: inner a toothed membrane. Flowers terminal. Capsule ovate-oblong, smooth. Veil smooth.*

SPEC. CHAR. *Stem very short, branched at the base. Leaves ovato-lanceolate, pointed. Capsule ovate, obtuse, pendulous.*

SYN. *Bryum bicolor. Dicks. Crypt. fasc. 4. 16. Sm. Fl. Brit. 1355. Turn. Musc. Hib. 121. t. 11. f. 2. B. n. 66, varietas parva. Dill. Musc. 397. t. 50. f. 66, F, G.*

COMMUNICATED by Mr. W. Brunton from the neighbourhood of Ripon, Yorkshire. It bears capsules in March, and is supposed to be perennial. I have it from Switzerland, and have also gathered it near Rome. It loves a barren sandy soil.

The plants grow in rather loose tufts, and are very short,



1880

1881

1882

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1800

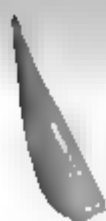


Illustration published by the Society of London



[1602]

BRYUM argenteum.

Silvery Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Outer fringe of 16 teeth, broad at the base: inner a toothed membrane. Flowers terminal. Capsule ovate-oblong, smooth. Veil smooth.*

SPEC. CHAR. *Stems tufted, branched from the base. Leaves ovate, concave, imbricated, with pellucid colourless bristly points. Capsule ovate, pendulous.*

SYN. *Bryum argenteum. Linn. Sp. Pl. 1586. Sm. Fl. Brit. 1355. Hedw. Sp. Musc. 181. Huds. 489. With. 838. Hull. 256. Relh. 427. Sibth. 293. Albot. 243. Dicks. H. Sicc. fasc. 15. 19. Curt. Lond. fasc. 3. t. 67. f. 2. Turn. Musc. Hit. 122.*

B. pendulum julaceum, argenteum et sericeum. Dill. Musc. 392. t. 50. f. 62.

B. capitulis subrotundis reflexis, cauliculis teretibus argenteis. Raii Syn. 100.

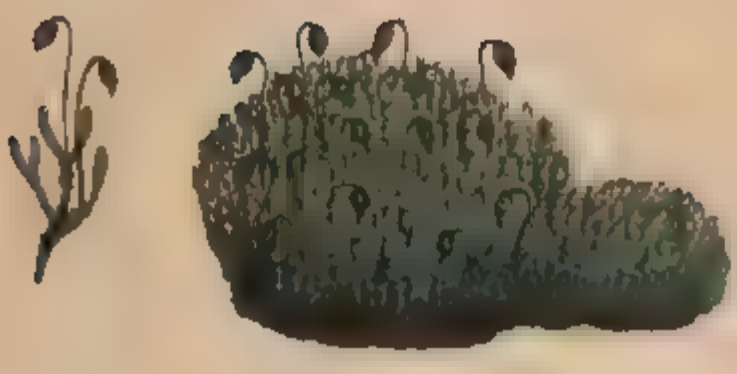
COMMON in the spring on dry open spots, especially on the tops of walls and stone roofs, where its beautiful silvery hue in moist weather renders it impossible to be overlooked or mistaken.

The stems form perennial, round, cushion-like tufts, and when separated are found to be much branched, about half an inch high, with cylindrical blunt branches, tapering at the base. Leaves closely imbricated on all sides, of a broad ovate figure, swelling, entire, single-ribbed, tipped with a hair, more or less of their upper part pellucid and colourless, which gives the silvery appearance above mentioned. The fruitstalks come forth in the early spring, from the tops of old branches, just where the new ones originate, and are not an inch long, red below, pale and curved at the summit. Capsule of a short ovate form, brown or reddish. Lid convex with a point. Veil small, soon falling off. Fringe yellow.



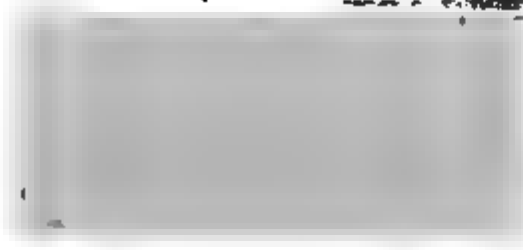
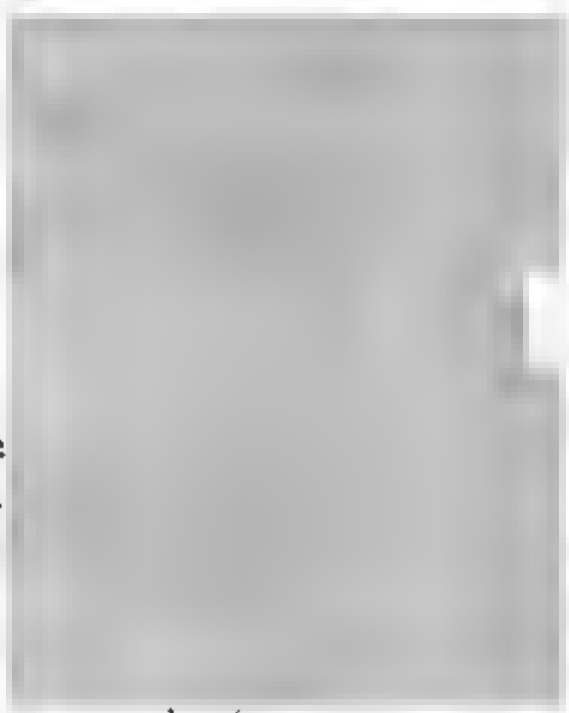
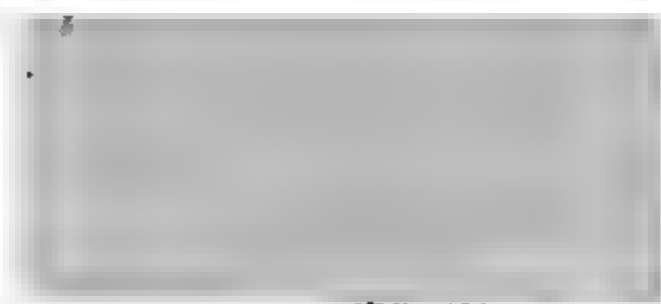


2012



Mosses of the ...





The following information
 was obtained from the
 records of the
 Department of
 Health and
 Human Services
 on 11/11/77

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 was obtained from the
 records of the
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The following information
 was obtained from the
 records of the
 Department of
 Health and
 Human Services
 on 11/11/77



BRYUM julaceum.

Slender-branched Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Outer fringe of 16 teeth, broad at the base; inner a toothed membrane. Flowers terminal. Capsule ovate-oblong, smooth. Veil smooth.*

SPEC. CHAR. *Stem branched from the base. Leaves ovate, concave, imbricated, obtuse, pointless. Capsule club-shaped, pendulous.*

SYN. *Bryum julaceum. Schrad. Spicil. 70. Sm. Fl. Brit. 1357.*

B. filiforme. Dicks. Crypt. fasc. 4. 16.

B. argenteum β. *Lin. Sp. Pl. 1586. Huds. 489. With. 839. Hull. 256.*

B. pendulum, surculis teretibus viridibus. Dill. Musc. 394. t. 50. f. 63.

B. trichodes, capitulis reflexis, viridissimum kolericeum. Dill. Giss. 226. app. 86. t. 2. f. F.

DILLENIIUS says he gathered this on the gravel walks of the Oxford garden. Mr. Dickson found it in moist rather mountainous places in Scotland, and our specimens were gathered by Mr. G. Don on the mountain of Clova in Angusshire, in July or August.

This elegant species has been supposed a variety of *B. argenteum*, t. 1602, but without much examination. It is much larger, with long slender erect and acute branches, forming dense tufts, of a bright silky green, not silvery. Leaves small, closely imbricated, ovate, entire, rather concave, single-ribbed in the lower part, obtuse, without any hair-like point. Fruit-stalk from the base of a branch, an inch or more in height, wavy, red. Capsule pendulous, brown, smooth, of a slender obovate or pear-shaped form. Lid convex with a little point



BRYUM julaceum.

Slender-branched Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Outer fringe of 16 teeth, broad at the base: inner a toothed membrane. Flowers terminal. Capsule ovate-oblong, smooth. Ped smooth.*

SPEC. CHAR. *Stem branched from the base. Leaves small, concave, imbricated, obtuse, pointed. Capsule club-shaped, pendulous.*

SEX. *Bryum julaceum. Schrad. Spicil. 70. Sm. Fl. Brit. 255.*

B. minimum. Dickk. Crypt. fasc. 4. 16.

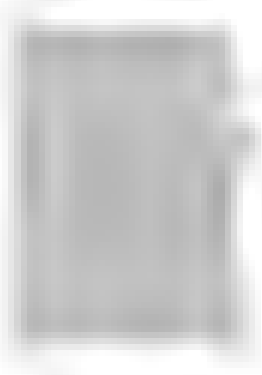
B. repens. Linn. Sp. Pl. 1586. Huds. 489. Brit. Mus. Hall. 256.

B. pendulum. sorculis teretibus viridibus. Dill. Musc. 224. t. 50. f. 68.

B. trichodes. capitulis reflexis, viridissimum holoseratum. Dill. Gæs. 226. app. 86. t. 2. f. F.

D. julaceum is to be gathered this on the gravel walks of





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[2007]

BRYUM capillare.
Greater Matted Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Outer fringe of 16 teeth, broad at the base; inner a toothed membrane. Flowers terminal. Capsule ovate-oblong, smooth. Veil smooth.*

SPEC. CHAR. *Stem branched from the base, tufted. Leaves obovate, hair-pointed, twisted when dry. Capsule club shaped, pendulous.*

SYN. *Bryum capillare. Linn. Sp. Pl. 1586. Sm. Fl. Brit. 1357. Hedw. Sp. Musc. 182. Huds. 488. Hull. 255. Lightf. 737. Sibth. 290. Turn. Musc. Hib. 120.*

B. foliis latiusculis congestis, capsulis longis nutantibus. Dill. Musc. 398. t. 50. f. 67.

B. capitulis reflexis, foliolis latiusculis congestis. Raii Syn. 100.

Mnium capillare. Linn. Fl. Suec. 385. With. 803. Relh. 420. Abbot. 234.

FOUND in woods and on heathy banks, not, like *B. caespitium*, in wet places.



[2007]

BRYUM capillare.
Greater Matted Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Outer fringe of 16 teeth, broad at the base; inner a toothed membrane. Flowers terminal. Capsule ovate-oblong, smooth. Veil smooth.

SPEC. CHAR. Stem branched from the base, tufted. Leaves obovate, hair-pointed, twisted when dry. Capsule club shaped, pendulous.

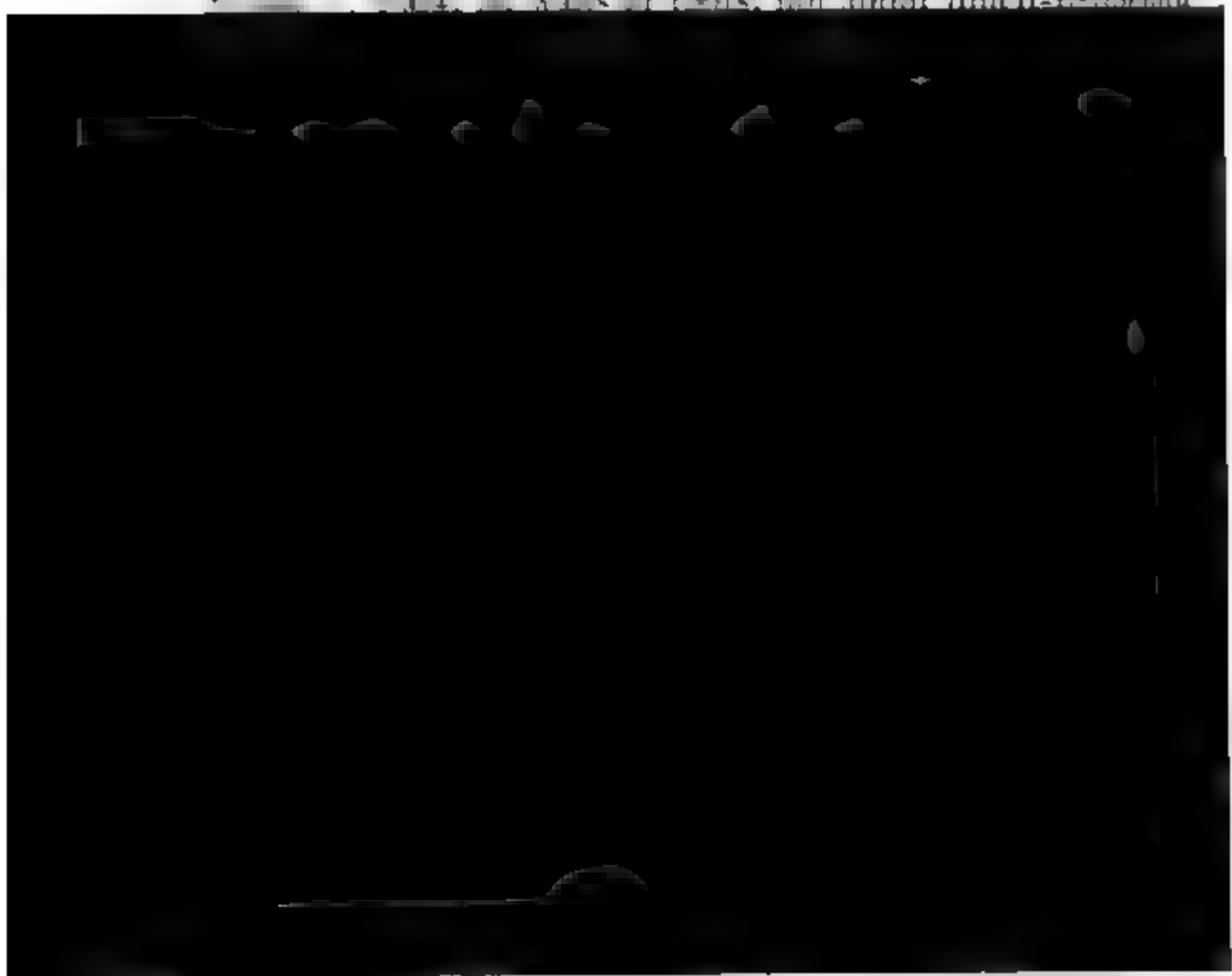
SYN. Bryum capillare. Linn. Sp. Pl. 1586. Sm. Fl. Brit. 1857. Hedr. Sp. Musc. 182. Huds. 488. Hill. 255. Lightf. 737. Sibth. 290. Tur. Musc. Felt. 120.

B. foliis latiusculis congestis, capsulis longis nutantibus. Dill. Musc. 398. t. 50. f. 67.

B. capitulis reflexis, foliolis latiusculis congestis. Raii Syn. 100.

Mnium capillare. Linn. Fl. Suec. 385. With. 803. Reiz. 490. Abbot. 234.

FOUND in woods and on heathy banks, not, like *B. caespitium*, on the walls of roofs, nor about much decayed wood.



2007



April 2 day. Submitted by J. J. Lowry, London.

[1862]

B R Y U M annotinum.

Summer Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Outer fringe of 16 teeth, broad at the base: inner a toothed membrane. Flowers terminal. Capsule ovate-oblong, smooth. Veil smooth.*

SPEC. CHAR. *Stem branched from the base. Leaves ovato-lanceolate, pellucid, keeled, somewhat serrated. Capsule obovate, pendulous.*

SYN. *Bryum annotinum. Hedw. Sp. Musc. 183. t. 43. Sm. Fl. Brit. 1358. Huds. 490. Hull. 255. Sibth. 291. Turn. Musc. Hib. 123.*

B. annotinum lanceolatum pellucidum, capsulis oblongis pendulis. Dill. Musc. 399. t. 50. f. 68.

Mnium annotinum. Linn. Sp. Pl. 1576. With. 805.

THIS moss is frequent enough on moist turfy ground, but very rarely indeed produces any capsules. We have gathered it in fruit once only, on Scarning common, Norfolk, in May 1780. The Rev. Dr. Abbot sent specimens from the thatch of a cottage near Bedford. The stipulated male blossoms are



✓

109.

[1862]

BRYUM annotinum.

Summer Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Osc. fringe* of 16 teeth, broad at the base: ~~inter~~ a toothed membrane. *Flowers* terminal. *Capsule* ovate-oblong, smooth. *Veil* smooth.

SPEC. CHAR. Stem branched from the base. Leaves ~~ovate-lanceolate~~, pellucid, keeled, somewhat serrated. Capsule obovate, pendulous.

SYN. *Bryum annotinum.* *Hedr. Sp. Musc.* 183. t. 43. *Sm. Fl. Brit.* 1358. *Huds.* 490. *Hull.* 255. *Sch. 291.* *Turn. Musc. Hit.* 123.

B. annotinum lanceolatum pellucidum, capsulis oblongis pendulis. *Dill. Musc.* 399. t. 50. f. 68.

Mossum annotinum. *Linn. Sp. Pl.* 1576. *With.* 805.

THIS moss is frequent enough on moist turfy ground, but very rarely indeed produces any capsules. We have gathered it in ~~one~~ once only, on Searning common, Norfolk, in May 1790. The Rev. Dr. Abbot sent specimens from the thatch of ~~the~~ *St. Andrew's Church, Norwich.* The ~~several~~ male blossoms fre-





Moss plant (L. sp.)

BRYUM compactum.

Compact Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Fringe* double: *outer* of 16 teeth, broad at their base: *inner* a toothed membrane. *Flowers* terminal. *Capsule* ovate-oblong, smooth. *Veil* smooth.

SPEC. CHAR. Stem divided at the base. Leaves lanceolate, keeled, serrated towards the point. Capsule ovate, pendulous.

SYN. *Bryum compactum*. *Dicks. Crypt. fasc. 4. 15. t. 11. f. 11.* *Sm. Fl. Brit. 1859. Turn. Musc. Hib. 124.*

ALL our knowledge of this *Bryum* was derived from Mr. Dickson, till specimens were sent to Mr. Sowerby by the Rev. Mr. Dalton, who has been uncommonly fortunate in discovering rare mosses near his residence at Copgrove, Yorkshire. He found it in a small running drain near Scriven, the seat of Sir Thomas Slingsby, Bart., and in another drain between Copgrove and Farnham. The capsules are perfected in the spring.

The roots are perennial. Stems half an inch or more in height, erect, forming a dense tuft, some of them simple, others divided at the bottom, often stripped of their leaves in the lower part, when they appear red. Leaves of a pale yellowish shining green, narrow, lanceolate, acute, keeled, serrated from the middle to the point, furnished with a strong red rib; the lowermost shorter and almost heart-shaped. Fruit-stalk terminal, solitary, scarcely an inch long, a little wavy, of a red or tawny hue. Capsule pendulous; when ripe ovate, short, brownish, with a spreading mouth so as to be almost turbinate; in an earlier state the capsule is rather pear-shaped. Lid convex, with a small point, red. Fringe red.



[1527]

BRYUM compactum.
Compact Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Fringe double: outer of 16 teeth, broad at their base: inner a toothed membrane. Flowers terminal. Capsule ovate-oblong, smooth. Veil smooth.

SPEC. CHAR. Stem divided at the base. Leaves lanceolate, keeled, serrated towards the point. Capsule ovate, pendulous.

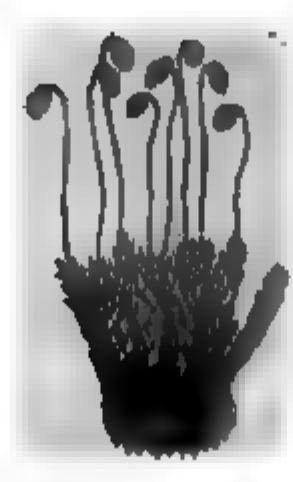
SYN. *Bryum compactum*. Dicks. *Crypt. fasc.* 4. 15. t. 11. f. 11. Sm. *Fl. Brit.* 1859. Turn. *Musc. Hib.* 124.

ALL our knowledge of this *Bryum* was derived from Mr. Dickson, till specimens were sent to Mr. Sowerby by the Rev. Mr. Dalton, who has been uncommonly fortunate in discovering rare mosses near his residence at Copgrove, Yorkshire. He found it in a small running drain near Scriven, the seat of Sir Thomas Slingsby, Bart., and in another drain between Copgrove and Farnham. The capsules are perfected in the spring.

The roots are perennial. Stems half an inch or more in height, erect, forming a dense tuft, some of them simple, others divided at the bottom, often stripped of their leaves in the lower part, when they appear red. Leaves of a pale yellowish shining green, narrow, lanceolate, acute, keeled, serrated from the middle to the point, furnished with a strong red rib; the lowermost shorter and almost heart-shaped. Fruit-stalk terminal, solitary, scarcely an inch long, a little wavy, of a red or tawny hue. Capsule pendulous; when ripe ovate, short, brownish, with a spreading mouth so as to be almost turbinate; in an earlier state the capsule is rather pear-shaped. Lid convex, with a small point, red. Fringe red.

11

2587



Small plant collected by Mr. Smith, Boston

1891
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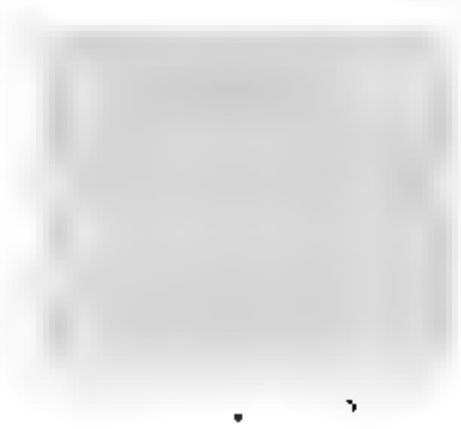
BRYUM attenuatum.*Slender Proliferous Thread-moss.***CRYPTOGAMIA Musci.**

GEN. CHAR. *Outer fringe of 16 teeth, broad at the base: inner a toothed membrane. Flowers terminal. Capsule ovate-oblong, smooth. Veil smooth.*

SPEC. CHAR. *Stem simple, proliferous. Leaves stellate, ovate, entire, reticulated. Capsule club-shaped, somewhat cylindrical, erect.*

SYN. *Bryum attenuatum. Dicks. Crypt. fasc. 4. 8. t. 10. f. 8. Sm. Fl. Brit. 1360.*

COLLECTED by Mr. Dickson in bogs on the mountains of Scotland. Mr. D. Turner, who has examined the fringe, assures us it is that of a *Bryum*; further we know nothing, except from a drawing made by Mr. Sowerby from an original







Hydrocotyle published by J. C. Sm. & P. R. S.

[2271]

BRYUM hornum.
Swan's-neck Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Outer fringe of 16 teeth, broad at the base; inner a toothed membrane. Flowers terminal. Capsule ovate-oblong, smooth. Veil smooth.

SPEC. CHAR. Stem simple. Leaves lanceolate, bordered with fine teeth. Fruit-stalk bowed. Capsule ovate, drooping.

SYN. Bryum hornum. *Huds.* 491. *Sm. Fl. Brit.* 1360. *Hull.* 266. *Sibth.* 290. *Curt. Lond. fasc. 1. t. 71.* *Dicks. H. Sicc. fasc. 4. 23.* *Turn. Musc. Hib.* 128. *Winch. v. 1. 115.*

B. stellare hornum sylvarum, capsulis magnis nutantibus. *Dill. Musc.* 402. t. 51. f. 71.

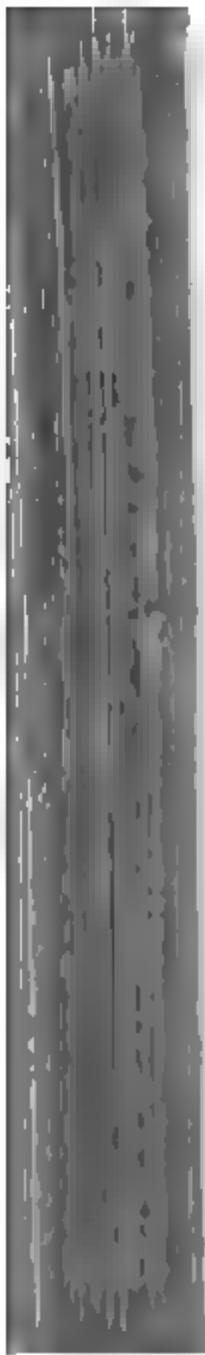
B. nitidum, capitulis majoribus reflexis, calyptrâ immo vergente, pediculis oblongis e cauliculis novis egredientibus. *Raii Syn.* 102.

Mnium hornum. *Linn. Sp. Pl.* 1576. *With.* 804. *Lightf.* 711. *Retz.* 419. *Abbot.* 233. *Ehrh. Crypt.* 3.

NOT uncommon in rather moist umbrageous woods, bearing fruit in the spring. It is one of the largest of its genus. The stems form dense, soft, elastic tufts, several inches high, furnished with close, blackish, fibrous, perennial roots. Each stem is simple, annual, whence the trivial name, from one to two inches in height, reddish, leafy. Leaves alternate, bright green, wavy when dry, pellucid, membranous, spreading, lanceolate, acute, beardless, single-ribbed, their edges and keel rather toothed than serrated. The male flowers are terminal, reddish, encompassed with large, spreading, star-like leaves, and are so conspicuous that nobody could overlook them, how much soever botanists might differ about their use. The female ones grow on a different plant. The fruitstalks are solitary, terminal, red, two inches or more in height, most curved to the upper part, so as often to imitate the graceful position of a swan's neck; under the fruit they are a little thickened. Capsule large, drooping, ovate inclining to elliptic, abrupt, turgid, thin, smooth, red brown, with a crimson mouth. Lid convex with a little point. Fringe yellowish.

Specimens of this species, in various stages of growth, were sent by Hedwig to Linnæus to demonstrate the sexes of mosses.





2271



Sp. moss collected by J. K. L. L.

BRYUM crudum.

Transparent-green Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Outer fringe* of 16 teeth, broad at the base: *inner* a toothed membrane. *Flowers* terminal. *Capsule* ovate-oblong, smooth. *Veil* smooth.

SPEC. CHAR. Stem simple. Leaves lanceolate, acute, entire; the uppermost narrow and minutely toothed. Capsule oblong, drooping.

SYN. *Bryum crudum*. *Huds.* 491. *Sm. Fl. Brit.* 1361. *Hull.* 266. *Turn. Musc. Hib.* 130.

B. sericeum. *Huds.* 487, according to Rev. H. Davies.

B. pendulum *hornum molle*, *foliis lanceolatis et gramineis*. *Dill. Musc.* 401. *t.* 51. *f.* 70.

Mnium crudum. *Linn. Sp. Pl.* 1576. *Hedw. Sp. Musc.* 189. *Crypt. v.* 1. 99. *t.* 37. *With.* 807.

Ehrh. Crypt. 152.

GATHERED by Mr. W. Brunton at Moss Dale Head, Wensley Dale, in the north of Yorkshire. It bears fruit in the summer, and is perennial.

We have compared our specimens with original ones of Dillenius, Hedwig, Ehrhart, and other writers. Much affinity is observable between this species and *B. elongatum*, though there are abundant marks of distinction, particularly in the inner fringe, which in *B. crudum* has the usual structure of the genus. The size of the whole plant is also twice as large; the leaves are much broader, and thin at the edge, the upper ones only being lengthened out into a narrow linear shape and slightly toothed; the capsules are thicker, when ripe rather oblong than ovate, with much less of that base or *apophysis* into which the cavity for the seeds does not extend. The lid is like *B. elongatum*. We conceive that these 2 species ought naturally to be placed near each other, though in the *Flora Britannica*, out of deference to the method of Hedwig, they stand far asunder. The natural distribution of all the species, as well as genera, of mosses with respect to each other, can only be perfected by degrees, when more exotic ones are observed with this particular view.



BRYUM cradum.

Transparent-green Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Capsule fringe of 16 teeth, broad at the base with a toothed membrane. Flowers terminal. Capsule unilocular, smooth. Veil smooth.

SPEC. CHAR. Stem simple. Leaves lanceolate, acute, entire, the uppermost narrow and minutely toothed. Capsule sessile, drooping.

SEM. Bryum cradum. *Hedw.* 491. *Syn. Fl. Brit.* 1861. *Hedw. Bot. Terr. Musc. Hib.* 130.

B. serotinum. *Hedw.* 487, according to Rev. H. Davies.

B. nemorosum *var. cradum* Hedw., foliis lanceolatis et gracilibus. *Bot. Musc.* 401. t. 51. f. 70.

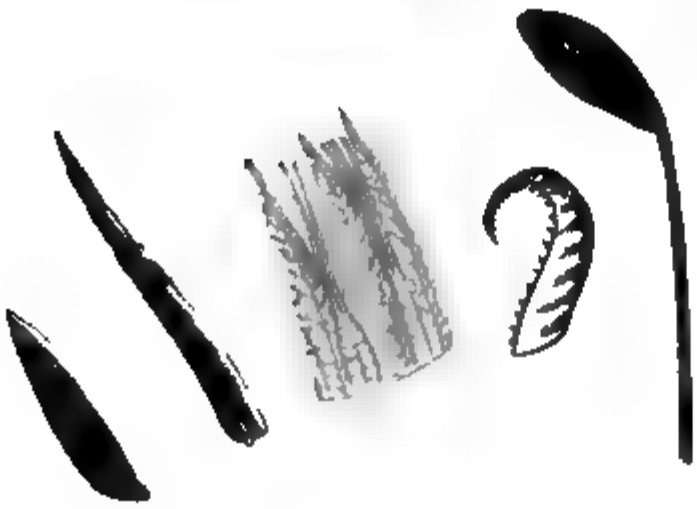
Muscum cradum. *Linn. Sp. Pl.* 1576. *Hedw. Sp.*

Musc. 188. *Crypt.* t. 1. 99. l. 37. *Wilh.* 807.

Edw. Crypt. 152.

GATHERED by Mr. W. Brereton at Moss Dale Head, Wetherby Dale, in the north of Yorkshire. It bears fruit in the summer, and is perennial.

We have compared our specimens with original ones of *Dilepisium* Hedwig, *Striptum*, and other writers. Much affinity is observable between the species and *B. elongatum*, though there are numerous marks of distinction, particularly in the stem fringe, which in *B. cradum* has the usual structure of the genus. The size of the whole plant is also twice as large; the leaves are much broader, and thin at the edge, the upper ones may being lengthened out into a narrow linear shape and slightly twisted. The capsules are thicker, when ripe rather longer than broad, with much less of that base or apophysis into which the cavity for the seeds does not extend. The leaves like *B. elongatum*. We conceive that these 2 species ought naturally to be placed near each other, though in the *Flora Scandinavica* out of deference to the method of Hedwig, they stand far asunder. The natural distribution of all the species, as well as genera, of mosses with respect to each other, can only be perceived by degrees, when more exotic ones are observed with this particular view.



B R Y U M marginatum.

Thick-edged Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, smooth. Fringe double: outer of 16 teeth, broad at their base: inner a toothed membrane. Flowers terminal.

SPEC. CHAR. Stem simple. Leaves lanceolate, acute, finely toothed; thickened at the margin. Capsule ovate. Lid conical.

SYN. Bryum marginatum. Dicks. Crypt. fasc. 2. 9. 1. 5. f. 1. Sm. Fl. Brit. 1362. With. 841. Hull. 267. Turn. Musc. Hib. 129.

Mnium crudum. Lightf. 712.

THE Rev. Dr. Burgess, so often quoted in the *Fl. Scotica*, first found this moss in woods and moist shady places in Dumfriesshire. From him I obtained corresponding specimens with those which he gave Mr. Lightfoot, who mentions the plant as *Mnium crudum*, very incautiously translating from Dillenius a description extremely foreign to the purpose. Mr. Dickson found the same moss in Scotland, and first named it properly. Our specimens were found, and determined, at Copgrove, Yorkshire, by our very obliging correspondent the Rev. James Dalton.

It is perennial, bearing fruit in April or May. The stems are simple, red, leafy, upright, about an inch high. Leaves elliptic-lanceolate, acute, wavy, finely toothed, especially in the upper part, remarkable for a thick cartilaginous margin, which, as well as the rib, is often red. Fruit-stalk solitary, erect, an inch long, flesh-coloured. Capsule pendulous, ovate. Lid conical at the base, with a taper point. Veil awl-shaped, brown or reddish, curved generally upwards as it grows.

[1473]

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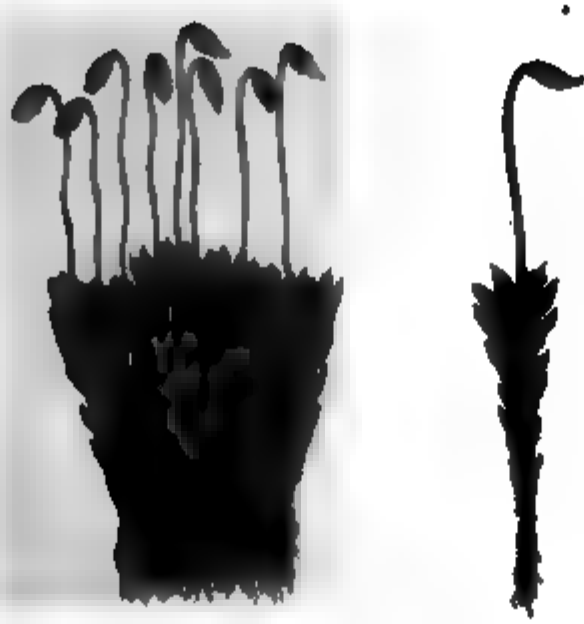


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2478



Ficus Alia, Folia, by J. Sowerby, London

[2371]

BRYUM interruptum.

Interrupted Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Outer fringe of 16 teeth, broadest at the base; inner a toothed membrane. Flowers terminal. Capsule ovate-oblong, smooth. Veil smooth.*

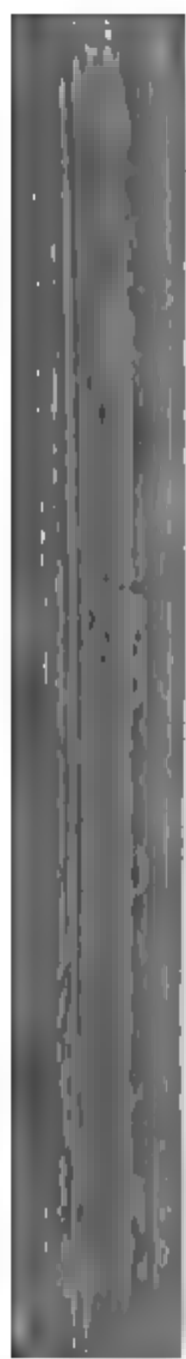
SPEC. CHAR. *Stem branched, interruptedly leafy. Leaves lanceolate, acute, finely serrated throughout. Capsule pear-shaped, nearly erect.*

SYN. *Bryum interruptum. Dicks. Crypt. fasc. 4. 13. t. 11. f. 6. Sm. Fl. Brit. 1363.*

FOUND on the alpine rocks of Scotland by Mr. Dickson, who bestowed on us a specimen, here delineated, from Ben Nevis. We have borrowed from the original sketch, made for his plate, what more decidedly shows the interrupted foliation of this species.

The perennial stems constitute dense tufts, an inch or two high, and are determinately branched, interruptedly leafy, red in the naked parts. Leaves clustered, bright green or yellowish, shining, reticulated, lanceolate, acute, with a mid-rib, equally and finely serrated; the lower ones more distant, small and short. Fruitstalk erect, red, hardly an inch high, terminal in its origin, though surmounted by branches. Capsule nearly erect, brown, pear-shaped, with a rather wide mouth, obscurely reticulated. Lid hemispherical, with a blunt point.





2571



Asplenium platyneuron L.

BRYUM nigricans.
Dark-green Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Fringe double: outer of 16 teeth, broad at their base: inner a toothed membrane. Flowers terminal. Capsule ovate-oblong, smooth. Veil smooth.*

SPEC. CHAR. *Stem branched at the base. Leaves lanceolate, straight, serrated about the point. Capsule turbinate, pendulous.*

SYN. *Bryum nigricans. Dicks. Crypt. fasc. 4. 15. t. 11. f. 10. Sm. Fl. Brit. 1363.*

NO one but Mr. Dickson seems to have known this moss, till from his Scottish specimens, and the account published by himself, a description of it appeared in the *Flora Britannica*. Our liberal friend Mr. Winch has lately communicated it from Northumberland. It bears fruit in July and is perennial, growing on turfy bogs.

The stems form tufts an inch or two in height, and are more or less branched. Leaves of a dull darkish green, closely imbricated, straight, lanceolate, broadish, acute, keeled; dilated and entire at the base; serrated near the point. Fruit-stalk terminal, solitary, various in length, wavy, curved at the top, red. Capsule pendulous, turbinate; when ripe of a rusty brown, with a wide mouth. Lid convex, with a little blunt point. Fringe yellowish.

[1528]

BRYUM nigricans.
Dark-green Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Fringes double: outer of 16 teeth, broad at their base: inner a toothed membrane. Flowers terminal. Capsule ovate-oblong, smooth. Veil smooth.*

SPEC. CHAR. *Stem branched at the base. Leaves lanceolate, straight, serrated about the point. Capsule subsinate, pendulous.*

**SEX. BRYUM nigricans. Dick. Crypt. fasc. 4. 15. t. 11.
= NO. Sm. Fl. Brit. 1563.**

No one but Mr. Dickson seems to have known this moss, till from his Scottish specimens, and the account published by himself, a description of it appeared in the



Fig. 12. 18. 19. *Published by the Botanical Society, London*

BRYUM cubitale.
Elbow-shaped Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Outer fringe of 16 teeth, broad at the base; inner a toothed membrane. Flowers terminal. Capsule ovate-oblong, smooth. Veil smooth.*

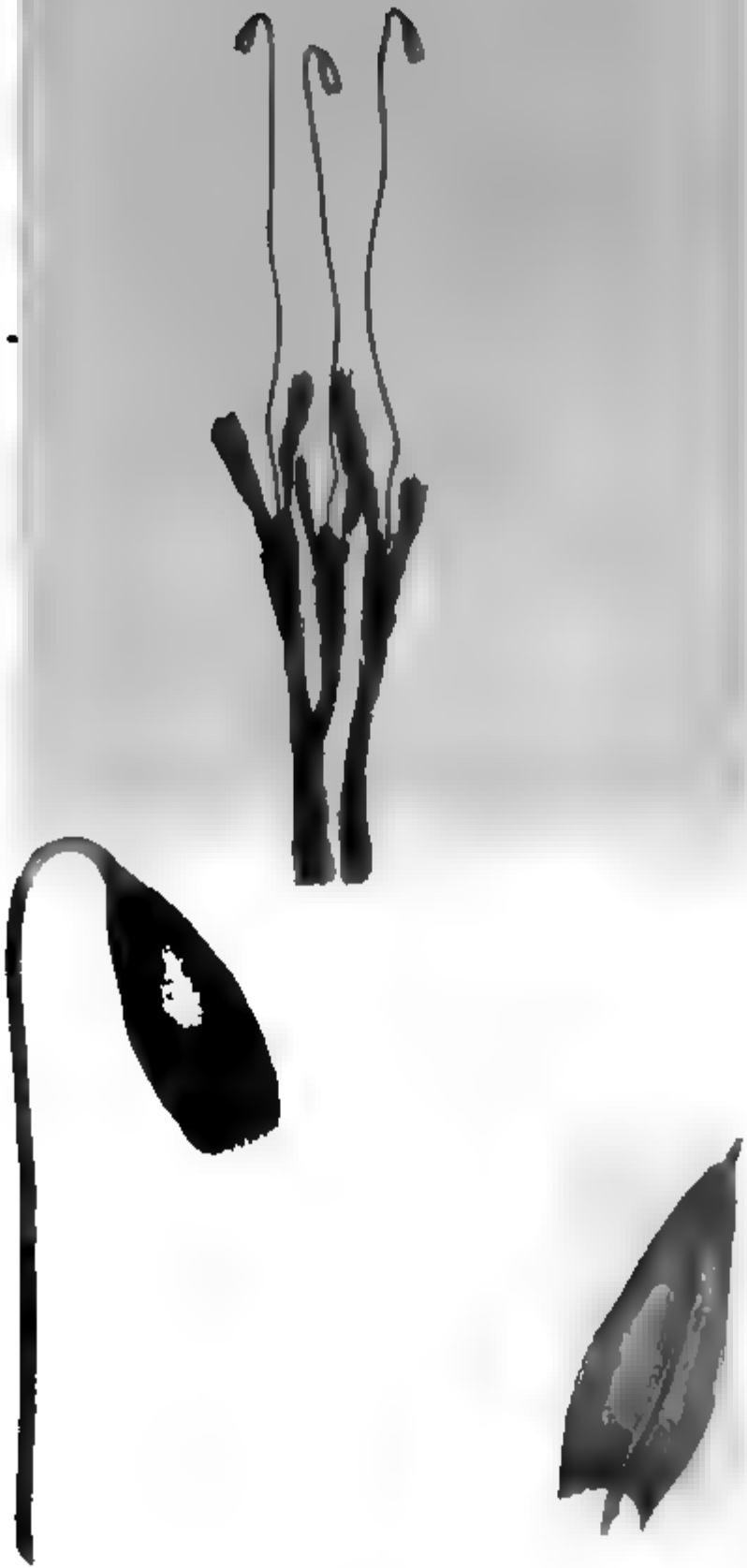
SPEC. CHAR. *Stem ascending, somewhat branched. Leaves lanceolate, entire, decurrent. Fruitstalk bent. Capsule clubshaped, pendulous.*

SYN. *Bryum cubitale. Dicks. Crypt. fasc. 2. 9. t. 5. f. 2. Sm. Fl. Brit. 1364. With. 840. Hull. 267.*

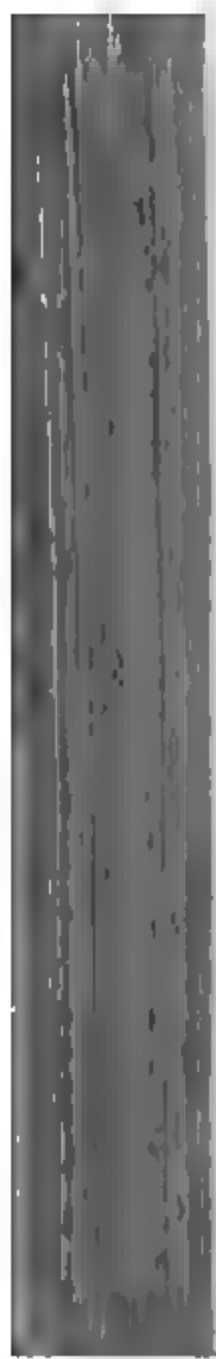
THIS large species of *Bryum*, distinguished by a singular bending near the base of its fruitstalks, was gathered by Mr. Dickson on moist banks near Aberfeldy in North Britain. We know of no other botanist who has observed it.

The habit approaches that of *bimum*, t. 1518, the stems being two or three inches high, clothed with rusty down, leafy, and irregularly branched. Leaves spreading, bright green, pellucid, reticulated, with a strong red mid-rib, and a thickened entire margin of the same hue. The apex is crowned with a minute point; the base is slightly decurrent. Fruitstalks solitary at the top of last-year's shoots, three or four inches long, of a shining tawny brown; bent near the bottom. Capsule pendulous, club-shaped, tapering at the base, pale brown, smooth, red at the margin, with a light-yellow fringe.

2554



Juncus acutiflorus L.





B R Y U M ventricosum.

Swelling Bog Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Outer fringe of 16 teeth, broad at the base: inner a toothed membrane. Flowers terminal. Capsule ovate-oblong, smooth. Veil smooth.*

SPEC. CHAR. *Stem determinately branched; the branches ascending. Leaves alternate, ovato-lanceolate, serrated near the point. Capsule swelling, pendulous.*

SYN. *Bryum ventricosum. Dicks. Crypt. fasc. 1. 4. Sm. Fl. Brit. 1365. Relh. 427. Turn. Musc. Hib. 126. Winch. v. 1. 115.*

B. triquetrum. Huds. 490, α. Hull. 256.

B. annotinum palustre, capsulis ventricosis pendulis. Dill. Musc. 404. t. 51. f. 72.

B. nitidum, foliis serpilli angustioribus, majus. Dill. in Raii Syn. 102.

Mnium pseudo-triquetrum. Hedw. Sp. Musc. 190 Crypt. v. 3. 19. t. 7. With. 108.

M. triquetrum. Abbot. 235. Lightf. 715.

GATHERED on the sandy brink of the river at Meavis bank near Edinburgh, bearing fruit in April. It prefers marshy or boggy places, especially where there is a mixture of sand or gravel, not mud. The long perennial rusty roots grow in close tufts. The stems are bright red, and have two or more branches springing from beneath the fructifying spot, which ascend in a slightly spreading posture. Leaves pale green, lax, rather alternate than three-ranked, moderately spreading, lanceolate, or in some measure ovate, acute, single-ribbed, serrated near the top, twisted when dry. Male and female organs often in the same flower, according to Hedwig. Fruitstalk from the top of last-year's branch, an inch and half or two inches high, nearly upright, red below, yellowish above. Capsule pendulous, ovate, short, tumid near the base, a little constricted under the mouth. Hedwig draws it, as he himself describes it, contracted at the base after the seeds are discharged. Lid convex, with a rather prominent point. Fringe yellow.



Al. ...





BRYUM *bimum*.

Long-stalked Bog Thread-moss.

CYSTOGAMA *Moss.*

GEN. CHAR. *Fringet double: outer of 16 teeth, broad at base: inner a toothed membrane. Flowers terminal. Capsule ovate-oblong, smooth. Veil smooth.*

SPEC. CHAR. *Stem branched. Leaves alternate, linear-lanceolate, slightly serrated near the point. Capsule minute, simple, pedicelous.*

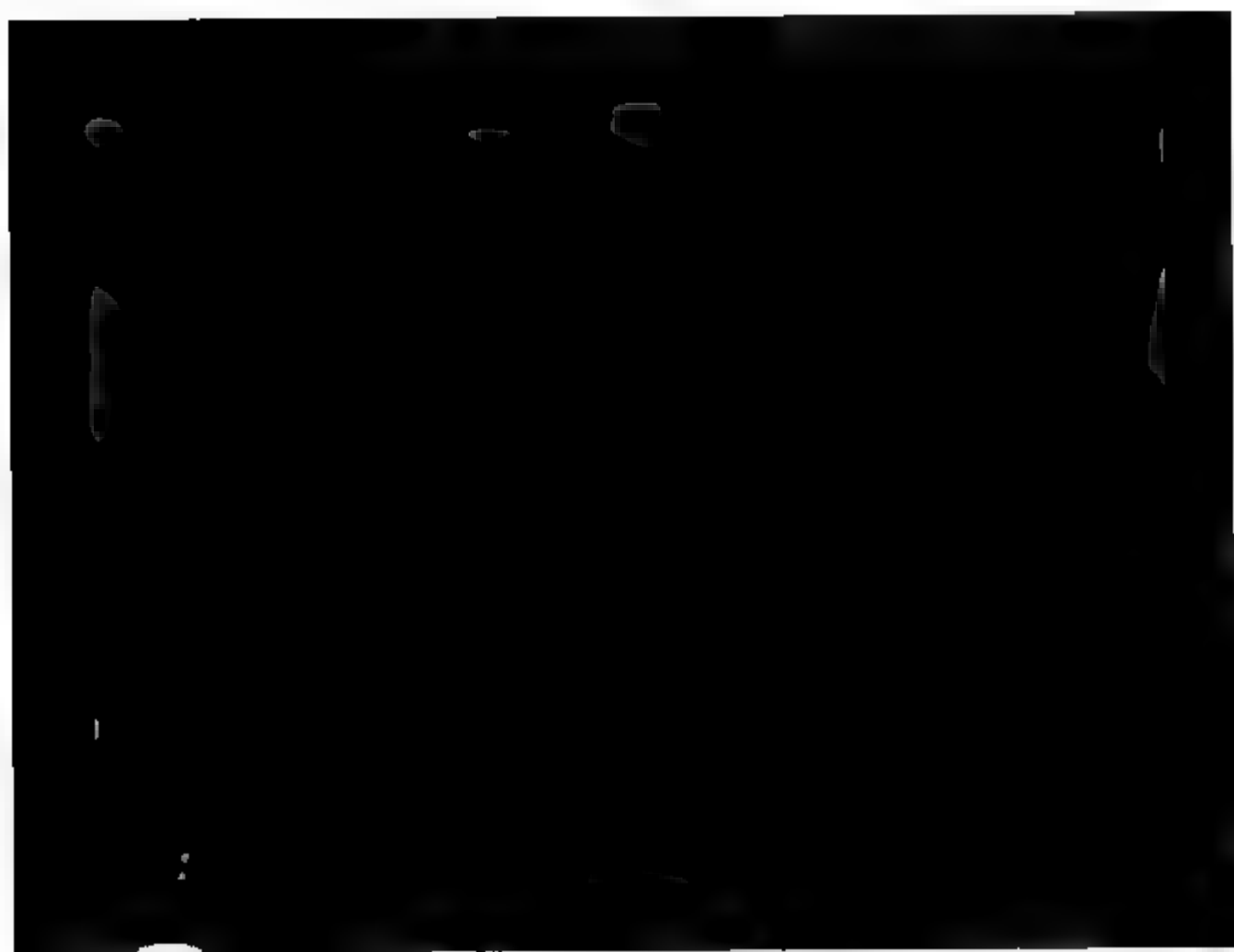
SYN. BRYUM *bimum*. *Scrub. Lips. 83. Sm. Fl. Brit. 1865. Turz. Musc. Hbt. 127.*

B. imbricatum *L. Herb. 490. Hall. 256.*

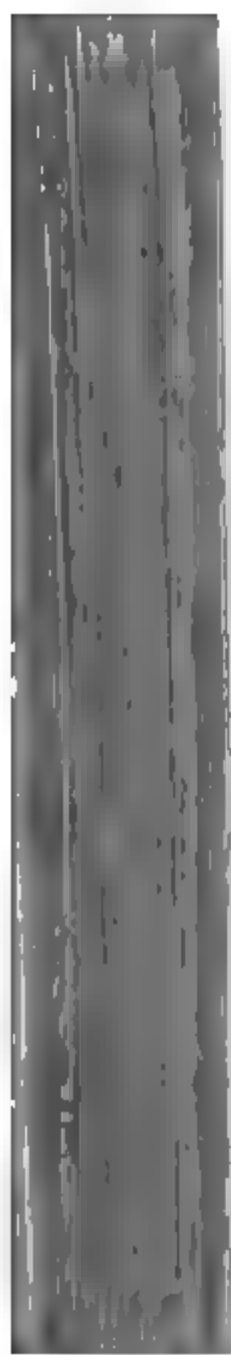
B. imbricatum *bimum*, *setis et capsulis longis pediculis.* *Dill. Musc. 405. t. 51. f. 73.*

B. minimum. *foliis setulis pellucidis angustis, capsulis minutis mucronatis, pediculis pediculis e surculis minutis cymosis.* *Dill. in Raii Syn. 102.*

Minimum *pediculis cymosis, var. 2. Willd. 808.*









[1572]

BRYUM turbinatum.

Pear-shaped Bog Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Outer fringe of 16 teeth, broad at the base: inner a toothed membrane. Flowers terminal. Capsule ovate-oblong, smooth. Veil smooth.*

SPEC. CHAR. *Stem branched. Leaves ovate, bearded, entire. Capsule pear-shaped, pendulous.*

SYN. *Bryum turbinatum. Swartz. Musc. Suec. 49. Sm. Fl. Brit. 1866.*

B. triquetrum γ . *Huds. 491.*

B. palustre complicatum rubens, capsulis turbinatis pendulis. Dill. Musc. 406. t. 51. f. 74.

B. nitidum rubens, capitulis reflexis, foliis angustis pellucidis, cauliculis proliferis. Dill. in Raii Syn. 102.

Mnium turbinatum. Hedw. Sp. Musc. 191. Crypt. v. 3. 22. t. 8.

M. nutans. With. 803. Hull. 255.

THIS seems to be a rare species. Dillenius mentions Shooter's hill and Wales as its stations. The Rev. Mr. Dalton finds it on Scotton banks near Knaresborough, and no where else. It bears fruit in spring and summer, and loves a wet sandy soil.

Stems about an inch high, perennial, branching, reddish. Leaves bright green, pellucid, reticulated, alternate, ovate, entire, with a strong rib ending in a small bristly point. Fruitstalk dark red, wavy, about an inch high. Capsule pendulous, pear-shaped, of a light shining brown when ripe. Lid convex, with a little point which is only perceptible in an early state. Fringe yellowish with a rusty hue.







[2434]

BRYUM stellare.

Starry-leaved Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Outer fringe of 16 teeth, broad at the base: inner a toothed membrane. Flowers terminal. Capsule ovate-oblong, smooth. Veil smooth.*

SPEC. CHAR. *Stem branched. Leaves ovate, pointed, reticulated with roundish interstices; the upper ones serrated and stellate. Capsule oblong, pendulous.*

SYN. *Bryum stellare. Roth. Germ. v. 3. 240. Sm. Fl. Brit. 1367.*

B. proliferum, var. 2. Hull. 266.

B. serpyllifolium ε. Huds. 492.

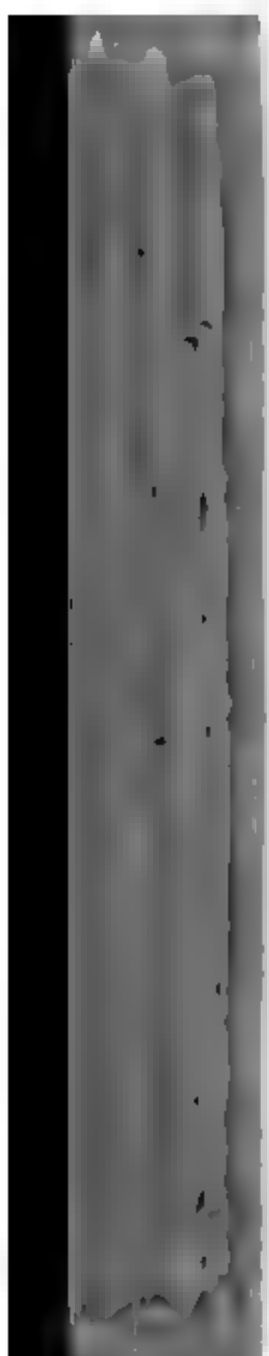
B. stellare roseum pendulum minus, capsulis et setis longioribus. Dill. Musc. 412. t. 52. f. 78.

B. roseum minus, foliis subrotundis. Raii Syn. 92.

Mnium stellare. Hedw. Sp. Musc. 191. t. 45. f. 1—4.

M. proliferum, var. 2. With. 807.

FOUND occasionally in woods, and moist heathy spots. The stem is an inch or two high, branched in a determinate manner, leafy and perennial, with many rusty radicles. Leaves light green, ovate or obovate with a short point, and a strong red rib. Under a magnifier they are found beautifully reticulated with roundish interstices. The lower ones are entire; the uppermost are crowded and stellate, and their tips are more or less serrated. Fruitstalk solitary, two inches high, smooth, rather stiff, not quite straight. Capsule pendulous, cylindrical inclining to obovate. Lid hemispherical with a small point.



[1474]

BRYUM cuspidatum.

Pointed-leaved Thyme Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, smooth. *Fringe* double: *outer* of 16 teeth, broad at their base: *inner* a toothed membrane. *Flowers* terminal.

SPEC. CHAR. Stem simple: when barren procumbent and somewhat branched. Leaves ovate, serrated. Capsule ovate. Lid hemispherical.

SYN. *Bryum cuspidatum.* Swartz. *Musc. Suec.* 51. *Sm. Fl. Brit.* 1368. *Hull.* 266. *Sibth.* 291.

B. serpyllifolium γ . *Huds.* 492.

B. pendulum, foliis variis pellucidis, capsulis ovatis. *Dill. Musc.* 413. t. 53. f. 79.

Mnium cuspidatum. *Hedw. Sp. Musc.* 192. t. 45. f. 5—8. *With.* 804. *Relh.* 420. *Abbot.* 234.

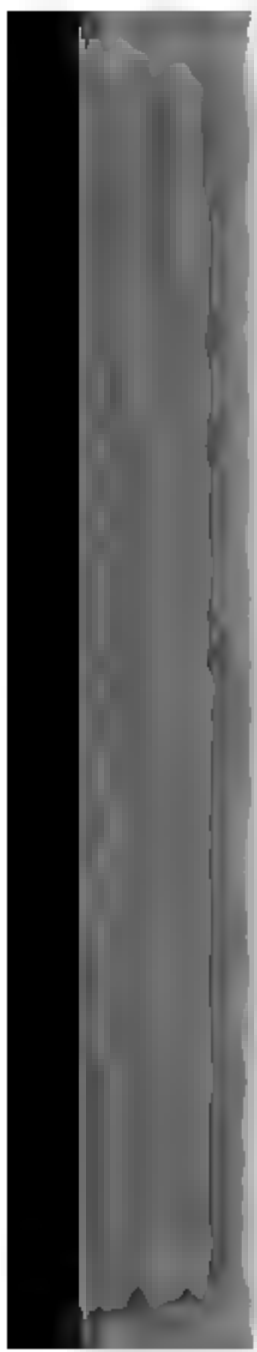
M. serpyllifolium β . *Linn. Sp. Pl.* 1577.

THIS species is common in shady moist groves, and is not very unfrequently found with capsules in the spring. We received it from the Rev. Mr. Dalton.

Its stems are of two kinds. The barren ones are procumbent and creeping, 2 or 3 inches, or more, in length, sometimes branched, always leafy. The flowering stems are upright, simple, only an inch high. The leaves are of a fine green, transparent, very minutely reticulated, of an ovate form with a sharp point, a little waved, and sharply serrated. Nerve strong, palish. Fruit-stalk solitary, erect, rose-coloured, a little zigzag. Capsule pendulous, ovate, rather short and broad when ripe, at which period it becomes yellow or tawny, with a blush on one side, and a red mouth. Lid convex, blunt. Fringe yellowish.



June 1 1862 Published by J. G. & W. G. London



BRYUM punctatum.

Dotted Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Fringe* double : *outer* of 16 teeth, broad at their base : *inner* a toothed membrane. *Flowers* terminal.

SPEC. CHAR. Leaves obovate, entire, waved, dotted. Capsules elliptical, pendulous. Lid with a taper point.

SYN. *Bryum punctatum.* *Hull.* 266. *Sibth.* 291.

B. serpyllifolium, punctatum. *Huds.* 492.

B. pendulum, serpylli folio rotundiore pellucido, capsulis ovatis. *Dill. Musc.* 416. t. 53. f. 81.

B. nitidum, serpylli rotundis et latioribus foliis pellucidis. *Rau Syn.* 103.

Mnium punctatum. *Witb.* 805. *Relb.* 420. *Abbot.* 234 *Hedw. Sp. Musc.* 193.

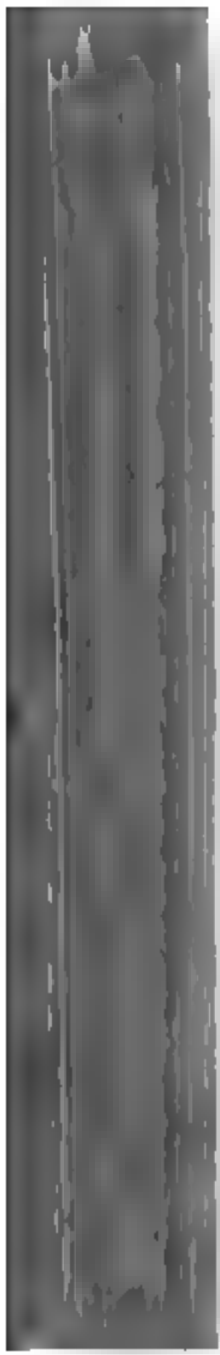
M. serpyllifolium, punctatum. *Linn. Sp. Pl.* 1577.

A NATIVE of wet shady spots, for specimens of which from Tunbridge we are obliged to Mr. J. F. Forster. It is perennial, ripening its fruit during the winter and early spring; but neither the fruit, nor indeed the moss itself, is of very frequent occurrence.

The root consists of dense brown fibres. Stems generally simple, reddish, leafy. Leaves obovate, broad, more or less pointed, waved, entire, with a thick cartilaginous edge; their substance thin and pellucid, pale-green, beautifully dotted or reticulated like the leaves of a *Splachnum*, with a central rib. Flowers terminal, dioecious. The male flat, surrounded with a rose of larger leaves. Capsules elliptical, pendulous, on longish, red, upright, mostly solitary, stalks. Lid with a taper point, not half so long as the capsule.

Linnaeus has most unwarrantably combined under his *Mnium serpyllifolium* many species as distinct from each other as they are all remarkable for elegance. The present is known at once by its broad dotted leaves.





BRYUM rostratum.

Long-beaked Thyme Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, smooth. Fringe double: outer of 16 teeth, broad at their base: inner a toothed membrane. Flowers terminal.

SPEC. CHAR. Stem simple. Leaves obovato-spatulate, minutely serrated. Capsule ovate. Lid awl-shaped.

SYN. *Bryum rostratum.* Schrad. *Spicil.* 72. *Sm. Fl. Brit.* 1369.

B. serpyllifolium β. *Huds.* 492.

B. punctatum, var. 2. *Hall.* 266.

B. pendulum, serpylli folio longiore pellucido, capsulis oblongis cuspidatis. *Dill. Musc.* 416. t. 53. f. 80. *Hort. Dill.*

Moss punctatum, var. 2. *Willd.* 806.

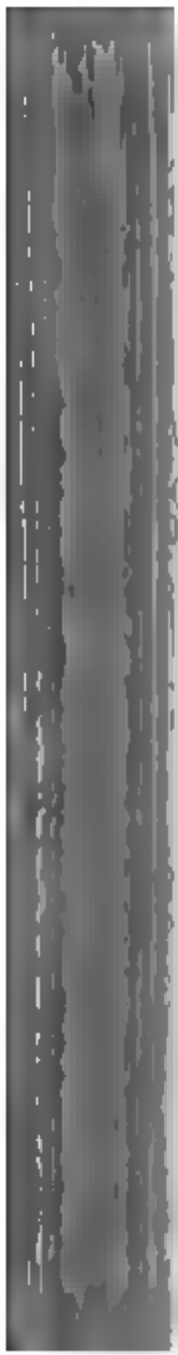
FOR THE WHICH is much rarer and less known than the last,



3475



Step 1. 1868. Published by W. G. Smith, London.



BRYUM roseum.

Rosaceous Thyme Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Outer fringe of 16 teeth, broadest at the base; inner a toothed membrane, Flowers terminal. Capsule ovate-oblong, smooth. Veil smooth.*

SPEC. CHAR. *Stem somewhat proliferous. Leaves crowded, stellate, ovate, acute, minutely dotted; finely serrated towards the summit. Lid conical.*

SYN. *Bryum roseum, Schreb. Lips. 84. Swartz. Musc. Succ. 51, Sm. Fl. Brit. 1370. Turn. Musc. Hib. 132.*

B. serpyllifolium δ . *Huds. 492.*

B. proliferum, Sibth. 292.

B. stellare roseum majus, capsulis ovatis pendulis. Dill. Musc. 411. t. 52. f. 77.

B. roseum majus, foliis oblongis. Rait Syn. 92.

Mnium roseum, Hedw. Sp. Musc. 194.

M. proliferum, With. 806. Abbot. 235.

M. serpyllifolium γ . *Linn. Sp. Pl. 1578. Hull. 250.*

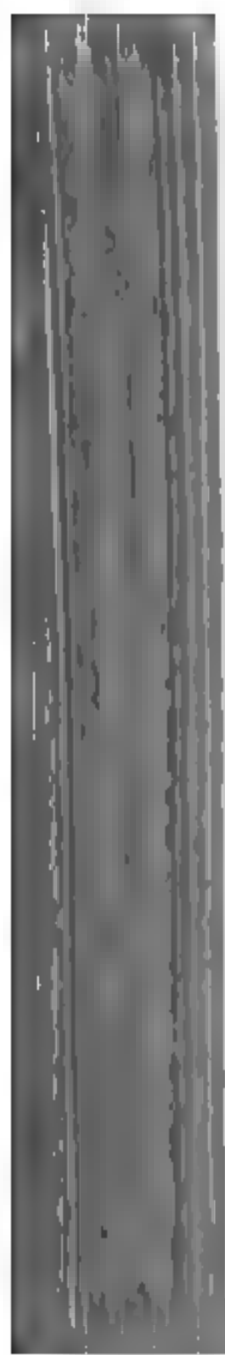
ALTHOUGH this species of *Bryum* may be occasionally met with in the moist parts of woods and heaths, the capsules are so exceedingly rare, that Dillenius appears to have procured them but once from his friend L. Brown, who found them at Christmas-time, near Bishop's-Castle. We are therefore happy to profit by Swedish specimens, of Dr. Swartz.

The stems are simple, erect, an inch or two high, perennial, brown, bearing many small scattered scales, and at the top a starry tuft of numerous, large, broad, pointed, finely dotted leaves, whose upper part is finely serrated, and their entire base somewhat decurrent. The fruitstalks grow, solitary or in pairs, from the centre among the leaves, and are about two inches high. Capsule inclining, ovate, smooth, red brown. Lid, according to Dillenius, convex, but short. The top of each stem often throws up a vertical shoot, bearing leaves and fruit the next year. The barren stems described in Fl. Brit. prove to belong to a different plant.

2395



Herbarium of the University of Cambridge



BRYUM ligulatum.
Long-leaved Thyme Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, smooth. *Fringe* double: *outer* of 16 teeth, broad at their base; *inner* a toothed membrane. *Flowers* terminal.

SPEC. CHAR. Stems simple, at length branched at the summit. Leaves oblong, undulated, serrated. Fruit-stalks clustered.

SYN. *Bryum ligulatum.* Schreb. *Lips.* 84. Sm. *Fl. Brit.* 1871.

B. undulatum. Sibth. 292. Turn. *Musc. Hib.* 133.

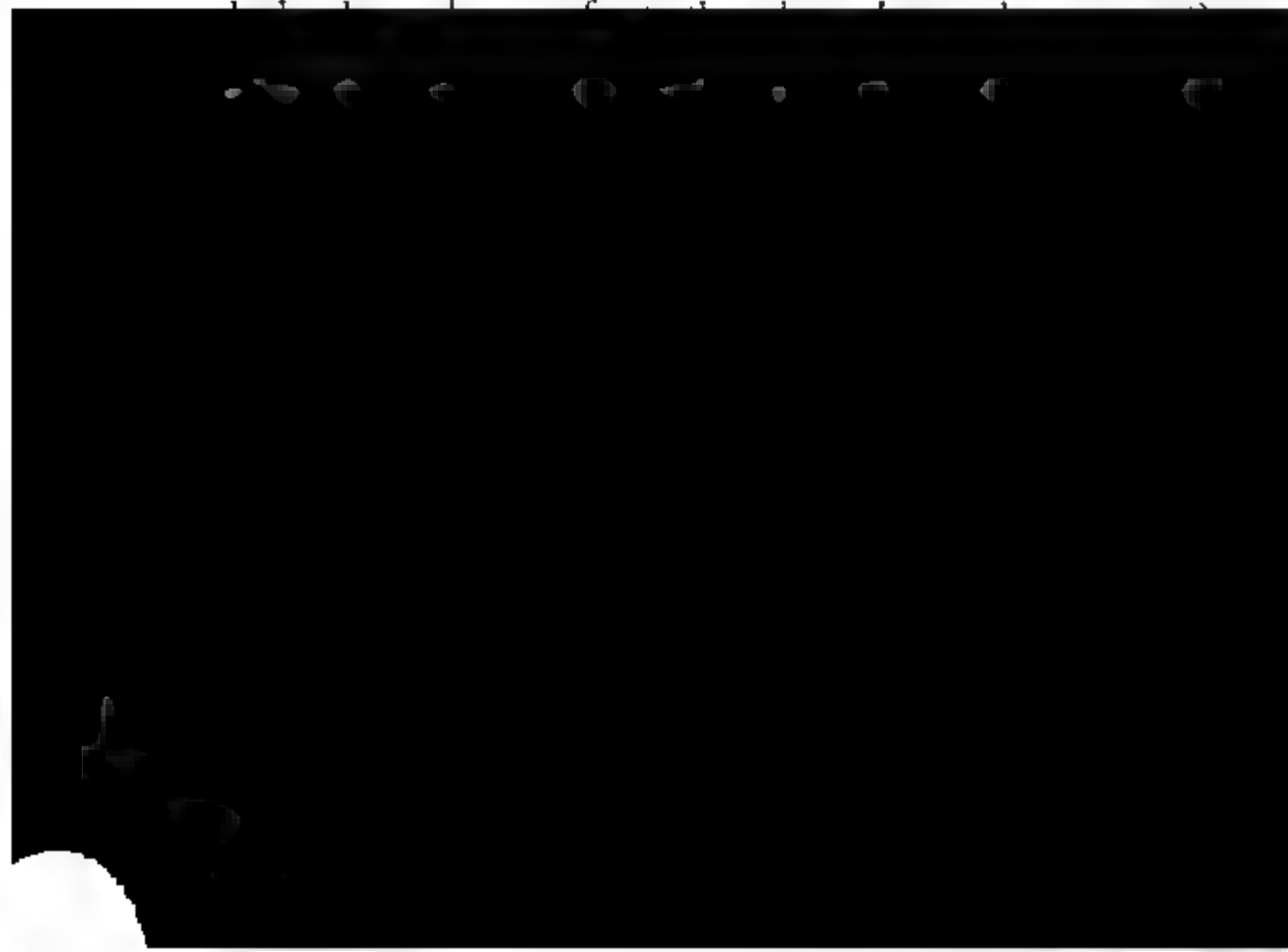
B. dendroides polycephalon, phyllitidis folio undulato pellucido, capsulis ovatis pendulis. Dill. *Musc.* 410. t. 52. f. 76.

B. nitidum, foliis oblongis undatis, capitulis cernuis, arbusculam referens. Raii *Syn.* 103.

Mnium undulatum. Hedw. *Sp. Musc.* 195. With. 806. Hull. 250. Relh. 420. Abbot. 235.

M. serpyllifolium δ . Sp. *Pl.* 1578.

THIS very elegant *Bryum* is of frequent occurrence in damp



BRYUM ligulatum.
Long-leaved Thyme Thread-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Caps. ovate-oblong, smooth. Fringe double: outer of 16 teeth, broad at their base; inner a toothed membrane. Flowers terminal.

SPEC. CHAR. Stems simple, at length branched at the summit. Leaves oblong, undulated, serrated. Fruit-stalks clustered.

SYN. *Bryum ligulatum.* Schreb. *Lips.* 84. *Sm. Fl. Brit.* 1371.

B. undulatum. Sibth. 292. *Turn. Musc. Hib.* 133.

B. dendroides polycephalon, phyllitidis folio undulato pellucido, capsulis ovatis pendulis. *Dill. Musc.* 410. t. 52. f. 76.

B. nitidum, foliis oblongis undatis, capitulis cernuis, arbusculam referens. *Raii Syn.* 103.

Mnium undulatum. *Hedw. Sp. Musc.* 195. *With.* 806. *Hort.* 250. *Relh.* 420. *Abbot.* 235.

M. serpyllifolium L. *Sp. Pl.* 1578.

THIS very elegant *Bryum* is of frequent occurrence in damp



W. J. 1805. *F. adhaerens*. In *Journal of the Botanical Society of London*.

POLYTRICHUM commune.

Common Hair-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Outer fringe of 32 or 64 short incurved teeth: inner a flat undivided membrane. Veil generally double: the outer hairy.*

SPEC. CHAR. *Stem simple. Leaves linear-lanceolate, finely serrated, acute. Capsule erect, quadrangular, standing on a roundish pedestal.*

SYN. *Polytrichum commune. Linn. Sp. Pl. 1573. Hedw. Sp. Musc. 88. Menz. Tr. of Linn. Soc. v. 4. 74. Huds. 469: With. 795. Hull. 247. Relh. 415. Sibth. 305. Abbot. 292. Dicks. H. Sicc. fasc. 17. 19?*

P. quadrangulare vulgare, Juccæ foliis serratis. Dill. Musc. 420. t. 54. f. 1.

P. vulgare et majus, capsulâ quadrangulari. Raii Syn. 90.

THIS, the most magnificent of all our Mosses properly so



POLYTRICHUM commune.*Common Hair-moss.***CRYPTOGAMA Muri.**

GEN. CHAR. *One* *ring* of 32 or 64 short incurved
membr. : *membr.* : *far* *undivided* *membrane.* *Veil* *ge-*
nerally *acute* : *the* *stem* *hairy.*

SPEC. CHAR. *Stem* *simple.* *Leaves* *linear-lanceolate,*
imbr. *serrated* *acute.* *Capsule* *erect, quadrangular,*
sitting *on* *a* *rudiment* *pedestal.*

SYN. *Polypodium commune.* *Linn. Sp. Pl.* 1573.
Fragm. N. Mur. 58. *Mur. Tr. of Linn. Soc.*
v. 4. p. 4. *Hull.* 439. *Wick.* 795. *Hull.* 247.
Reil. 475. *Nitz.* 305. *Attol.* 232. *Dicks. H.*
Nitz. *tab.* 17. 19?

P. juniperinum *volgare,* *Jocze* *foliis* *serratis.* *Dill.*
Musc. 433. = 54. f. 1.

P. vulgare *et* *raris,* *capsula* *quadrangulari.* *Raii*
Syn. 32.



[1198]

POLYTRICHUM attenuatum.*Slender Hair-moss.***CRYPTOGAMIA Musci.**

GEN. CHAR. *Outer fringe of 52 or 64 short incurved teeth: inner a fine undivided membrane. Veil generally double: the outer hairy.*

SPEC. CHAR. *Stem simple. Leaves linear-lanceolate, spreading, serrated, acute. Capsule quadrangular, drooping, contracted at the base, without a pedicel.*

SYN. *Polytrichum attenuatum. Menz. Tr. of Linn. Soc. v. 4. 72. t. 6. f. 2.*

P. formosum. Hedw. Sp. Musc. 92. t. 19. f. 1, 2.

OBSERVED by Mr. Sowerby in April 1800, on Sydenham Common, Kent, for the first time, we believe, in Britain.

This elegant species has apparently been long overlooked as not different from *P. commune*, for it appears not to be very







Fig. 11. 1881. Published by J. S. G. & Co., London.

[1827]

POLYTRICHUM *gracile*.
Long-stalked Hair-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Outer fringe of 32 or 64 short incurved teeth: inner a flat undivided membrane. Veil generally double: the outer hairy.*

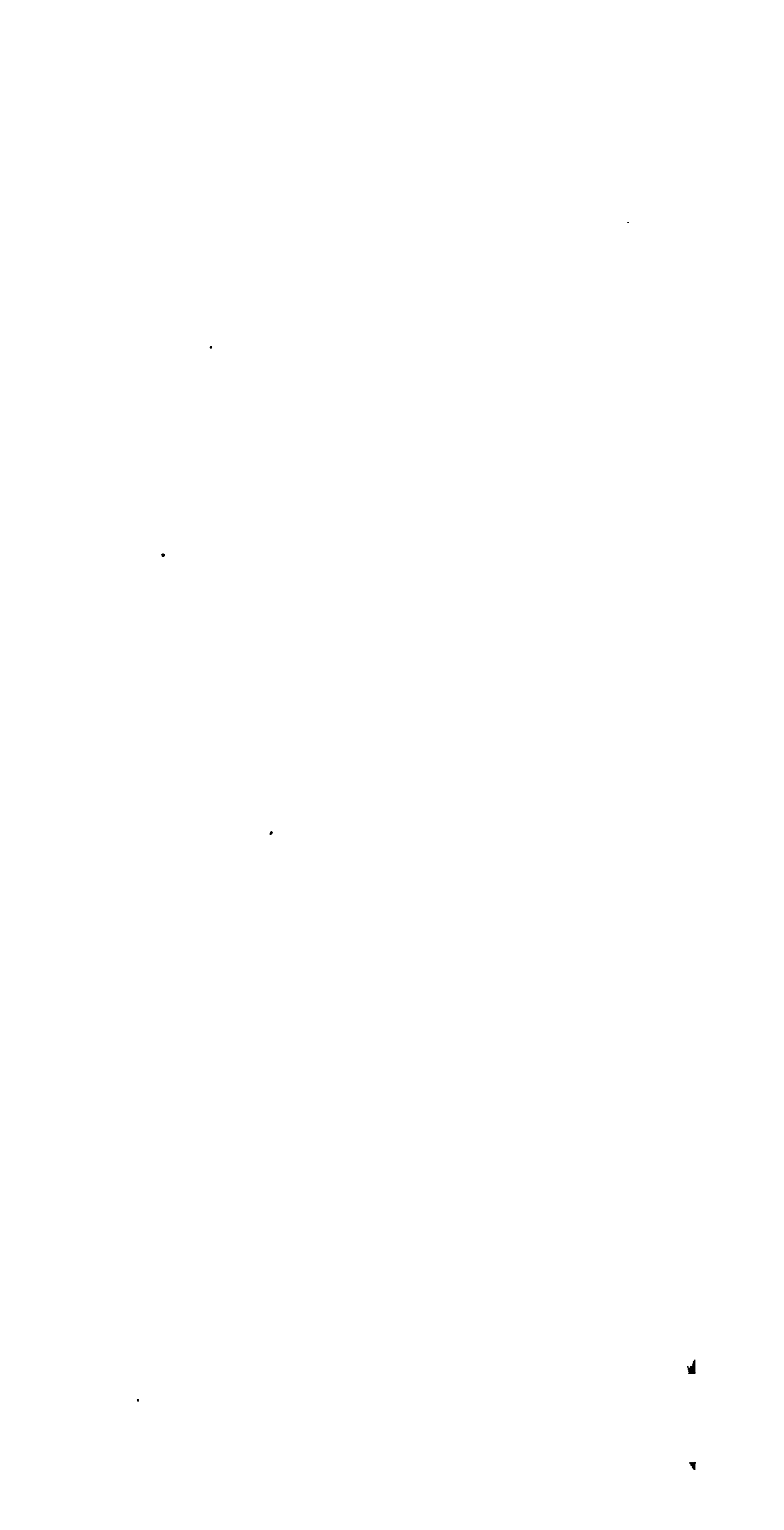
SPEC. CHAR. *Stem simple. Leaves linear-lanceolate, somewhat spreading, serrated. Capsule inclining, ovate, quadrangular, contracted at the base, without a pedestal. Fringe of thirty-two teeth.*

SYN. *Polytrichum gracile. Menz. Tr. of Linn. Soc. v. 4. 73. t. 6. f. 3. Sm. Fl. Brit. 1374. Hull. 247. Turn. Musc. Hib. 85.*

P. longisetum. Swartz. Musc. Suec. 76 and 103. t. 8. f. 16.

SENT from Ireland by Mr. Templeton, who finds it on both mountain and lowland bogs, bearing fruit in the middle of





[1837]

POLYTRICHUM gracile.
Long-stalked Hair-moss.

LEPTOGAMIA Moench.

GEN. CHAR. *Capsule*, fringe of 32 or 64 short incurved teeth: *stem* & *leaf* undivided membrane. *Veil* generally *simple*: the *stem* hairy.

SPEC. CHAR. *Stem* simple. Leaves linear-lanceolate, *knowing* spreading, serrated. Capsule inclining, *stem* *contracted*, contracted at the base, without a *pedicel*. Fringe of thirty-two teeth.

SYN. POLYTRICHUM gracile. Moench. *Tr. of Linn. Soc.* 1: 4. 73. 1. 5. 7. 5. *Syn. Fl. Brit.* 1874. *Hull.* 247. *Tr. Mus. Hist.* 85.

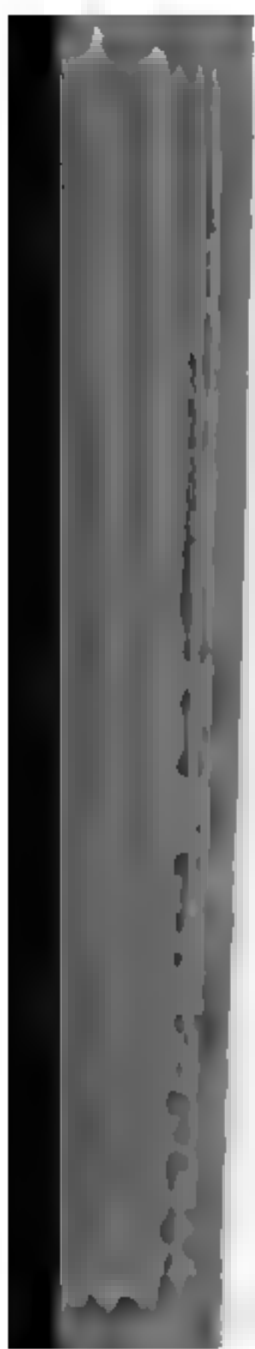
P. imbricatum. *Syn. Musc. Succ.* 76 and 108. 1. 8. 7. 16.

SENT from Ireland by Mr. Templeton, who finds it on both *mountain* & *lowland* hills, *grows* fruit in the middle of

1827



Bot. Beech. Published by J. Smith London





[1199]

POLYTRICHUM piliferum.*Bristle-topped Hair-moss.***CRYPTOGAMIA Musci.**

GEN. CHAR. Outer fringe of 32 or 64 short incurved
 teeth: inner a few undivided membrane. Veil generally
 entire: the outer hairy.

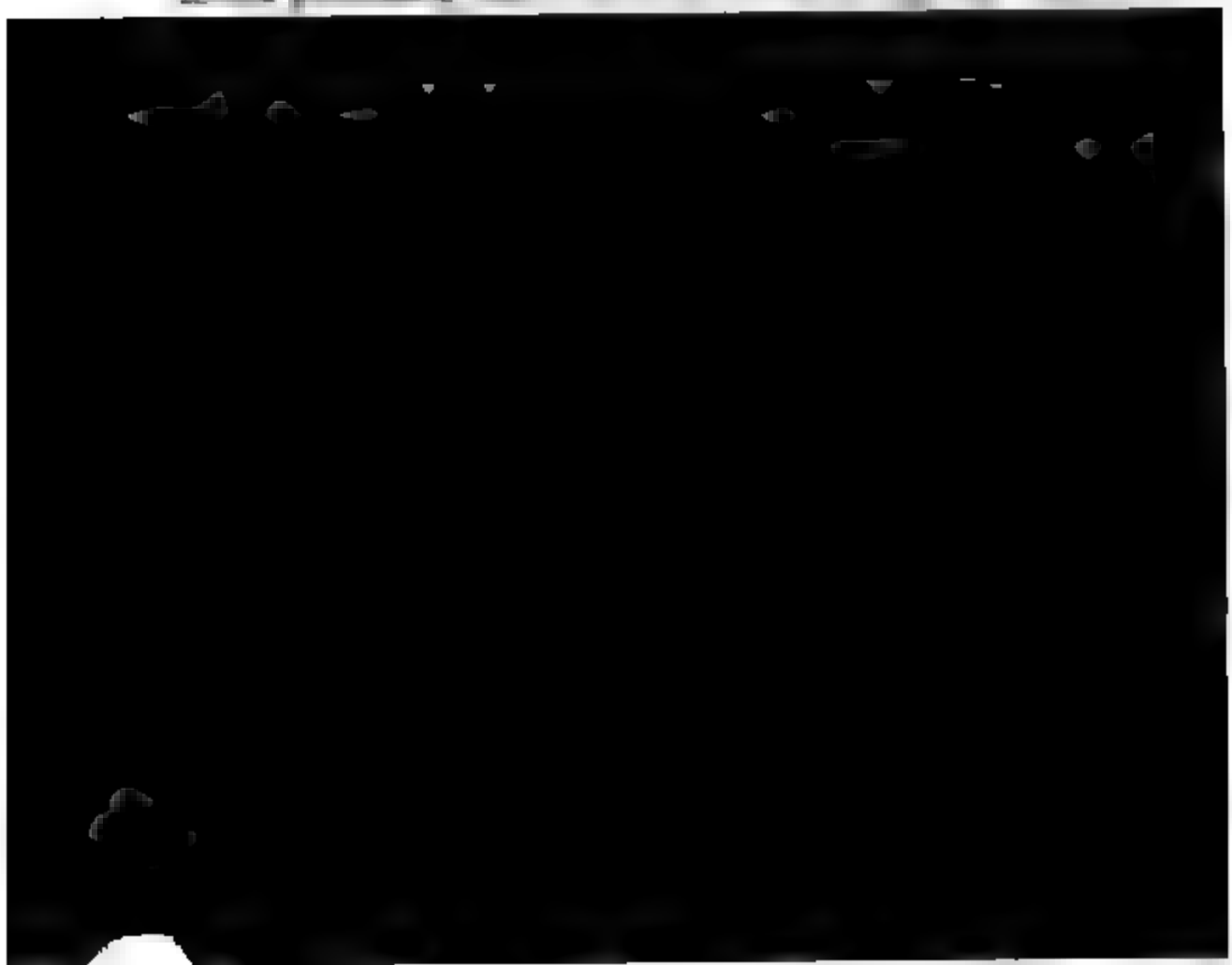
SPEC. CHAR. Leaves bracteate, rigid, entire, tipped
 with a white hair. Capsule quadrangular, on a
 depressed pedicel.

SYN. *Polytrichum piliferum*. Schreb. *Fl. Lips.* 74.
Musc. T. of Linn. Soc. v. 4. 75. *Hedw. Sp.*
Musc. 30. *Hall.* 247. *Sitch.* 306. *Ehrh. Crypt.* 92.

P. commune, *γ.* *Linn. Sp. Pl.* 1573. *Huds.* 470.
Walt. 796.

P. quadrangulare minus, *Juniperi foliis pilosis.* *Dill.*
Musc. 496. t. 54. f. 3.

COMMON on dry mountainous sandy heaths and open
 places, which are covered in the winter and early spring by
 snow. It is a very common moss, and is often collected in large quantities.



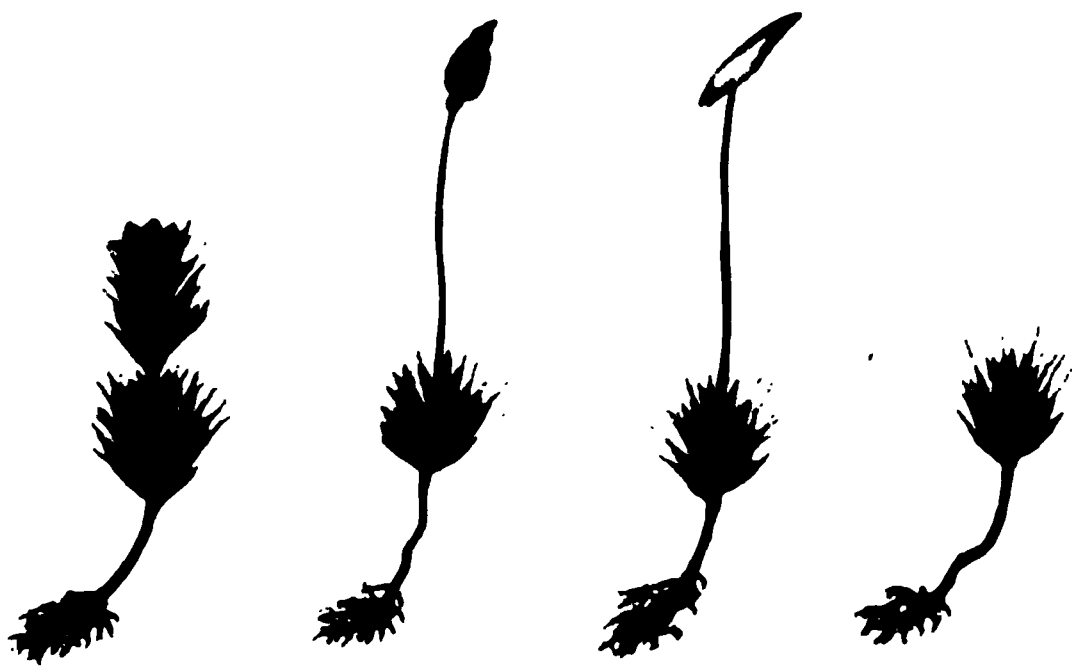


Fig. 1. 1893. Published by the University of Toronto.





[1200]

POLYTRICHUM juniperinum.

Juniper-leaved Hair-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Outer fringe of 32 or 64 short incurved teeth: inner a flat undivided membrane. Veil generally double: the outer hairy.*

SPEC. CHAR. *Leaves linear-lanceolate, pointed, entire; their margins inflexed. Capsule quadrangular, on a flat pedestal.*

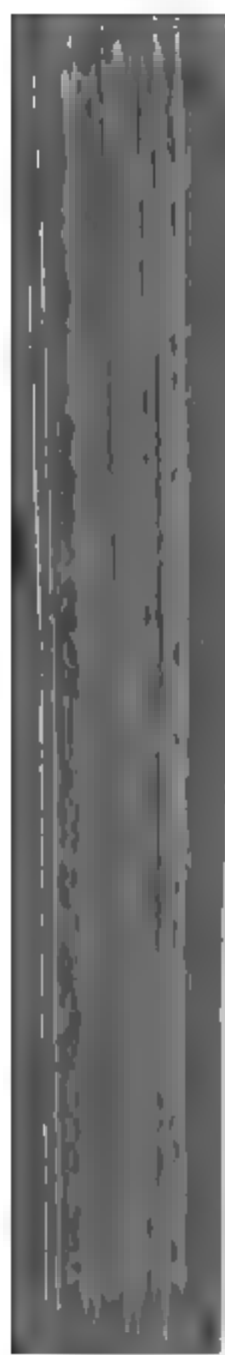
SYN. *Polytrichum juniperinum. Menz. Tr. of Linn. Soc. v. 4. 76. t. 6. f. 4. Hedw. Sp. Musc. 89. t. 18. f. 6—10. Relh. 415. Sibth. 306. Abbot. 232. Ehrh. Crypt. 82. Pl. Off. 180.*

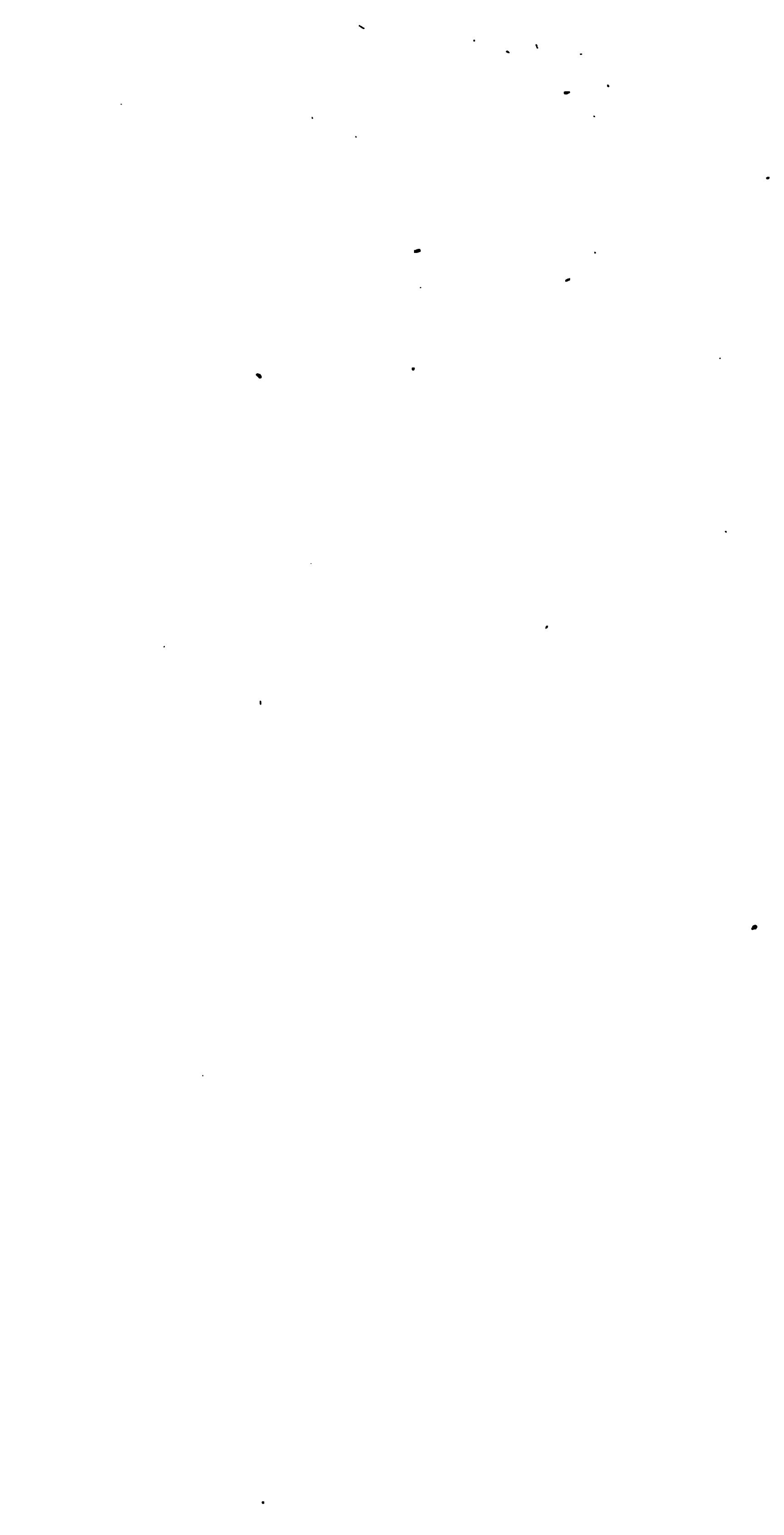
P. commune, β. Linn. Sp. Pl. 1573. Huds. 469. With. 795.

P. quadrangulare, juniperi foliis brevioribus et rigidioribus. Dill. Musc. 424. t. 54. f. 2.

ABOUT as common as the last in heathy mountainous places, ripening its fruit in April. We gathered these specimens on Hampstead heath.







POLYTRICHUM strictum.

Close-leaved Hair-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Outer fringe of 32 or 64 short incurved teeth: inner a flat undivided membrane. Veil generally double: the outer hairy.*

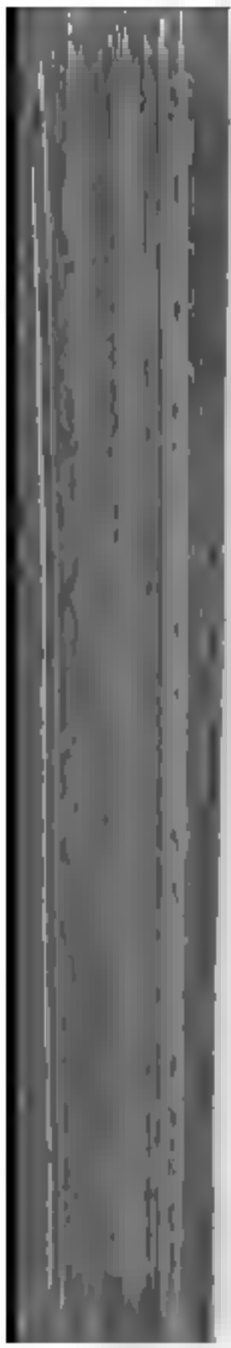
SPEC. CHAR. *Leaves lanceolate; their margins inflexed, entire. Capsule quadrangular, on a flat pedestal. Stem branched.*

SYN. *Polytrichum strictum. Menz. Tr. of Linn. Soc. v. 4. 77. t. 7. f. 1. Sm. Fl. Brit. 1876. Hull. 247. Turn. Musc. Hib. 83.*

A NATIVE of dry, barren, mountainous places. We have it from Scotland, by favour of Mr. G. Don, as well as an authentic specimen from Mr. Menzies. The branched stem, with a greater quantity of soft white woolly down about the roots, and the more upright or close position of the leaves, are supposed to constitute a specific difference between this and *P. juniperinum*, t. 1200. The branches moreover are sometimes very long, and from the close-pressed leaves, at least in dry weather, look very slender, with a pale, more red or rusty aspect than is observable in the *juniperinum*. Nevertheless, we are inclined, with Mr. Turner, to suspect it a variety only, though certainly a remarkable one. The tips of the leaves are slightly serrated, but on that we dare not lay any great stress in this case.



collected by J. H. Sargent





[1905]

POLYTRICHUM alpinum.

Alpine Hair-moss.

CRYPTOGAMIA Muci.

GEN. CHAR. *Caps.* fringe of 32 or 64 short incurved
teeth: *stem* a flat undivided membrane. *Veil* gene-
rally entire: the *caul* hairy.

SPEC. CHAR. *Leaves* lanceolate-awlshaped, finely ser-
rate. *Capsule* ovate, drooping, with a top-shaped
peristome. *Stem* branched.

SEX. P. alpinum *Linna. Sp. Pl.* 1573. *Sm.*
F. Br. 157. *Hedr. Sp. Musc.* 92. *Menz. Tr.*
of L. Soc. 7. & 8. *Huds.* 470. *With.* 797.
HbL. 245. *Lign.* 708. *Tern. Musc. Hib.* 85.
Dicks. H. Soc. Jacq. 12. 19. *Ehrh. Crypt.* 2.

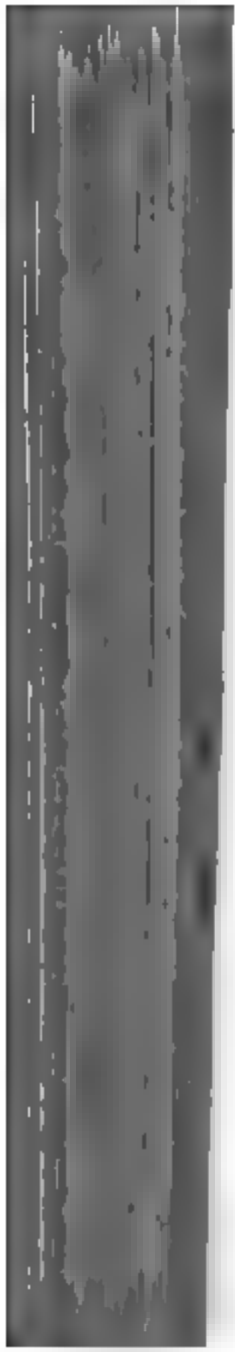
P. alpinum *var. caucasicum*, *capsulis e summitate ellipticis.*
Dal. Musc. 437. t. 55. f. 4.

A NATIVE of the highest mountains of Britain, as Snow-
don, Ben Lomond, &c. The specimen here delineated was
gathered by the late Mr. W. Branton, in June 1803, on Moss
Dale Hill, Wharfedale, Yorkshire. The capsules are pro-

1905



Fig. 1212. Reduced by A. S. Fernald, London.



Small, faint, illegible markings or artifacts located in the upper right quadrant of the page.



[1218]

POLYTRICHUM urnigerum.*Urn-headed Hair-moss.***CRYPTOGAMIA Musci.**

GEN. CHAR. *Oeder Fringe* of 32 or 64 short incurved setae: *stem* a flat undivided membrane. *Veil* generally simple: the *oeder hairy*.

SPEC. CHAR. Leaves lanceolate, finely serrated. Capsule cylindrical, erect, without a pedicel. Stem branched, fastigiate.

SYN. Polytichum urnigerum. *Linna. Sp. Pl.* 1573. *Hedw. Sp. Musc.* 100. t. 22. f. 5—7. *Menz. Tr. of Linna. Soc.* t. 4. 81. *Walt.* 79. *Hall.* 248. *Lightf.* 703. *Dicks. H. Sicc. fasc.* 12. 20.

P. alpinum *Hedw.* 471.

P. muscivora, setis ex alis urnigeris. *Dill. Musc.* 427. t. 33. f. 5.

THIS does not infrequently occur in a dry loose soil on the mountains of Scotland and Wales. Specimens from which







[1906]

POLYTRICHUM sexangulare.

Six-sided Hair-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Outer fringe of 32 or 64 short incurved teeth : inner a flat undivided membrane. Veil generally double : the outer hairy.*

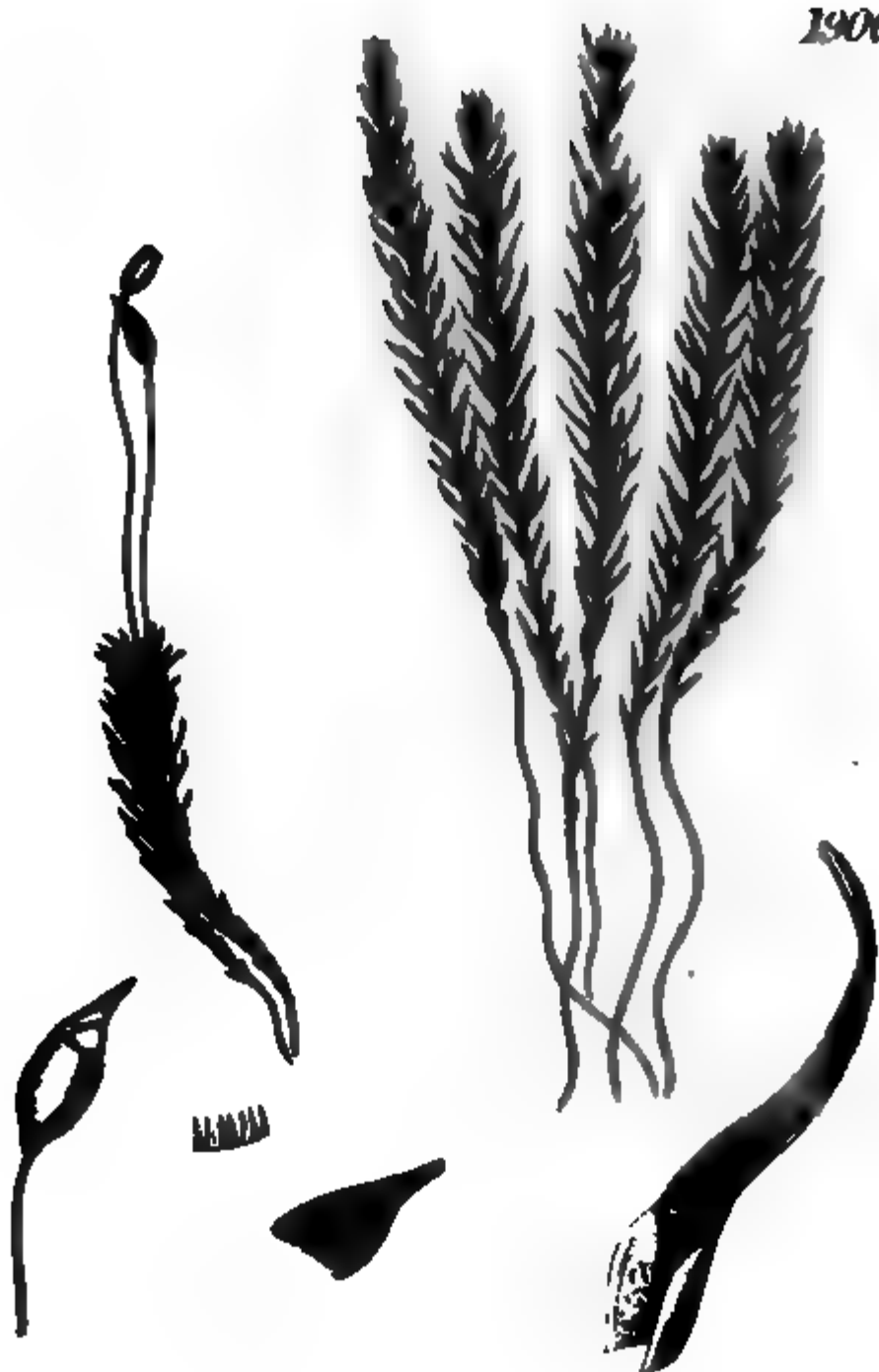
SPEC. CHAR. *Stem simple. Leaves linear-lanceolate, beardless, their edges and keel quite smooth and entire. Capsule inclining, ovate, with six angles, contracted at the base, without a pedestal. Fringe of sixty-four teeth.*

SYN. *Polytrichum sexangulare. Swartz in Schrad. Journ. v. 2. 174.*

ONE of the most curious acquisitions of Messrs. Turner and Hooker, who gathered it on Ben Nevis in their last-year's journey to Scotland, but not in fructification. The annexed specimen in fruit was sent us long ago from the Salzburg alps of Germany, by our much-esteemed and very liberal correspondent Dr. Schrader, with whom in the present disordered state of the world we can have no communication.

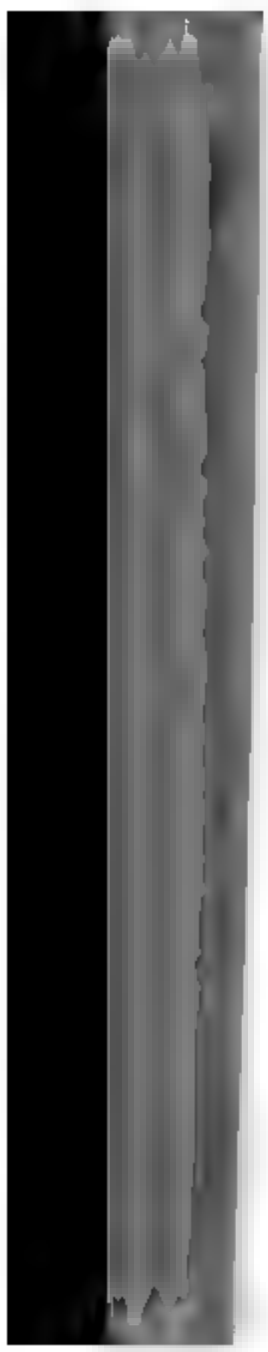
Mr. Flörk, it seems, an eminent alpine botanist, first found and named this species of *Polytrichum*. It is known by its leaves being perfectly smooth and entire both at the edges and keel, linear-lanceolate, slightly incurved, channelled above, convex beneath, without any terminal hair. Its capsule is ovate and 6-sided, contracted at the base so as to resemble an *apophysis*, but we think it has none. Veil double. Lid awl-shaped. Fringe of 64 minute white slender teeth standing in pairs.

1906



A. ...







POLYTRICHUM subrotundum.
Dwarf Round-headed Hair-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. Outer fringe of 32 or 64 short incurved teeth: ~~the~~ a flat undivided membrane. Veil generally ~~double~~: the outer hairy.

SPEC. CHAR. Leaves lanceolate, obtuse, entire, rigid. ~~Capsule~~ turbinate, nearly upright. Stem very short.

SYN. Polytrichum subrotundum. Huds. ed. 1. 400. Sm. Fl. Brit. 1378. Menz. Tr. of Linn. Soc. t. 4. 53. Hall. 247. Turn. Musc. Hist. 89.

P. pumilum. Swartz. Musc. Suec. 77 and 108. t. 9. f. 19. Hedw. Sp. Musc. 97. t. 21. f. 7—9.

P. nanum, capsulis subrotundis galeritis, aloes folio non serrato. Dill. Musc. 428. t. 55. f. 6. A—F.

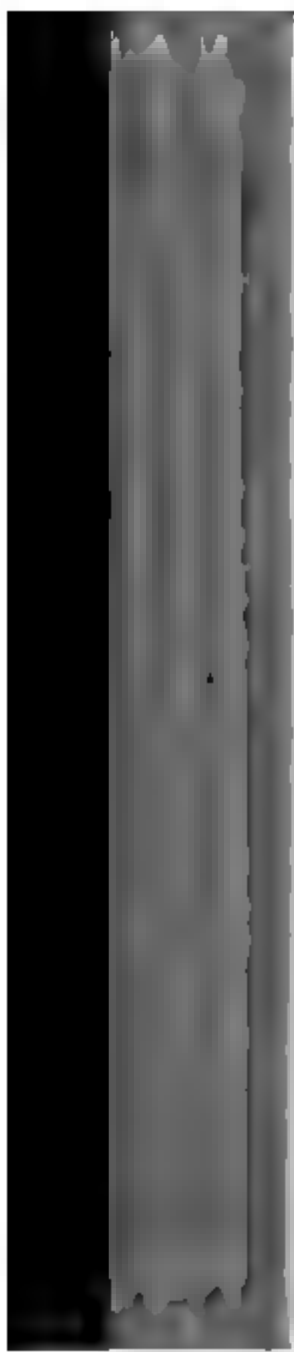
COMMON on heaths and sandy or loamy banks, bearing its capsules in the winter or early spring.

The root consists of fine dense woolly fibres, and is presumed to be annual. Stem scarcely any. Leaves numerous, of a dark dull green, rigid, thickish, oblong or lanceolate, obtuse, beardless, channelled, for the most part quite entire, the lowermost only being sometimes toothed at the summit. Fruit-stalk solitary, not an inch high, nearly straight, reddish brown, thickened at the top. Capsule almost erect, roundish when young, short and turbinate, with a very wide mouth; when old, a little oblique. Fringe of 32 slender teeth, soon turning black. Lid convex, red-edged, with a curved beak, which is conical when young, as in some other species. Veil double, the outermost yellowish brown.

Mr. J. D. Sowerby has observed that what is above called the inner fringe is more properly the membranous base of the lid, often attached to the column by its centre; and that there seems in this, as well as in *P. undulatum*, t. 1220, a real membranous peristome within the teeth. This gives quite a new view of the generic character.



July 2, 1866. Published by J. G. Sowerby, London.





POLYTRICHUM nanum.

Slender Round-headed Hair-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Outer fringe of 32 or 64 short incurved teeth: inner a flat undivided membrane. Veil generally double: the outer hairy.*

SPEC. CHAR. *Leaves linear, obtuse, slightly serrated. Capsule turbinate, drooping. Fruit-stalk zigzag. Stem very short.*

SYN. *Polytrichum nanum. Hedw. Sp. Musc. 95. Crypt. v. 1. 35. t. 13. Menz. Tr. of Linn. Soc. v. 4. 69. Sm. Fl. Brit. 1379. Huds. 470, β. Hull. 247. Relh. 416. Sibth. 306. Turn. Musc. Hib. 89. Ehrh. Crypt. 54.*

P. subrotundum. Curt. Lond. fasc. 2. t. 68. With. 796. Abbot. 232.

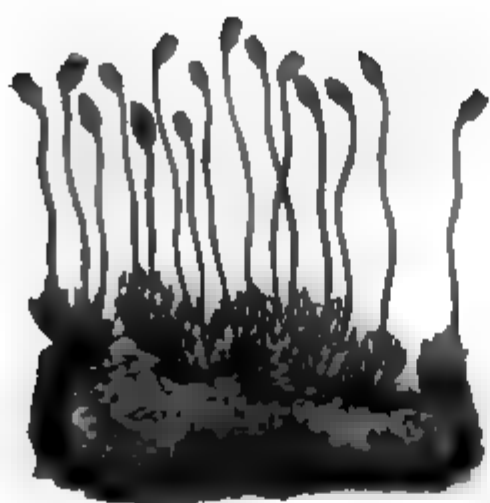
P. nanum, capsulis subrotundis galeritis, aloes folio non serrato. Dill. Musc. 428. t. 55. f. 6. G—L.

P. minus, capsulis subrotundis, calyptrâ quasi lacertâ coronatis. Raii Syn. 91.

Mnium polytrichoides α. Linn. Sp. Pl. 1576.

FREQUENT in dry heathy places, flowering in the early spring.

Root supposed to be annual. Whole plant much like *P. subrotundum*, except that it is somewhat larger, the leaves narrower, for the most part serrated, though obscurely, and less rigid than in that species. The fruit-stalk is nearly an inch and half high, slender, wavy or zigzag, twisted when dry. Capsule more or less drooping, rather more oblong than in the last-mentioned species. Fringe as in that, with a similar internal membrane.



Folio. 12. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.



POLYTRICHUM aloides.
Dwarf Long-headed Hair-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Outer fringe of 32 or 64 short incurved teeth: inner a flat undivided membrane. Veil generally double: the outer hairy.*

SPEC. CHAR. *Leaves lanceolate, obtuse, rigid, serrated towards the top. Capsule cylindrical, oblique. Stem unbranched.*

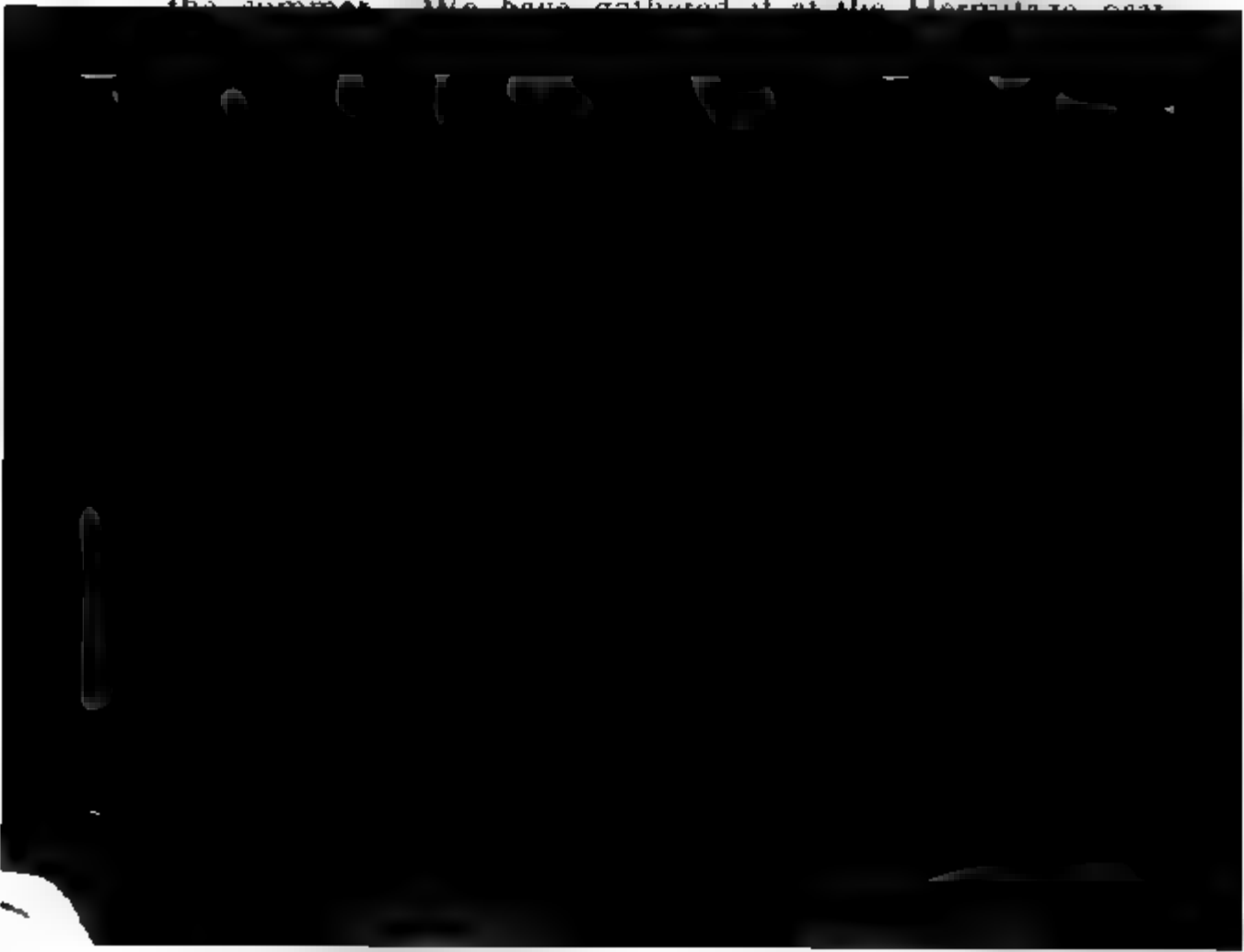
SYN. *Polytrichum aloides. Hedw. Sp. Musc. 96. Crypt. v. 1. 37. t. 14. Menz. Tr. of Linn. Soc. v. 4. 70. Sm. Fl. Brit. 1380. With. 796. Hull. 247. Sibth. 307. Turn. Musc. Hib. 88.*

P. nanum. Huds. 470, α. Lightf. 701.

P. parvum, aloes folio serrato, capsulis oblongis. Dill. Musc. 429. t. 55. f. 7.

Mnium polytrichoides β. Linn. Sp. Pl. 1577.

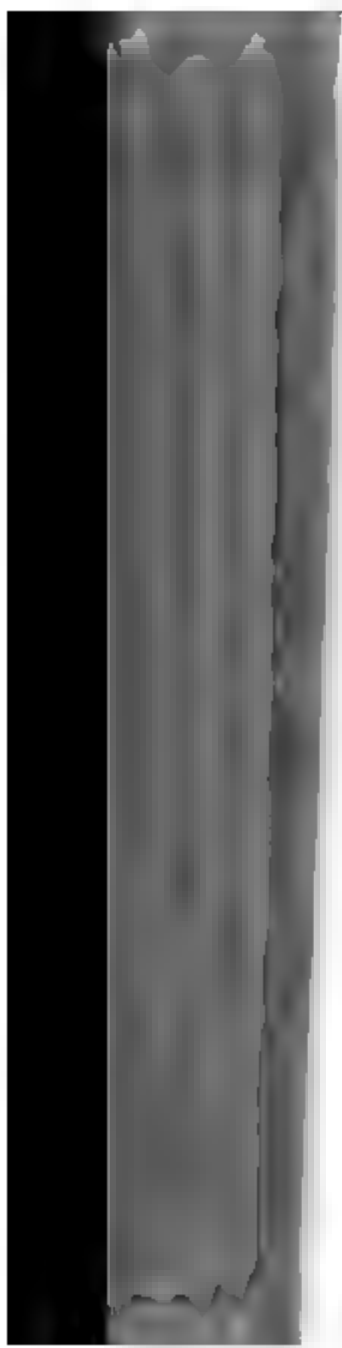
FREQUENT on rather moist and shady banks near rivulets, bearing capsules in April or May, sometimes much later in the summer. We have gathered it at the Hermitage near



1619



by Robert Smith of the Royal Society, London





[1605]

POLYTRICHUM Dicksoni.

Dwarf Short-stalked Hair-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* swelling. *Outer fringe* of 32 or 64 short, flat, incurved teeth: *inner* a circular, transverse membrane, attached to the points of the former. *Veil* generally double; the outermost hairy.

SPEC. CHAR. Leaves linear-lanceolate, obtuse, rigid, serrated. Capsule cylindrical, erect. Lid conical, taper-pointed. Stem mostly simple.

SYN. *Polytrichum Dicksoni*. *Turn. Musc. Hib.* 90. t. 10. f. 2.

FOR specimens of this moss, gathered on sandy banks near Yarmouth in April 1805, we are obliged to Mr. Turner, who also received it from Ireland, as mentioned in his work on Irish Mosses, and who has named it after its original observer Mr. Dickson.

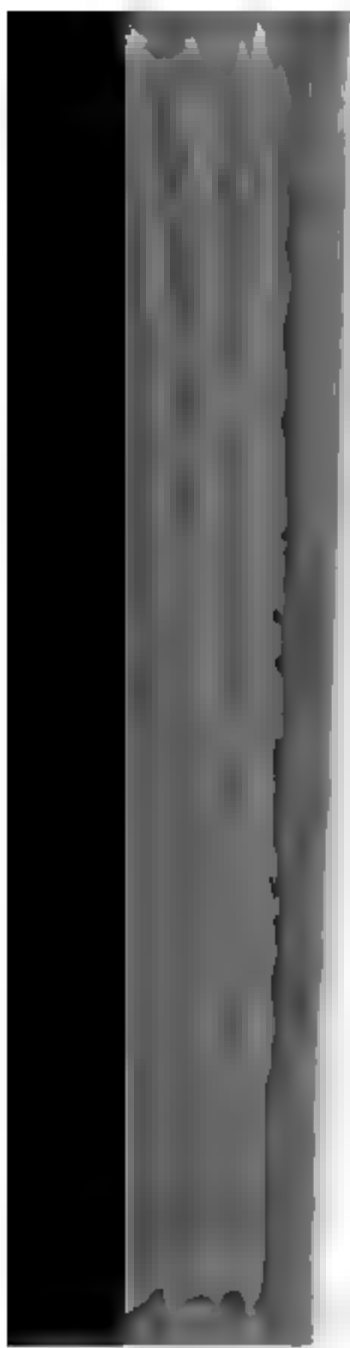
It is nearly allied to several small species of its genus, which we have not yet had an opportunity of figuring. We shall therefore describe it without referring to those species.

Root of many dense woolly fibres, probably perennial. Stems half an inch high, erect, simple or slightly branched, leafy. Leaves crowded, rigid, dark green with a tinge of purple, smooth, rather spreading when wet, a little incurved when dry; they are nearly linear, obtuse, keeled, their margin and keel serrated. Fruitstalks red, not much exceeding the leaves in length. Capsule quite erect, of a short cylindrical form, rounded at the base, smooth, purplish or glaucous. Fringe red, of about 32 teeth. Lid when young and moist conical, with a taper point; when dried the base becomes contracted and depressed. Outer veil composed of dense brown hairs.

1606



June 1 1806. Paddyland St. 1/4 County. London





1140 .
[1939]

POLYTRICHUM rubellum.

Reddish Dwarf Hair-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Outer fringe of 32 or 64 short incurved teeth : inner a flat undivided membrane. Veil generally double : the outer hairy.*

SPEC. CHAR. *Leaves lanceolate, bluntish, serrated in the margin and keel. Capsule cylindrical, oblique. Stem branched.*

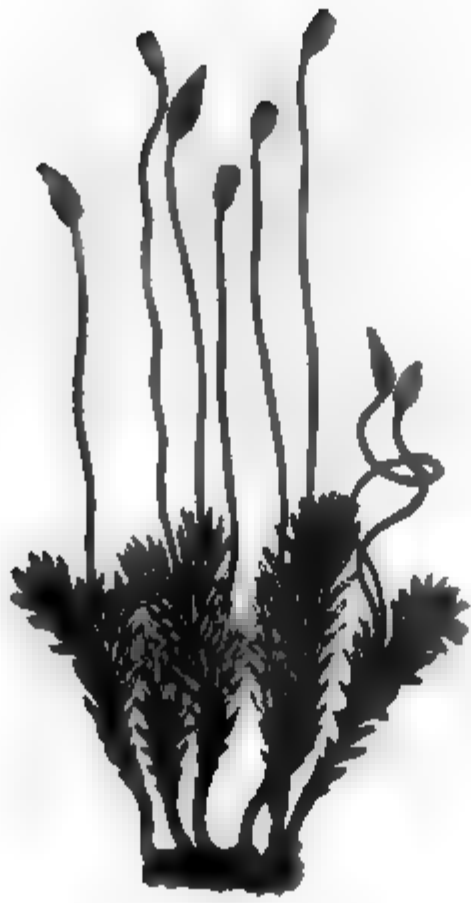
SYN. *Polytrichum rubellum. Menz. Tr. of Linn. Soc. v. 4. 79. t. 7. f. 3. Sm. Fl. Brit. 1381. Hull. 248. Turn. Musc. Hib. 87.*

P. aloides. Ehrh. Crypt. 45.

GATHERED in April 1808, by Mr. G. B. Sowerby, in a wood at Darent, near Dartford, Kent; a spot celebrated for affording many rare insects as well as plants, having been much investigated by the late Mr. Lewin, who for some time resided there.

The stem of this species is reddish, much more elongated than in *P. aloides*, t. 1849, and frequently branched or subdivided. Indeed the whole plant is taller and larger. Leaves more curled and twisted when dry, serrated nearly throughout, as is a great part of their keel. Fruitstalks commonly an inch and half, sometimes 2 inches, long, twisted, red. Capsule a little oblique, cylindrical inclining to ovate, its mouth slightly dilated. Teeth 32. Lid short, pointed, most conical when young, as in others of this genus.

Most authors have not distinguished this from *P. aloides*.





POLYTRICHUM hercynicum.

Incurved Hair-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Outer Fringe* of 32 or 64 short incurved teeth: *inner* a flat undivided membrane. *Veil* generally double: the *outer* hairy.

SPEC. CHAR. Leaves linear, mostly entire, incurved when dry. Capsule ovato-cylindrical, erect. Veil single, hairy when young.

STEM. *Polytrichum hercynicum.* Hedw. *Sp. Musc.* 94. *Crypt.* v. 1. 40. t. 15. *With.* 797. *Hull.* 248. *Bryum incurvum.* *Huds.* 479.

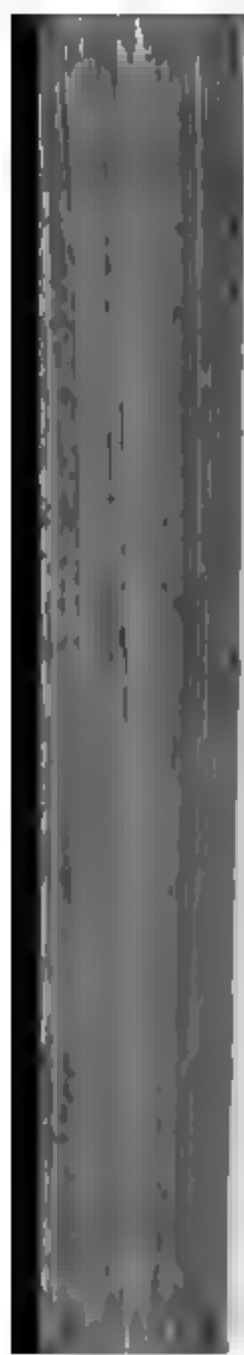
A RARE inhabitant of the Welch and Scottish mountains, for specimens of which we are obliged to Mr. Griffith, and to its original discoverer the Rev. H. Davies. It bears fruit in July.

Root perennial, densely woolly. Stems in tufts, from one to three quarters of an inch in height, mostly simple. Leaves dull-green, rigid, linear, channelled, rather pointed, for the

1219



Oct 2 1844. Published by J. G. & W. G. London.





POLYTRICHUM undulatum.

Undulated Hair-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Outer Fringe* of 32 or 64 short incurved teeth: *inner* a flat undivided membrane. *Veil* generally double: the *outer* hairy.

SPEC. CHAR. Leaves lanceolate, serrated, crisp when dry. Capsule cylindrical, drooping. Veil rough at the point.

SYN. *Polytrichum undulatum.* Hedw. *Sp. Musc.* 98.

Crypt. v. 1. 43. t. 16, 17. *Relh.* 416. *Sith.* 307.

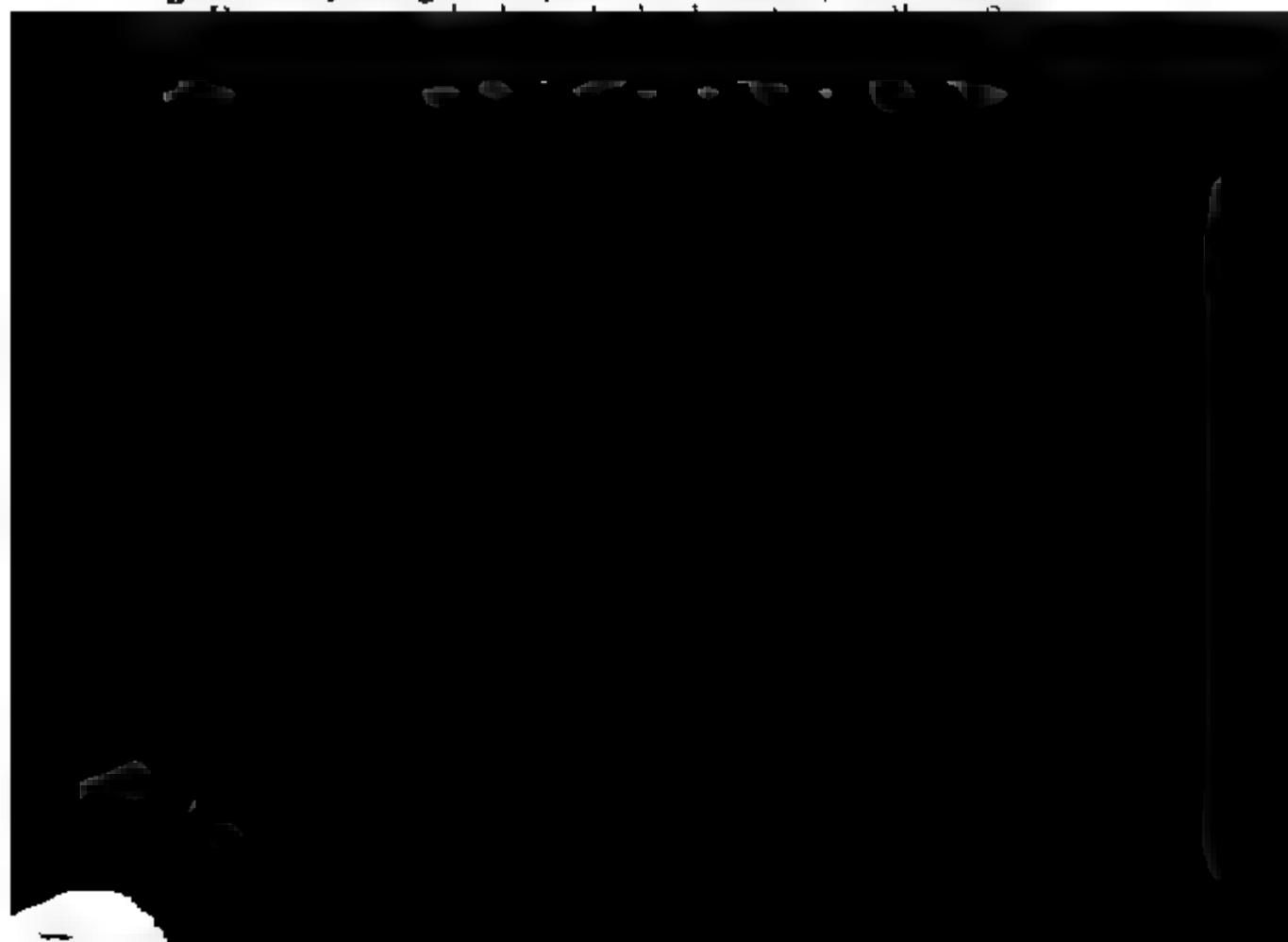
Bryum undulatum. Linn. *Sp. Pl.* 1582. *Huds.* 479.

With. 836. *Hull.* 265. *Abbot.* 243. *Curt. Lond.* fasc. 1. t. 70. *Dicks. H. Sicc.* fasc. 10. 19.

B. *phyllitidis folio rugoso acuto, capsulis incurvis.* *Dill. Musc.* 360. t. 46. f. 18.

B. *capitulis oblongis rubentibus, foliis oblongis angustis pellucidis rugosis.* *Raii Syn.* 95.

FREQUENT on shady sandy banks under hedges, and in groves, ripening its capsules in February and March.





Plat. 1. 1862. Published by J. G. Smith, London





