

The British Bryological Society

Formerly the Moss Exchange Club,
Founded 1896.



REPORT FOR 1940-43.

VOL. IV., PART 4.



Price of Reports (per copy)	.... ..	2/6.
Old M.E. Club Reports (per copy)	... ..	1/-.

Berwick-upon-Tweed :
MARTIN'S PRINTING WORKS, LTD. 64 & 66 WEST STREET

1944

CONTENTS.

	<i>Page</i>
Moss Herbarium of B.B.S.	ii cover
Executive Officers of the B.B.S.	189
List of Members - - - - -	190
Report of Secretary - - - - -	195
Statement of Accounts - - - - -	198
List of Referees - - - - -	200
Census Catalogues ; New V.C. records, etc. :—	
Sphagna - - - - -	201
Mosses - - - - -	208
Hepatics - - - - -	218
Note on <i>Cephalozia Fluitans</i> var. <i>Gigantea</i> Lindb. .	223
Recent Bryological Publications - - - - -	224
Obituaries - - - - -	228
List of Books on Mosses and Hepatics	iii cover

**EXECUTIVE OFFICERS
of the British Bryological Society
for 1940-43.**

President :—

Miss E. ARMITAGE.

Vice-President :—

Mr. W. R. SHERRIN, A.L.S.

Ex-Presidents :—

Mr. H. N. DIXON, M.A., F.L.S. (Deceased).

Rev. C. H. BINSTED, M.A., F.L.S. (Deceased).

Mr. W. E. NICHOLSON, F.L.S.

Dr. W. WATSON, D.Sc., A.L.S.

Mr. H. H. KNIGHT, M.A. (Deceased).

Mr. J. B. DUNCAN.

Treasurer :—

Mr. J. B. DUNCAN.

Librarian and Curator :—

Mr. W. R. SHERRIN, A.L.S.

Bibliographer :—

Mr. W. R. SHERRIN, A.L.S.

Distributors :—

Mosses :—Miss A. M. SAUNDERS. (Deceased).

Mr. E. C. WALLACE.

Hepatics :—Mr. C. M. BEDFORD, B.A.

Additional Members :—

Mr. F. E. MILSOM, B.Sc.

Miss E. M. LOBLEY.

Secretary :—

Mr. A. THOMPSON, B.Sc.,

23 Regent Crescent, Skipton, Yorkshire.

LIST OF MEMBERS, 1940.

Honorary Members :—

- Rev. H. G. Jameson, M.A. (Oxon.), Gartymore, Park Rise,
Leatherhead, Surrey. (Deceased, Dec. 26th, 1939.)
- Dr. A. W. Evans, Ph.D., Yale University, Newhaven (Con-
necticut), U.S.A.
- *Rev. C. H. Binstead, M.A. (Oxon.), F.L.S., Levanne,
Bodenham Road, Hereford. (Deceased, Jan. 10th,
1941.)
- *Mr. H. N. Dixon, M.A. (Lond. & Cantab.), F.L.S., 17, St.
Matthew's Parade, Northampton. (Deceased, May 9th,
1944.)

Ordinary Members :—

- Mr. J. H. Albrecht, Beau-Soleil, Villars-sur-Ollon, Switzerland.
- Mr. G. H. Allison, 65, Convamore Road, Grimsby.
- Prof. P. Allorge, 63, Rue de Buffon, Paris (5e).
- Herr H. Andres, Argeländerstrasse, 124/2, Bonn am Rhein,
Germany.
- *Miss E. Armitage, Dadnor, Ross, Herefordshire.
- Mrs. A. S. Bacon, B.Sc. (Lond), F.L.S., Department of Biology,
Technical College, Brighton, Sussex.
- Mr. A. D. Banwell, 30 Thorncliffe Road, Nottingham.
- Mr. E. F. Barnes, St. Madderne, Throwleigh, Okehampton.
- Mr. Edwin B. Bartram, Bushkill, Pike County, Pennsylvania,
U.S.A.
- Mr. Chas. M. Bedford, B.A., Taunton School, Somerset.
- Dr. T. H. B. Bedford, M.Sc., M.D., M.R.C.P., The Medical
School, The University, Manchester, 13.
- Mr. A. Bennett, Upper Colwall, Malvern. (Deceased, Sept.
30th, 1941.)
- Dr. Adám Boros, Aldás-u 4, Budapest, 11, Hungary.
- Mr. D. B. Bradshaw, 38, Morehampton Road, Dublin.
(Deceased, Jan. 5th, 1944.)
- Miss Margaret S. Brown, 36, Kent Street, Halifax, Nova Scotia.
- Mr. W. H. Burrell, F.L.S., 203, Hall Lane, Horsforth, Leeds.
- Mr. D. G. Catcheside, M.Sc., F.L.S., 186, Gilbert Road,
Cambridge.
- Mons. J. Charrier, La Châtaigneraie, Vendée, France.

- Miss H. A. Chick, 45, Cricklade Avenue, Streatham Hill,
London, S.W.2.
- Miss L. M. Child, Municipal Museum, 12, Mount Ephraim,
Tunbridge Wells.
- Miss C. A. Cooper, California Lane, Bushey Heath, Herts.
(Deceased, March, 1944.)
- Mr. F. Crosland, Eton House, Palmerston Street, Derby.
- Mr. J. B. Duncan, 6, Summerhill Terrace, Berwick-on-Tweed.
- Miss U. Duncan, Parkhill, Arbroath, Angus.
- Prof. J. Else, F.R.B.S., Broadoak House, Newnham-on-
Severn, Glos.
- Mr. J. G. Finlay, 27, Botanic Road, Glasnevin, Dublin.
- Prof. T. C. Frye, Dept. of Botany, University of Washington,
Seattle, U.S.A.
- Dr. Jos. Froehlich, Rechtsanwalt, Mariahilfer Str. 117,
Vienna, 6, Germany.
- Mr. A. Gepp, M.A. (Cantab), British Museum (Nat. Hist.),
Cromwell Road, London, S.W.7.
- Dr. A. J. Grout, Ph.D., Newfane, Vermont, U.S.A.
- Prof. Istvan Györfy, Kolozovár, Majális-utca, 28, Hungary.
- Prof. T. M. Harris, M.A., B.Sc., Botanical Dept., The
University, Reading.
- Mr. G. F. Horsley, Holmdene, Eaglescliffe, Stockton-on-Tees.
- Miss E. M. Hough, M.A., The School, Brentwood, Essex.
- Mr. J. D. Houston, Northern Bank House, Kilrea, Co. Derry,
Ireland.
- Mr. C. P. Hurst, F.L.S., Landulph Rectory, Saltash, Cornwall.
- Mr. H. A. Hyde, M.A., F.L.S., National Museum of Wales,
Cardiff.
- Dr. C. T. Ingold, B.Sc., Department of Botany, University
College, Leicester.
- Miss A. M. Irwin, Red House, Union Street, Coleraine, N.
Ireland.
- Mr. A. B. Jackson, 3, The Avenue, Kew Gardens, London.
- Mr. E. W. Jones, M.A., School of Forestry, University of
Oxford, Oxford.
- Mr. H. H. Knight, M.A. (Cantab.), The Lodge, All Saints'
Villas Road, Cheltenham. (Deceased, Jan. 4th, 1944).
- Miss Margaret Knox, 63, Talbot Road, Highgate, London, N.6
- Dr. Mauno J. Kotilainen, D.Ph., Korkevuoren, Katu, 8C.,
Helsinki, Finland.

Mr. J. R. Lee, 96, Finlay Drive, Dennistoun, Glasgow, E.1.

Herr Johannes Lid, Botanical Museum, Oslo, Norway.

Mr. C. A. Lister, 2 Brynelen Court, Prince Edward's Road, Lewes, Sussex.

Miss E. M. Lobley, 17, Southlands, Hexham, Northumberland.

Mr. Percy Long, Glenlea, Carisbrooke Road, Newport, Isle-of-Wight.

Dr. N. Malta, Prof. of Botany, Alberta 10, Riga, Latvia.

Mr. C. V. B. Marquand, M.A. (Cantab), F.L.S., Glenbrittle House, Isle of Skye. (Deceased, 1st July, 1943.)

Rev. W. R. Megaw, B.A., M.R.I.A., The Manse, Rosetta, Belfast.

Mr. F. E. Milsom, B.Sc., High Cross, Kirkburton, Huddersfield.

Dr. Hjalmar Möller, Naturhistoriska Riksmuseum, Stockholm. 50, Sweden.

Mr. E. A. Moxley, 131, Edna Avenue, Toronto, Ontario, Canada.

*Mr. W. E. Nicholson, F.L.S., 50, St. Anne's Crescent, Lewes, Sussex.

Miss E. F. Noel, F.L.S., 37, Burnham Court, London, W.2.

Mr. J. H. G. Peterken, 73, Forest Drive East, Leytonstone, London, E.11.

Miss D. Powell, M.Sc., F.L.S., Aldersyde, Reigate, Surrey.

Prof. J. H. Priestley, D.S.O., B.Sc., F.L.S., The University, Leeds, 2.

Dr. P. W. M. Richards, M.A., 44, Sedley Taylor Road, Cambridge.

Mr. F. Rilstone, A.L.S., Lambourne Hill, Penhallow, Truro, Cornwall.

Mrs. C. Sandwith, 26, Canynge Square, Clifton, Bristol, 8.

Mrs. Saunders, St. Ann's, Wray Park Road, Reigate, Surrey.

Miss A. Muriel Saunders, St. Ann's, Wray Park Road, Reigate, Surrey. (Deceased, July 23rd, 1944.)

Miss L. I. Scott, M.Sc., 18, Montpelier Cliff Road, Leeds, 6.

Mr. G. E. Shaw, 62, Quarry Hill, Tonbridge, Kent.

Herr Albert Schumacher, Waldbröl, Wiedenhof, 5, Rheinland, Germany.

Mr. W. R. Sherrin, A.L.S., South London Botanical Institute, 323, Norwood Road, London, S.E.24.

Mr. J. Sinclair, Ellerslie, Stronsay, Orkney.

- Miss K. E. Smith, The Quarry, Lutterworth Road, Nuneaton.
 Mr. F. A. Sowter, 9, North Avenue, Leicester.
 Mr. Wm. C. Steere, Dept. of Botany, University of Michigan,
 Ann Arbor, U.S.A.
 Capt. Carl Stenholm, Södra Vägen, 24, Göteborg, Sweden.
 Rev. T. Stephenson, Irfon, Llanbadarn Road, Aberystwyth.
 Miss E. H. Stevenson, B.Sc., Training College, The Close,
 Salisbury.
 Herr Per Störmer, Bot. Museum, Oslo, Norway.
 Miss J. S. Thomson, 28, Lower Baggot Street, Dublin.
 Mr. A. Thompson, B.Sc. (Lond.), 23, Regent Crescent, Skipton,
 Yorkshire.
 Mr. Francis W. Thorrington, Fern Dell, Luscombe Road,
 Paignton, Devon.
 Mr. W. G. Travis, 9, Barton Road, Liverpool, 9.
 Dr. L. B. C. Trotter, M.D. (Cantab.), 826, Woodborough
 Road, Mapperley, Nottingham.
 Mrs. Trotter, 826, Woodborough Road, Mapperley, Notting-
 ham. (Deceased, 1st July, 1943.)
 Mr. Arthur Turner, 140, Pine Street, Nelson, Lancashire.
 Colonel A. R. Uggla, F.L.S., 18, Sturegatan, Stockholm,
 Sweden.
 Dr. Fr. Verdoorn, P.O. Box, 151, Waltham, Mass., U.S.A.
 Mr. W. H. Wachter, Mathenesserweg 118a, Rotterdam-West,
 Holland.
 Mr. E. C. Wallace, 2, Strathearn Road, Sutton, Surrey.
 Professor J. Walton, M.A., D.Sc., Dept. of Botany, The
 University, Glasgow, W.2.
 Mr. R. Waterfield, 42, Union Road, Exeter.
 Dr. Walter Watson, D.Sc. (Lond.), A.L.S., Cedene, Cheddon
 Road, Taunton.
 Mr. W. C. R. Watson, 245, Southlands Road, Bickley, Kent.
 Miss M. Weightman, M.Sc., 13, Alexandra Road, Waterloo,
 Liverpool, 22. (Deceased, April 7th, 1941.)
 Mrs. A. White, Great Close, Ampfield, Romsey, Hants.
 Miss G. Wigglesworth, M.Sc., The Manchester Museum,
 The University, Manchester, 13.
 Mr. A. Wilson, F.L.S., F.R.Met.S., Tir-y-coed, Roe Wen,
 Conway, North Wales.
 *Mr. William Young, J.P., F.B.S.Ed., Fairview, Kirkcaldy,
 Fifeshire.

NEW MEMBERS, 1940-44.

- Mr. T. L. C. Bottomley, 23 Ryegate Crescent, Sheffield, 10.
 Mr. A. Burges, M.Sc., Ph.D., Botany School, Cambridge.
 Mr. C. P. Castell, B.Sc., 52 Graham Road, Wimbledon, London, S.W.19.
 Mr. A. C. Cramp, Palmer's Boys' School, Grays, Essex.
 Mr. H. F. Dovaston, B.Sc., West of Scotland Agricultural College, Auchincruive, by Ayr.
 Capt. A. E. A. Dunston, Burltons, Donhead St. Mary, Wilts., via Shaftesbury, Dorset.
 Miss M. B. Gerrans, 46 Moormead Road, St. Margarets, Twickenham, Middlesex.
 Mr. H. J. Holmes, 129 Dunmow Road, Bishop's Stortford, Herts.
 Mr. R. Lewis, Fiddler's Elbow, Staunton Road, Monmouth, Mon.
 Lieut. Hansford T. Shacklette, M.Sc. (Kentucky), O 1541305, 12th Evacuation Hospital, A.P.O. 511, Army of the U.S.A.
 Dr. Stanley Wyard, M.D., F.R.C.P., 35, Bolingbroke Grove, London, S.W.11.

**Original members of the Moss Exchange Club.*

Carpenter

Worthing

Motcombe

F.V. Watson

Whitehouse

Hora

(23)

Mr. J. J. J.

Mr. J. J. J.

Mr. J. J. J.

Mr. J. J. J.

Mr. J. J. J.

Mr. J. J. J.

Mr. J. J. J.

Mr. J. J. J.

Mr. J. J. J.

Mr. J. J. J.

Mr. J. J. J.

REPORT OF SECRETARY.

So many of the most active members of the Society have been unable to do much work on their hobby owing to other calls upon their time, that there is little to relate and it is difficult for the Secretary to write his Report.

Unfortunately, it is necessary to record the death of some of our oldest and most useful workers :—Rev. H. G. Jameson, Rev. C. H. Binstead and Mr. H. H. Knight. The two last were well known, even to those who joined the Society only a few years before 1939, as most capable and willing helpers in the identification of their finds. There is the loss of Mr. C. V. Marquand who was a very cheerful participant in most of the Annual Meetings. We shall miss the presence of Mr. D. B. Bradshaw, Miss C. A. Cooper, Mrs. Trotter and Miss M. Weightman at our excursions. The death of Mr. A. Bennett has also occurred. Thus we have lost ten of our number by death and two members have resigned.

We have received twelve new additions with the probability of several more to come, so that, so far as numbers go, our British list is about the same as before.

In the List of Members published in this issue, the names and addresses of foreigners are printed as given in the 1939 Report. Of what has happened to them we know scarcely anything, but we hope that most of them at all events will be able to rejoin us when affairs in Europe have settled down again. Mr. Wallace had news up to January, 1943, that Dr. J. Lid and Per Störmer were alive and well and were able to continue their botanical work. Some of those who have lately joined are very keen and are making interesting finds that are new V.C. records.

Capt. A. E. A. Dunston has sent in several hundred packets of sphagna, including quite a lot of new records for Dorset and S. Wilts. ; if he begins to examine the plants himself he will be a most useful member.

An account of two new *Andreaeas*—*A. Hartmanii* Hedw., found on Rhum (104) and *A. Blytii* Schp., on N. Harris (110), by J. W. Heslop Harrison, D.Sc., and R. B. Cooke, appeared in the J. of B., February, 1942, and make a notable addition to the British moss-flora.

During the war period a number of members—Miss U. Duncan, Miss J. S. Thomson and Messrs. E. C. Wallace, A. D. Banwell, J. G. Finlay, P. W. Richards, F. A. Sowter and others have done some collecting, resulting in many new V.C. records. Mr. Sowter has also published "The Cryptogamic Flora of Leicestershire and Rutland. Bryophytes."

Miss E. Armitage, our President, has very kindly had printed and is distributing to members "A Short Account of the Moss Exchange Club and the British Bryological Society," which she has compiled from the Annual Reports, 1896-1939. It is a most interesting and useful addition to our literature. Appendix II. should contain "Census Catalogue of British Sphagna," compiled by W. R. Sherrin.

Mr. Sherrin continues as useful to us as ever and deserves high praise among other things for his discovery of people interested in bryophytes whom he encourages to join the Society.

Mr. Duncan is indefatigable in keeping the Society in being, he has examined hundreds of packets of mosses sent in for naming since we closed down, has kept up a large correspondence in connexion with this work. His help and advice have been of considerable value to me.

Now what of the future? Nothing much can be done until the war at least in Europe is over, but when that occurs it might be a good plan to have a meeting of the Committee first of all to discuss the course to be taken. After that as soon as possible a general meeting of as many members as could attend should be attempted in some fairly easily accessible part of the country when definite plans and appointments can be discussed and agreed on.

The Secretary will be glad to receive suggestions from members who care to write to him as to where and when this should be, when the time approaches at which it becomes feasible.

There is still much to be done in some districts in ascertaining their bryophyte flora. I have lately been studying the Census Catalogue for Sphagna, brought up to date, but cannot see that much can be carried out in the vice-counties with the fewest records, as evidently geology has more to do in causing this rather than lack of observers. Cambridge (29) seems to have not a single sphagnum; N. Wilts. (7) only one, though S. Wilts. (8) has produced between 20 and 30; Huntingdon (31) only one; E. Gloucester (33) two; Northampton (32) and S. Lincoln (53) three each;

Oxford (23) and E. Perth (89) four each ; Hertfordshire (20) has five records and so on. Starting from the other end—N.E. Yorks. (62) has the largest number of records ; then come in order Westmorland with N. Lancs. (69) ; N.W. Yorks. (65) ; Surrey (17) ; W. Lancs. (60) ; Durham (66) ; Mid-W. Yorks. (64) and Mid-Perth (88) ; Cumberland (70) ; S.W. Yorks. (63) ; S. Northumberland (67), etc. Here the effect of one or more observers, past or present is very noticeable and this leads one to fancy that other likely vice-counties have not been worked nearly as systematically and that a special effort might be made in them. Any new record of a moss should be reported and a voucher specimen sent to Mr. Duncan, if a hepatic to Mr. Wilson or if a sphagnum to Mr. Thompson.

Since the above was written we have had our greatest loss of all. Mr. H. N. Dixon, M.A., F.L.S., our first President (1923) and Britain's most distinguished Bryologist, died on 9th May, 1944.

While this Report was being printed we have received the further sad news of the death of Miss A. Muriel Saunders.

A. THOMPSON, *Secretary*.

April, 1944.

STATEMENT OF

RECEIPTS.

Balance from last Account	....	....	....	£134	16	4
Subscriptions—1940	....	....	....	£24	10	6
„ 1939	....	....	....	2	10	0
					27	0 6
Sales of Catalogues and Reports	....	....	....	6	16	5
Interest on £100 3½% War Stock to 1st December,						
1943	....	....	....	12	5	0
				£180	18	3

BALANCE SHEET

LIABILITIES.

Printing Report, 1940-43 (estimated)	....	....	£25	0	0
Balance (excess of Assets over Liabilities)	....	....	125	14	10
			£150	14	10

Berwick-on-Tweed,
6th May, 1944.

ACCOUNT for 1943-44.*EXPENDITURE.*

Printing Report, 1939	....	....	....	....	£22	8	9
Distribution Costs, 1939-40	....	....	....	....	2	11	8
Stationery	....	....	....	....	1	3	0
Secretary's Expenses	....	....	....	....	3	14	11
Treasurer's Expenses	....	....	....	....	2	3	0
Librarian's Expenses	....	....	....	....		15	4
Cost of £100 3½% War Stock	....	....	....	....	100	6	9
Balance on hand, 31st December, 1943	....	....	....	....	47	14	10
					£180	18	3

31st December, 1943.*ASSETS.*

Cash on hand	....	....	....	....	£47	14	10
£100 3½% War Stock	....	....	....	....	103	0	0
					£150	14	10

*31st December, 1943.*J. B. DUNCAN, *Treasurer.*

N.B.—Subscription, 10/- per annum, Foreign and Colonial
Members, 5/-.

REFEREES.

Mosses :—

Sphagnaceae :—

Acutifolia and Cymbifolia	....	Mr. HORSLEY.
Rigida, Squarrosa and Cuspidata		Miss LOBLEY.
Subsecunda	.... .... ....	Mr. THOMPSON.
Referee-in-Chief	.... .... ....	Mr. SHERRIN.

True Mosses :—

Andreaeaceæ to Grimmiaceæ	....	Mr. CROSLAND.
Tortulaceæ to Orthotrichaceæ	....	Dr. WATSON.
Schistostegaceæ to Leskeaceæ (except Bryum)	.... ....	Mr. RILSTONE.
Hypnaceæ	.... .... ....	Mr. J. B. DUNCAN.
North American Mosses	.... ....	Mr. SHERRIN.
European Mosses and British species of Bryum	.... ....	Mr. NICHOLSON.
Non-European (except North American Mosses) and Referee- in-Chief	.... .... ....	Mr. DIXON. (Deceased 9th May, 1944).

Hepatics :—

British and European	.... ....	Mr. MILSOM.
Non-European and Referee-in- Chief	.... .... ....	Mr. NICHOLSON

CENSUS CATALOGUES.

LISTS OF NEW VICE-COUNTY RECORDS.

SPHAGNA.

This list includes all new V.C. records reported since the 1937 Census Catalogue, except those given in the 1938 and 1939 Reports under the heading "Report on Plants sent in by Members." A.T.

Sphagnum fimbriatum Wils., var. *robustum* Braith., Mynydd Margam, Port Talbot (41), A.D.B., det. W.R.S.; Sharp Haw, Skipton (64), A.Th.; var. *validius* Card., Charnwood Heath (55), F.A.S., det. A.Th.; var. *intermedium* Russ., nr. Norden Wood, Corfe Castle (9), A.E.A.D., det. A.Th.; Beacon Hill, Leicester (55), F.A.S., det. A.Th.; Twiston Moor nr. Gisburn (59), A.Tu., det. A.Th.; Tentsmuir (85), W.Y., det. A.Th.; near Loirston Loch (91), E.C.W.; var. *tenue* Grav., nr. Norden Wood, Corfe Castle (9), A.E.A.D., det. A.Th.; var. *laxifolium* Warnst., Cutch Common, Donhead (8), A.E.A.D., det. A.Th.; Scotland, Purbeck, (9), A.E.A.D., det. A.Th.; Greenshaw Plain, Hexham (67), E.M.L.

S. Girgensohnii Russ., nr. R. Tanat (47), E.M.L.; var. *robustum* Warnst., Glencoe (98), E.M.L.; var. *microcephalum* Warnst., Tanat Valley (47), A.Th.; Askham Bog (64), A.Th.; Coldburn Hill, Cheviot (68), E.M.L.; Loch Coruisk, Skye (104), E.M.L.; var. *gracilescens* Grav., Glen Nevis (97), E.M.L.

S. Russowii Warnst., Feldon Burn, Edmond Byers (66), E.M.L.

S. Warnstorffii Russ., E. Budleigh Common (3), A.Th.; Ceiriog Ddu (50), E.M.L.; Earl's Seat, Wharfedale (64), A.Th.; Cairn o' Mount, Kincardine (91), U.D.; Ben Bulbin (I.28), A.Th.; nr. Bundoran (I.34), G.H.A.

S. rubellum Wils., Cyrn-y-Brain (50), A.Th.; Mark of Luce Moss (74), E.M.L.; Tullaghan (I.29), E.M.L.

S. subtile (Russ.) Warnst., Slievemore, Achill Isle (I.27), A.Th.

S. quinquefarium Warnst., E. Budleigh Common (3), A.Th. ; nr. Corfe Castle (9), A.E.A.D., det. A.Th. ; Puck's Glen, Argyll (98), J.R.L. ; nr. Kyleakin, Skye (104), U.D. ; Glen Iff and Ben Bulbin (I.28), A.Th.

S. plumulosum Röhl, Cutch Common, Donhead (8), A.E.A.D., det. A.Th. ; Newchurch Marshes, I. of W. (10), P.L., det. W.R.S. ; Mark of Luce Moss (74), E.M.L. ; Corpach Moss (97), E.M.L. ; Tullaghan, E.M.L., and Glenade, A.Th. (I.29).

S. tenerum (Aust.) Warnst., Meathop Moss, Westmorland (69), A.Th.

S. molle Sull., Loch Morar, Westernness (97), E.M.L. ; nr. Glen Brittle, Skye (104), U.D. ; Loch Duich (105), E.M.L. ; var. *molluscoides* Warnst., roadside, Corfe Castle—Wareham (9), A.E.A.D., det. A.Th. ; var. *limbatum* Warnst., Wyming Brook nr. Sheffield (63), A.Th.

S. compactum D.C. var. *squarrosus* Russ., Widdybank Fell (66), E.M.L. ; var. *subsquarrosus* Warnst., Scald Hill, Cheviot (68), E.M.L. ; Glen Trool (73), E.M.L. ; Tentsmuir (85), W.Y., det. A.Th. ; Rossie Moor, Angus (90), U.D. ; Scavaig, Skye (104), E.M.L. ; Upper Loch Torridon (105), E.M.L. ; Isle of Barra (110), Prof. J. W. Heslop Harrison, det. E.M.L. ; var. *imbricatum* Warnst., Tentsmuir (85), W.Y., det. A.Th. ; Zittle, Kilrannoch (90), U.D. ; Raasay I. (104), Dr. K. B. Blackburn, det. E.M.L. ; Coir Zair, nr. Achnashellach (105), U.D. ; nr. Loch na Gainimh, Lochinver (108), U.D. ; Askernish, S. Uist (110), G.H.A. ; Glenade (I.29), A.Th. ; Castle Caldwell (I.33), A.Th.

S. squarrosus Pers. var. *spectabile* Russ., Llyfnant Valley (47), A.Th. ; Hexhamshire Common (67), E.M.L. ; Scald Hill, Cheviot (68), E.M.L. ; Rescobie Loch (90), U.D. ; nr. Loirston Loch (91), E.C.W. ; E. Golf Links, Nairn (96), U.D. ; Glen Coe (98), E.M.L. ; Upper Loch Torridon (105), E.M.L. ; S. Uist (110), G.H.A. ; nr. Keel Lough, Achill I. (I.27), A.Th. ; Tullaghan (I.29), E.M.L. ; var. *subsquarrosus* Russ., Gutch Common (8), A.E.A.D., det. A.Th. ; The Mot, Gimley, Leicester (55), F.A.S., det. A.Th. ; Loweswater (70), A.Th. ; side of B. Nevis (97), A.Th. ; S. Uist (110), G.H.A. ; Tullaghan (I.29), E.M.L. ; nr. Bundoran (I.34), G.H.A.

S. teres Ångstr. var. *imbricatum* Warnst., Comb Gill, Borrowdale (70), U.D. ; Loch Coruisk, Skye (104), E.M.L. ; var. *subteres* Lindb., Corfe Common (9), A.E.A.D., det. A.Th. ; Sutton Park (38), A.Th. ; Ceiriog Ddu (50), A.Th. ; Hexhamshire Common (67), E.M.L. ; Coledale (70), E.M.L. ; Culloden Moor nr. Inverness (96), U.D.

S. amblyphyllum Russ. var. *macrophyllum* Warnst., Bwlch-y-groes (48), E.M.L.; Ceiriog Ddu (50), E.M.L.; Emmott Moor (59), A.Th.; Fylingdales Moor (62), A.Th.; Rivelin Valley nr. Sheffield (63), A.Th.; nr. Loch Brandy, Clova (90), U.D.; nr. Foyers, Loch Ness (96), U.D.; Camusnagaul nr. Fort William (97), G.H.A.; Glen Nevis (97), A.Th.; nr. Monument, S. Uist (110), G.H.A.; nr. Keel Lough, Achill I. (I.27), A.Th.; Ben Bulbin (I.28), E.M.L. and A.Th.; var. *mesophyllum* Warnst., Gutch Common (8), A.E.A.D., det. A.Th.; Bwlch-y-groes (47), E.M.L.; Tanat Valley (47), A.Th.; Scald Hill, Cheviot (68), E.M.L.; Bescobie Loch nr. Forfar (90), U.D.; Arisaig (97), E.M.L.; Raasay I. (104), Dr. K. B. Blackburn, det. E.M.L.; nr. Keel Lough, Achill I. (I.27), A.Th.; Tullaghan (I.29), E.M.L.

S. balticum Russ., Lawkland Moss (64), A.Th.

S. pulchrum Warnst., Hexhamshire Common (67), E.M.L.; Scald Hill, Cheviot (68), E.M.L.; Glen Clova (90), U.D.; Loch Morar (97), E.M.L.; Loch Fyne (98), E.M.L.; nr. Kyleakin, Skye (104), U.D.; Fionn Bheinn, E. Ross (106), U.D.; Glenade (I.29), A.Th.

S. recurvum P. de B. var. *robustum* Breidl., Stoborough Heath, Purbeck (9), A.E.A.D. det. W.R.S.; Ceiriog Ddu (50), A.Th.; Loweswater (70), A.Th.; Moss of Cree (74), E.M.L.; nr. Ullapool (105), U.D.; Ben Bulbin (I.28), E.M.L. and A.Th.; var. *majus* Ångstr., Hanging Stone Hill, Woodhouse (55), F.A.S., det. A.Th.; Coldburn Hill, Cheviot (68), E.M.L.; Glen Trool (73), E.M.L.; Star Moss (85), W.Y., det. A.Th.; Ethie Wood, nr. Arbroath (90), U.D.; Glen Nevis (97), E.M.L.; nr. Keel and on Slievemore, Achill I. (I.27), A.Th.; Ben Bulbin (I.28), E.M.L. and A.Th.; Glen Iff (I.28), A.Th.; Tullaghan (I.29), E.M.L.; Glenade (I.29), A.Th.; var. *parvulum* Warnst., Ilkley Moor (64), A.Th.; Hallsenna Moor nr. Seascale (70), A.Th.; Glen Nevis (97), A.Th.

S. fallax von Klinggr., Tanat Valley (47), E.M.L.; Scald Hill, Cheviot (68), E.M.L.; var. *laxifolium* Warnst., Dimbath Valley (41), F.A.S., det. A.Th.; Hallsenna Moor nr. Seascale (70), A.Th.; nr. Creag Aoil nr. Fort William (97), A.Th.; var. *microphyllum* Warnst., Swaledale (65), A.Th.; var. *robustum* Warnst., Swaledale (65), A.Th.; Glenade (I.29), A.Th.; var. *Schultzii* Warnst., Skipton Moor (64), A.Th.

S. cuspidatum Ehrh., var. *falcatum* Russ., Hatfield Moor nr. Doncaster (63), A.Th.; Ben Nevis (97), E.M.L.; Sgaoth Ard, Harris I. (110), C.V.B.M., det. A.Th.; Shenanagh nr. Kylemore (I.16), Dr. E. M. Lind, det. A.Th.; nr. Cliffony (I.28), E.M.L.;

nr. Bundoran (I.34), G.H.A. ; var. *submersum* Schp., Swaledale (65), A.Th. ; Hallsenna Moor nr. Seascale (70), A.Th. ; nr. Loch Brandy, Clova (90), U.D. ; Corpach Moss nr. Fort William (97), E.M.L. ; Fionn Bheinn, Achnasheen (106), U.D. ; Castlebay, I. of Barra (110), Miss K. B. Blackburn, det. E.M.L. ; nr. Keel Lough, Achill I. (I.27), A.Th. ; Ben Bulbin (I.28), A.Th. ; var. *plumosum* Bryol. germ., Hatfield Moor, nr. Doncaster (63), A.Th. ; Moss of Cree (74), E.M.L. ; Rossie Moor (90), U.D. ; Corpach Moss nr. Fort William (97), E.M.L. ; I. of Soay, Skye (104), Dr. K. B. Blackburn, det. E.M.L. ; Coire Zair nr. Achnashellach (105), U.D. ; var. *plumulosum* Schp., Scald Hill, Cheviot (68), E.M.L. ; Loch Esk, Clova (90), U.D. ; Glen Nevis (97), G.H.A. ; nr. Loch na Gainimh, Lochinver (108), U.D. ; S. Uist (110), G.H.A. ; Slievemore, Achill I. (I.27), A.Th. ; var. *serratum* (Aust.), Holwick Fell, Teesdale (65), A.Th. ; nr. Bundoran (I.34), G.H.A.

S. molluscum Bruch, Mark of Luce Moss (74), E.M.L. ; Glenade (I.29), A.Th.

S. obesum Wils., var. *plumosum* Warnst., Stanhope Common (66), E.M.L. ; Slievemore, Achill I. (I.27), A.Th. ; var. *teretiramosum* Warnst., Sugarloaf Mtn. nr. Glengariff (I.3), A.Th. ; Achill I. (I.27), G.H.A. ; Ben Bulbin (I.28), A.Th. ; var. *sanguineum* Warnst., Nuckton Burn, Blanchland (66), E.M.L. ; Glen Esk (70), U.D. ; var. *brachycladum* Warnst., Howmoor, S. Uist (110), G.H.A. ; var. *canovirens* Warnst., Gutch Common, Donhead (8), A.E.A.D., det. A.Th. ; nr. Corfe Castle (9), A.E.A.D., det. A.Th. ; Fylingdales Moor (62), A.Th. ; Swaledale (65), A.Th. ; Hexhamshire Common (67), E.M.L. ; Rossie Moor (90), U.D. ; Kylemore (I.16), Dr. E. M. Lind, det. A.Th. ; nr. Keel Lough, Achill I. (I.27), A.Th. ; Glenade (I.29), A.Th. ; var. *hemi-isophyllum* Warnst., Coledale (70), E.M.L. ; Sharphaw (64), A.Th. ; Slievemore, Achill I. (I.27), A.Th. ; var. *mastigocladum* Warnst., Wicklow Gap (I.20), A.Th.

S. subsecundum Ness var. *intermedium* Warnst., Ceiriog Ddu (50), A.Th. ; Borrowdale (70), U.D. ; Ethie Wood, nr. Arbroath (90), U.D. ; Loch Morar (97), E.M.L. ; Glen Nevis (97), G.H.A. ; Ardlui, Dumbarton (99), E.M.L. ; Raasay I. (104), Miss K. B. Blackburn, det. A.Th. ; I. of Vatersay (110), Dr. K. B. Blackburn, det. E.M.L. ; Tullaghan (I.29), E.M.L. ; var. *robustum* Warnst., Rossie Moor (90), U.D.

S. inundatum Russ., Keel, Achill I. (I.27), G.H.A. ; var. *robustum* (Warnst.) Sherrin, Exe Cleave (5), A.Th. ; nr. Corfe Castle (9), A.E.A.D., det. A.Th. ; Austwick Moss (64),

A.Th. ; Holwick Fell (65), A.Th. ; Tentsmuir (85), W.Y., det. A.Th. ; Loch Morar (97), E.M.L. ; nr. Clifony (I.28), E.M.L. ; Castle Caldwell (I.33), A.Th. ; Lough Nacung (I.35), Miss E. M. Lind, det. A.Th. ; var. *eurycladum* (Warnst.), Sherrin, Arne area, Purbeck (9), A.E.A.D., det. A.Th. ; south of Bwlch-y-groes (47), E.M.L. ; Ceiriog Ddu (50), E.M.L. and A.T. ; Rossie Moor (90), U.D. ; Ben Nevis (97), E.M.L. ; Kingshouse (98), E.M.L. ; Upper Loch Torridor (105), E.M.L. ; nr. Loch na Gainimh (108), U.D. ; Castle Caldwell (I.33), A.Th. ; Bundoran (I.34), E.M.L. ; var. *densum* (Warnst.), Sherrin ; Mynydd Margan (41), A.D.B., det. W.R.S. ; Tanat Valley (47), E.M.L. ; Bachnagairn (90), U.D. ; Corpach Moss (97), E.M.L. ; Coire Zair (105), U.D. ; nr. L. Crutta and Conner Hill Road (I.1), A.Th. ; nr. Bundoran (I.34), G.H.A. ; var. *lancifolium* Warnst., nr. Corfe Castle (9), A.E.A.D., det. A.Th. ; south of Bwlch-y-groes (47), E.M.L. ; Storthes Hall Wood nr. Huddersfield (63), A.Th. ; Oxenber (64), A.Th. ; Swaledale (65), A.Th. ; Colt Crag (67), E.M.L. ; Tentsmuir (85), W.Y., det. A.Th. ; Rossie Moor (90), U.D. ; E. Golf-links, Nairn (96), U.D., det. A.Th. ; Glen Nevis (97), E.M.L. ; Loch Beag (105), E.M.L. ; Loch Lundie, Black I. (106), U.D. ; Loch Boisdale, S. Uist (110), G.H.A. ; Tullaghan (I.29), E.M.L. ; Castle Caldwell (I.33), A.Th. ; var. *diversifolium* Warnst., Killarney (I.2), A.Th. ; Glenade (I.29), A.Th.

S. auriculatum Schp., Berry Wood (8), A.E.A.D., det. A.Th. ; Tullaghan (I.29), E.M.L. ; Bundoran (I.34), E.M.L. ; var. *tenellum* Warnst., nr. Fort William (97), A.Th. ; nr. Kyleakin (104), U.D. ; var. *ovatum* Warnst., Cynr-y-Brain (50), A.Th. ; Fylingdales Moor (62), A.Th. ; Skipton Moor (64), A.Th. ; Swaledale (65), A.Th. ; Stanhope Common (66), E.M.L. ; Craigmaddie Moor (86), J.R.L., det. A.Th. ; Arisaig (97), E.M.L. ; Tighnabruiaich (98), J.R.L., det. A.Th. ; Loch Coruisk (104), E.M.L. ; Killarney (I.2), A.Th. ; Kylemore (I.16), Dr. E. M. Lind, det. A.Th. ; nr. Keel Lough, Achill I. (I.27), G.H.A. and A.Th. ; Castle Caldwell (I.33), A.Th. ; var. *laxifolium* Warnst., Bicton Common (3), A.Th. ; Lake Common, I. of W. (10), P.L., det. A.Th. ; Corfe Common (9), A.E.A.D., det. A.Th. ; south of Bwlch-y-groes (47), E.M.L. ; Bwlch-y-groes (48), E.M.L. ; Bradgate Park, Leicester (55), F.A.S., det. A.Th. ; Slippery Stones (63), A.Th. ; Oxenber (64), A.Th. ; Swaledale (65), A.Th. ; Moss of Cree (74), E.M.L. ; Glen Nevis (97), E.M.L. and A.Th. ; Black Mount (98), E.M.L. ; Castle Caldwell (I.33), A.Th. ; var. *canovirescens* Warnst., Wych Heath (9), A.E.A.D., det. A.Th. ; Llanarmon

(47), E.M.L. ; Pendle (59), A.Th. ; Rimington Moor (64), A.Tu. and A.Th. ; I. of Soay (104), Dr. K. B. Blackburn, det. A.Th. ; var. *submersum* Warnst., Corfe Common (9), A.E.A.D., det. A.Th. ; Pistyll Rhaidr, Llanarmon (47), E.M.L. ; Bradgate Park, Leicester (55), F.A.S., det. A.Th. ; nr. Brown Rigg Beck, Fylingdales Moor (62), A.Th. ; Swaledale (65), A.Th. ; Rossie Moor (90), U.D. ; by Red Burn, B. Nevis (97), A.Th. ; Pass of Glencoe (98), A.Th. ; Meenawn Cliffs, Achill I. (I.27), A.Th. ; var. *plumosum* Warnst., Honister Pass (70), E.M.L. and A.Th. ; var. *racemosum* Warnst., Storthes Hall Wood nr. Huddersfield (63), A.Th. ; nr. Coniston Lake (69), A.Th. ; Ben Bulbin (I.28), A.Th.

S. crassycladum Warnst., Ceiriog Ddu (50), E.M.L. ; var. *magnifolium* Warnst., Norden Clay Pit (9), A.E.A.D., det. A.Th. ; Storthes Hall Wood (63), A.Th. ; Cronkley Fell (65), A.Th. ; nr. Glencorse Reservoir (83), U.D. ; Tentsmuir (85), W.Y., det. A.Th. ; nr. the Tolmount (92), U.D. ; Arisaig (97), G.H.A. ; nr. Fort William (97), A.Th. ; Mullock Moor, I. of Rhum (104), Dr. K. B. Blackburn, det. E.M.L. ; Coire Zair (105), U.D. ; var. *diversifolium* Warnst., Berry Wood, Donhead St. Mary (8), A.E.A.D., det. A.Th. ; above Ingleby Greenhew (62), W. E. L. Wattam, det. A.Th. ; Storthes Hall Wood (63), A.Th. ; Bradgate Park, Leicester (55), F.A.S., det. A.Th. ; Stannope Common (66), E.M.L. ; Craggside, Rothbury (68), E.M.L. ; Tarn Howes (69), A.Th. ; Glen Phee (90), U.D. ; near Foyers (96), U.D. ; Achnashellach (105), U.D. ; nr. Keel Loch, Achill I. (I.27), A.Th. ; Castle Caldwell (I.33), A.Th. ; var. *intermedium* Warnst., An Cruachan, I. of Eigg (104), E.M.L.

S. Camusii Card., nr. Cronkley Fell (65), A.Th. ; Loughrigg (69), A.Th. ; Arisaig (97), G.H.A. ; nr. Keel Lough (I. 27), G.H.A. and A.Th. ; nr. Cliffony (I.28), E.M.L. ; Tullaghan (I.29), E.M.L.

S. turgidulum Warnst., Skipwith Common (61), A.Th. ; Loch Coruisk, Skye (104), E.M.L.

S. contortum Schultz, Tanat Valley (47), E.M.L. and A.Th. ; Brant Fell nr. Sedbergh (65), E.M.L. ; Ashness Gate (70), W.R.S., E.M.L. and A.Th. ; Arisaig (97), E.M.L.

S. platyphyllum (S. and L.) Warnst., above Inverfarigaig and nr. Foyers (96), U.D., det. A.Th. ; Glen Nevis (97), E.M.L. ; I. of Vatersay (110), Dr. K. B. Blackburn, det. E.M.L. ; Castle Caldwell (I.33), A.Th.

S. imbricatum Hornsch., Loch Garry (96), E.M.L.; nr. Glen Brittle, Skye (104), U.D.; Kylemore (I.16), Miss E. M. Lind, det. A.Th.; Keel, Achill I. (I.27), G.H.A.

S. papillosum Lindb., var. *normale* Warnst., Lake Common, Sandown (10), P.L., det. A.Th.; Whixall Moss (40), E.M.L. and A.Th.; Cronkley Fell and Gt. Shunner Fell (65), A.Th.; Tanat Valley (47), A.Th.; Coldburn Hill, Cheviots (68), E.M.L.; Glen Trool (73), E.M.L.; Moss of Cree (74), E.M.L.; Rossie Moor (90), U.D.; Raasay I. (104), Miss K. B. Blackburn, det. E.M.L.; Fionn Bheinn, Achnasheen (106), U.D.; nr. Stoer (108), U.D.; Kylemore (I.16), Dr. E. M. Lind, det. A.Th.; Ben Bulbin (I.28), E.M.L. and A.Th.; Tullaghan (I.29), E.M.L.; Glenade (I.29), A.Th.; Castle Caldwell (I.33), A.Th.; var. *sublaeve* Limpr., Stoborogh Heath, Purbeck (9), A.E.A.D., det. W.R.S.; Whixall Moss (40), A.Th.; Pendle (59), A.Th.; Corpach Moss (97), A.Th.; Ardlui (99), E.M.L.; nr. Keel Lough (I.27), A.Th.

S. centrale C. Jens., Kylemore (I.16), Miss E. M. Lind, det. A.Th.

S. magellanicum Brid., Moss of Cree (74), E.M.L.; I. of Soay (104), Dr. K. B. Blackburn, det. E.M.L.; Glen Cluanie (105), E.M.L.; S. Uist (110), G.H.A.; Shenanagh, Kylemore (I.16), Dr. E. M. Lind, det. A.Th.; Lough Mask (I.26), Miss Bagwell, det. U.D.; Keel, Achill I. (I.27), G.H.A.; nr. Cliffony (I.28), E.M.L.; Tullaghan (I.29), E.M.L.

A.T.

List of additional V.C. Records since the issue of the
Report for 1939.

MOSSES.

Andreaea petrophila Ehrh., Hill of Ord, Black Isle (106), Jan., 1943, U.D.

A. Rothii W. and M., near Kilmuir, Black Isle (106), May, 1942, U.D.

Tetraphis pellucida Hedw., Shouldham Warren, W. Norfolk (28), 1940, E. F. Warburg per P.W.R.

Catharinea undulata W. and M., near Lough Key (I.25), May, 1940, J.S.T. ; var. *minor* W. and M., Donhead St. Mary (8), Jan., 1941, A.E.D. ; West Briggs (28), 1941, D.G.C.

C. crispa James, silt-in-stream, Ponterwyd (46), Oct., 1941, T.S.

Polytrichum aloides Hedw., near Carrig-na-binnia (I.7), Sept., 1943, A. W. Stelfox per J.S.T.

P. strictum Banks, Muckle Moss and nr. Sweethope Loughs (67), Sept., 1941, R. B. Cooke.

P. gracile Dicks., Ladysmith Plantation, Buddby S. Forest, Notts. (56), 1941, E. F. Warburg and D.G.C. ; woods, Dixon Newton (35), Feb., 1943, R. Lewis.

P. formosum Hedw., near Avoch, Black Isle (106), Dec., 1942, U.D.

P. commune L., Lough Leeben (I.24), Aug., 1941, J.G.F. ; var. *minus* Weis, Stoborough Heath (9), May, 1942, A.E.D.

Archidium alternifolium Schp., Munlochy Bay, Black Isle (106), Oct., 1942, U.D.

Pleuridium axillare Lindb., Sally Point (I.30), Aug., 1941, J.G.F. ; Fleet Pond (12), Sept., 1941, E.C.W.

Ditrichum homomallum Hampe., Cil-y-gofid, Bryn (41), Oct., 1943, A.D.B. ; near Carrig-na-binnia (I.7), A. W. Stelfox per J.S.T.

D. flexicaule Hampe., Nairn (96), Feb., 1942, U.D.

Seligeria calcarea B. and S., Lime Quarry, Waltham (55), May, 1942, F.A.S.

Cynodontium Bruntoni B. and S., Loch Lundie, Black Isle (106), Aug., 1942, U.D.

Dichodontium pellucidum Schp., near Boyle (I.25), May, 1940, J.S.T.; near Bunchrew, Inverness (96), May, 1942, U.D.; near Avoch, Black Isle (106), Dec., 1942, U.D.

Dicranella varia Schp., Kilkea Park (I.13), Sept., 1940, J.S.T.; Nairn (96), Jan., 1942, U.D.; banks of R. Welland, Stamford (53), Apr., 1943, F.A.S.

Dicranoweisia cirrata Lindb., Wood, Walton Fen (31), June, 1940, H. Edwards.

Campylopus pyriformis Brid., Weasenham and Shouldham Warren, W. Norfolk (28), 1940, E. F. Warburg; Hill of Ord, Black Isle (106), Jan., 1943, U.D.

C. fragilis B. and S., Donhead St. Mary (8), Dec., 1940, A.E.D.

C. introflexus Brid., Howth (I.21), July, 1942, J.S.T.

Dicranodontium longirostre var. *alpinum* Milde, Ach-nashellach (105), June, 1939, U.D.

Dicranum Bonjeani var. *rugifolium* Bosw., Crickhowell (42), June, 1941, A.D.B.; Dochgarroch nr. Inverness (96), Jan., 1943, U.D.

D. scoparium Hedw., wood, Walton Fen (31), June, 1940, H. Edwards; var. *paludosum* Schp., Muckle Moss (67), Sept., 1941, R. B. Cooke; var. *spadiceum* Boul., Crookham Common (22), July, 1939, and Crickhowell (42), June, 1941, A.D.B.

D. majus Turn., Sandringham, W. Norfolk (28), 1940, E. F. Warburg.

D. elongatum Schleich., Invercauld Forest (92), July, 1941, E.C.W.

Leucobryum glaucum Schp., Little Widgham Wood (29), 1941, H. L. K. Whitehouse per P.W.R.

Fissidens polyphyllus Wils., Drumgoff Brook, Glenmalure (I.20), Oct., 1942, A. W. Stelfox per J.S.T.

F. decipiens De Not., Ravensdale, Co. Louth (I.31), June, 1943, J.S.T.; cliffs at L. Diheen (I.7), Sept., 1943, A. W. Stelfox per J.S.T.

F. taxifolius Hedw., near Avoch, Black Isle (106), Dec., 1942, U.D.

Grimmia apocarpa var. *rivularis* W. and M., Inverfarigaig (96), Aug., 1942, U.D.

G. trichophylla Grev., near Kilmuir, Black Isle (106), May, 1942, U.D.

G. Stirtoni Schp., on Sarsens, Clotford (7), April, 1939, E.C.W. ; Carrickmines (I.21), July, 1942, J.S.T.

G. Hartmani Schp., Ravensdale, Co. Louth (I.31), June, 1943, J.S.T.

G. Doniana Sm., Glendalough (I.20), Sept., 1941, J.S.T.

Rhacomitrium canescens var. *ericoides* B. and S., near Avoch, Black Isle (106), Dec., 1942, U.D.

Ptychomitrium polyphyllum Fuernr., nr. Boyle (I.25), May, 1940, J.S.T.

Hedwigia ciliata Ehrh., on Sarsens, Ashdown Park (22), April, 1939, E.C.W.

Acaulon muticum C.M., Upham (11), Feb., 1941, E.C.W.

Phascum cuspidatum Schreb., Nairn (96), Jan., 1942, U.D. ; St. Asaph (51), Mar., 1942., A.B.J. ; Rosemarkie, Black Isle (106), Feb., 1943, U.D.

Pottia intermedia Fuernr., Munlochy Bay, Black Isle (106), Oct., 1942, U.D. ; var. *littoralis* Mitt., cliffs near Arbroath (90), Nov., 1939, U.D.

Tortula pusilla Mitt., Dochgarroch nr. Inverness (96), Jan., 1943, U.D. ; Rosemarkie, Black Isle (106), Feb., 1943, U.D.

T. ambigua Ångstr., Dochgarroch nr. Inverness (96), Jan., 1943, U.D.

T. aloides De Not., wall, Saverlake Station (7), Jan., 1909, A.B.J.

T. subulata Hedw., nr. Boyle (I.25), May, 1940, J.S.T. ; Rosemarkie, Black Isle (106), Feb., 1943, U.D.

T. ruralis Ehrh., Inchnadamph (108), July, 1909, E.C.W.

T. ruraliformis Dixon, Compton Chamberlayne (8), Dec., 1940, A.E.D. ; Rosemarkie (106), Jan., 1942, U.D.

Barbula lurida Lindb., Cambridge Botanic Garden (29), 1941, E. F. Warburg per P.W.R.

B. rubella Lindb., nr. Allan Grange, Black Isle (106), Nov., 1942, U.D.

B. tophacea Mitt., nr. Avoch, Black Isle (106), Dec., 1942, U.D.

B. fallax Hedw., Dingwall (106), Feb., 1943, U.D.

B. recurvifolia Schp., nr. Popham Beacons (12), March, 1941, E.C.W.

B. cylindrica Schp., Walls in Cambridge (29), 1939, J. Rishbeth per P.W.R.; nr. Rosemarkie, Black Isle (106), Feb., 1943, U.D.

B. vinealis Brid., seashore, Stoer (108), July, 1939, E.C.W.

B. convoluta Hedw., Dingwall (106), Feb., 1943, U.D.

B. unguiculata Hedw., Rosemarkie, Black Isle (106), Feb., 1943, U.D.

Weisia crispata C.M., Butser Hill (11), March, 1941, E.C.W.

W. tenuis C.M., Compton Chamberlayne (8), Dec., 1940, A.E.D.; Quarry nr. Nairn (96), Nov., 1942, U.D.

W. curvirostris var. *commutata* Dixon, Balnakiel Bay, Durness (108), Jan., 1942, J. Sinclair.

Trichostomum crispulum var. *elatum* Schp., Donhead St. Mary (8), Dec., 1940, A.E.D.

T. mutabile var. *littorale* Dixon, Kilmuir, Black Isle (106), May, 1942, U.D.; var. *cophocarpum* Schp., Durness (108), Jan., 1942, J. Sinclair.

T. flavo-virens Bruch, Seashore, Dingwall (106), Feb., 1943, U.D.

Cinclidotus Brebissoni Husn., by the Kennet, Red Lodge (29), 1941, P.W.R.

Encalypta streptocarpa Hedw., Chilmarsh, Wilts. (8), Sept., 1935, A.E.D.

Zygodon Mougeotii B. and S., nr. Kilmuir (106), June, 1942, U.D.

Z. viridissimus R. Brown, Kiltarity (96), March, 1942, U.D.

Ulotia Ludwigii Brid., on birch, Loch Cluanie (96), April, 1942, U.D.

U. Drummondii Brid., nr. Rosemarkie, Black Isle (106), Feb., 1943, U.D.

U. Bruchii Hornsch., Donhead St. Mary (8), Feb., 1941, A.E.D.; nr. Avoch, Black Isle (106), Dec., 1942, U.D.; Ravensdale, Co. Louth, (I.31), June, 1943, J.S.T.

U. crispa var. *crispula* Hamm., nr. Invermoriston (96), April, 1942, U.D.; var. *intermedia* Braithw., nr. Avoch, Black Isle (106), Dec., 1942, U.D.

U. Hutchinsiae Hamm., Loch Cluanie (96), April, 1942, U.D.

Orthotrichum anomalum var. *saxatile* Milde, Tomartin (96), April, 1942, U.D.

O. leiocarpum B. and S., Ravensdale, Co. Louth (I.31), June, 1943, J.S.T.

O. Lyellii Hook and Tayl., Kiltarity (96), March, 1942, U.D.

O. affine Schrad., var. *rivale* Wils., by the Kennet, Red Lodge (29), 1941, P.W.R.

O. pulchellum Smith, Cowden (16), May, 1939, E.C.W.; nr. Avoch, Black Isle (106), Dec., 1942, U.D.

Tayloria tenuis Schp., nr. Invermoriston (96), April, 1942, U.D.

Physcomitrium pyriforme Brid., Cavan (I.30), Aug., 1941, J.S.T.

Funaria hygrometrica Sibth., Ballinaclesh (I.20), July, 1941, J.S.T.

Amblyodon dealbatus P. Beauv., Culbin Sands (95), Aug., 1942, U.D.

Philonotis fontana Brid., Lough Leeben (I.24), Sept., 1941, J.G.F.; var. *adpressa* Ferg., Benbecula (110), June, 1938, J. W. Campbell per W.R.S.

P. calcarea Schp., Lough Leeben (I.24), Aug., 1941, J.G.F.

Orthodontium gracile Schwaeg., on a large oak near Hamilton (77), June, 1943, T. G. Y. Porter per W.R.M.; var. *heterocarpum* Watson, Parsons Slip and Sand Gault pine plantations nr. Elveden, W. Suffolk (26), 1941, E. F. Warburg and D.G.C.; The Dales, Upper Sheringham (27), 1941, E. F. Warburg and D.G.C.; Cockley Clay (28), 1941, E. F. Warburg; High Rocks, Clipstone; Ladysmith Plantation, Budby S. Forest; Joiner's plantation, Welbeck Park, all Notts (56), 1941, E. F. Warburg and D.G.C.; on tree stump between Markfield and Ulverscroft (53), April, 1943, F.A.S.; Howth Demesne, Co. Dublin (I.21), H. Hudson and J.S.T. per J.S.T., new to Ireland.

Leptobryum pyriforme Wils., wood, Walton Fen (31), June, 1940, H. Edwards (Miss?); Reading, Berks. (22), 1940, T. M. Harris per P.W.R.

Webera acuminata Schp., cliffs at L. Diheen (I.7), Sept., 1943, A. W. Stelfox per J.S.T.

W. cruda Schwaeg., Durness (108), Feb., 1942, J. Sinclair; Cliffs at L. Diheen (I.7), Sept., 1943, A. W. Stelfox per J.S.T.

W. nutans Hedw., wood Walton Fen (31), June 1940, H. Edwards (Miss?).

W. annotina var. *erecta* Correns, Isle of Raasay (104), June, 1940, U.D. ; Moffat (72), June, 1943, J.B.D. ; near Loch Killin, Whitebridge (96), Sept., 1942, U.D. ; var. *bulbifera* Correns, nr. Beaully (96), Jan., 1942, U.D.

W. carnea Schp., Killykeen (I.30), Aug., 1941, J.G.F.

W. albicans Schp., Kingston Wood, Cambs. (29), 1938, P.W.R.

Bryum pendulum Schp., nr. Boyle (I.25), May, 1940, J.S.T.

B. Warneum Bland, Culbin Sands (95), Aug., 1942, U.D.

B. bimum Schreb., wood, Walton Fen (31), June, 1940, H. Edwards (Miss ?).

B. erythrocarpum Schwaeg., Feede wood, Co. Louth (I.31), June, 1943, J.S.T.

B. pallescens Schleich., Wyre Forest (37), July, 1905, E. M. Holmes, det. W. R. Sherrin and J.B.D. ; *Mynydd Margam*, Port Talbot (41), June, 1941, A.D.B. ; Culabock, Inverness (96), Feb., 1942, U.D.

B. argenteum L., Cavan (I.30), Aug., 1941, J.S.T. ; var. *lanatum* B. and S., walls, Culloden Moor (96), Aug., 1942, U.D.

B. roseum Schreb., Old Winchester Hill (11), Feb., 1941, E.C.W. ; nr. Beaully (96), Jan., 1942, U.D. ; Railway Bank, Dixon Newton (35), Dec., 1942, R. Lewis.

Mnium affine Bland, nr. Boyle (I.25), May, 1940, J.S.T. ; var. *elatum* B. and S., Culbin Sands (95), Aug., 1942, U.D. ; var. *rugicum* B. and S., Margam Park (41), June, 1941, A.D.B.

M. rostratum Schrad., nr. Boyle (I.25), May, 1940, J.S.T.

M. stellare Reich., nr. Avoch, Black Isle (106), Dec., 1942, U.D.

M. punctatum L., nr. Avoch, Black Isle (106), Dec., 1942, U.D. ; nr. Lough Key (I.25), May, 1940, J.S.T. ; wood, Walton Fen (31), June, 1940, H. Edwards (Miss ?) ; Ardnacliff (I.24), Sept., 1941, J.G.F. ; var. *elatum* Schp., nr. Dolgelly (48), June, 1942, R. Burn per U.D.

M. subglobosum B. and S., Orkneys (111), March, 1942, J. W. H. Harrison per R. B. Cooke.

Fontinalis antipyretica var. *gracilis* Schp., Hurstwood nr. Burnley (59), A.T.

Cryphaea heteromalla Mohr., Ravensdale (I.31), June, 1943, J.S.T.

Neckera crispa Hedw., Plodda Falls nr. Tomich (96), Sept., 1942, U.D.; var. *falcata* Boul., Isle of Raasay (104), June, 1940, U.D.

N. pumila Hedw., Farnham Demesne (I.30), Sept., 1941, J.G.F.; Moore Abbey (I.19), Sept., 1938, J.G.F.; var. *Philippeana* Milde., Invermoriston (96), April, 1942, U.D.; Ravensdale (I.31), June, 1943, J.S.T.

N. complanata Huebn., Cnochan, (105), July, 1939, E.C.W.; nr. Avoch, Black Isle, (106), Dec., 1942, U.D.

Homalia trichomanoides B. and S., nr. Drumnadrochit (96), March, 1942, U.D.; nr. Avoch, Black Isle (106), Dec., 1942, U.D.

Leucodon sciuroides Schwaeg., Monasterevan (I.19), Sept., 1938, J.G.F.; stone circles of Clava, Culloden (96), April, 1942, U.D.

Pterogonium gracile Swartz., Loch Cluanie (96), April, 1942, U.D.

Habrodon Notarisii Schp., nr. Inverquharity Castle, Kirriemuir (90), April, 1941, U.D.

Porotrichum alopecurum Mitt., nr. Avoch, Black Isle (106), Dec., 1942, U.D.

Leskea polycarpa Ehrh., Lough Oughter (I.30), Aug., 1941, J.S.T.; nr. Diss, E. Norfolk (27), 1941, E. F. Warburg per P.W.R.

Leptodon Smithii Mohr., Grimm's Ditch, near Pangbourne (22), 1940, T. M. Harris per P.W.R.

Thuidium abietinum B. and S., The Scrubs, nr. Popham Beacons (12), March, 1941, E.C.W.

T. hystricosum Mitt., sandhills, Strundhill (I.28), May, 1939, J.S.T.; Hemner Hill, W. Sussex (13), April, 1941, E.C.W.

T. delicatulum Mitt., woods Dundonald (75), May, 1943, J.R.L.

T. recognitum Lindb., nr. Naas (I.19), 1938, J.G.F.

T. Philiberti Limpr., Bordean Hanger (12), April, 1941, E.C.W.; old limestone wall, Allenheads (67), Oct., 1941, E.M.L.

Climacium dendroides W. and M., Rosemarkie (106), Aug., 1942, U.D.

Cylindrothecium concinnum Schp., Armagour (103), Aug., 1940, R. B. Cooke.

Pylaisia polyantha B. and S., Donhead St. Mary (8), Jan., 1941, A.E.D.

Orthothecium rufescens B. and S., Cnochan (105), July, 1939, E.C.W.

O. intricatum B. and S., Isle of Raasay (104), June, 1940, U.D.; Lough Muskry (I.7), Sept., 1943; A. W. Stelfox per J.S.T.

Camptothecium lutescens B. and S., Ross House Estate (I.22), Sept., 1941, J.G.F.

Brachythecium glareosum B. and S., Rathmore (I.19), July, 1938, J.G.F.

B. albicans B. and S., Sutton Golf Course (I.20), Nov., 1940, J.G.F.

B. salebrosum B. and S., Bowhill (13), April, 1939, E.C.W.; var. *palustre* Schp., Freefolk Wood (12), March, 1941, E.C.W.

Hyocomium flagellare B. and S., The N.C.R. for W. Kent (16), was given incorrectly in Report 1939, p. 175. The locality should have been "Mopesden, nr. Hawkhurst, 1939, P.W.R."

Eurhynchium piliferum B. and S., Comberton (and many other localities) (29), 1934, P.W.R.; Ardracliff (I.24), Sept., 1941, J.G.F.

E. crassinervium B. and S., nr. Lough Key (I.25), May, 1940, J.S.T.

E. praelongum var. *Stokesii* Brid., wood below Ely, Glamorgan (41), 1920, P.W.R.

E. Swartzii Hobk., nr. Boyle (I.25), May, 1940, J.S.T.; Rathmore (I.19), July, 1938, J.G.F.; var. *rigidum* Boul., Noar Hill, Selbourne (12), April, 1941, E.C.W.

E. tenellum Milde., nr. Boyle (I.25), May, 1940, J.S.T.; Munloch Bay, Black Isle (106), July, 1942, U.D.

E. myosuroides var. *rivulare* Holt, Inverfarigaig, Foyers (96), Aug., 1942, U.D.

E. myurum Dixon, Monasterevan (I.19), Sept., 1938, J.G.F.

E. circinatum B. and S., Barford St. Martin (8), Dec., 1940, A.E.D.; Bowhill (13), April, 1939, E.C.W.

E. rusciforme var. *alopecuroides* Brid., Kirkstone Pass (69), Aug., 1939, per A. E. Wade, H.H.K.

E. murale Milde, Rathmore (I.19), July, 1938, J.G.F.

E. confertum Milde, nr. Inverness (96), Feb., 1942, U.D.

Plagiothecium elegans Sull., West Briggs (28), High Rocks, Clipstone Park; Ladysmith Plantation, Budby S. Forest; Joiner's Plantation, Welbeck Park (56), 1941, E. F. Warburg and D.G.C.

P. silesiacum B. and S., Hempstead nr. Holt, 1940, and The Dales, Upper Sheringham (27), 1941, E. F. Warburg and D.G.C.

P. silvaticum B. and S., Ardnaclyff (I.24), Aug., 1941, J.G.F.

P. undulatum B. and S., Weasenham, Sandringham and Shouldham Warren (28), 1940, E. F. Warburg per P.W.R.

Amblystegium Juratzkanum Schp., wood, Walton Fen (31), June, 1940, H. Edwards (Miss?); Hawick Plantation (67), Aug., 1941, R. B. Cooke; Munloch Bay (106), Oct., 1942, U.D.

A. varium Lindb., Lough Oughter (I.30), Aug., 1941, J.S.T.; Bearl Wood, Bywell (67), Sept., 1941, R. B. Cooke.

A. irriguum B. and S., Devil's Glen (I.20), July, 1940, J.S.T.

A. filicinum De Not., nr. Boyle (I.25), May, 1940, J.S.T.

Hypnum riparium L., nr. Boyle (I.25), May, 1940, J.S.T.; var. *longifolium* Schp., nr. Boyle (I.25), May, 1940, J.S.T.; Ardnaclyff (I.24), Sept., 1941, J.G.F.; North Hayling (11), Nov., 1939, A.D.B.

H. elodes Spruce, Traligill (108), July, 1939, E.C.W.; Lough Oughter and L. Gowna (I.30), Aug., 1941, J.S.T.

H. stellatum var. *protensum* Rcehl., Lough Oughter (I.30), Aug., 1941, J.S.T.; Hemmer Hill, S. Harting (13), April, 1941, E.C.W.

H. hispidulum var. *Sommerfeltii* Myr., Babraham, Cambs. (29), 1940, P.W.R.

H. aduncum var. *aquaticum* Sanio, Wicken Fen (29), Oct., 1941, A.D.B., det. W. R. Sherrin; var. *polycarpon* Bland, Purbeck (9), July, 1942, A.E.D.

H. lycopodioides Schwaeg., Foulden Common (28), 1941, P.W.R.

H. fluitans var. *setiforme* Ren., Dunkery Hill (5), June, 1939, A.D.B.

H. exannulatum var. *brachydictyon* Ren., Myngdd Llangeinor (41), June, 1941, A.D.B.; var. *falcifolium* Ren., Beaulieu Heath (11), May, 1940, P.L.

H. intermedium Lindb., Corfe Castle Common (9), July, 1942, A.E.D.

H. falcatum Brid., nr. Rosemarkie, Black Isle (106), Feb., 1943, U.D.

H. cupressiforme L., var. *resupinatum* Schp., Rosemarkie, E. Ross (106), Jan., 1942, U.D.; var. *filiforme* Brid., Slade of Saggart (I.21), April, 1939, and Devil's Glen (I.20), July, 1939, J.S.T.; West Briggs (28), 1941, E. F. Warburg per P.W.R.; Loch Lundie, Black Isle (106), Aug., 1942, U.D.; var. *ericetorum* B. and S., Lough Curra (I.7), Sept., 1943, A. W. Stelfox per J.S.T.; Cockley Cley (28), 1941, E. F. Warburg per P.W.R.; Hill of Ord, Black Isle (106), Jan., 1943, U.D.; var. *tectorum* Brid., Avoch, Black Isle (106), Dec., 1942, U.D.

H. hamulosum B. and S., The Cairnwell, (89), July, 1939, E.C.W.

H. Bambergeri Schp., Isle of Scalpay (104), Aug., 1935, J. W. H. Harrison per R. B. Cooke.

H. Wilsoni Schimp., Kenfig Pool (41), and var. *Hamatum* Lindb., Kenfig Pool (41), May, 1940, A. E. Wade per H.H.K.

H. molluscum var. *fastigiatum* Bosw., Cnochan (105), July, 1939, E.C.W.; Isle of Raasay (104), June, 1940, and ~~nr. Loch Esk, Clova (90), May, 1940, U.D.~~

H. crista-castrensis L., Bridge of Conon, E. Ross (106), Jan., 1942, U.D.

H. palustre Huds., nr. Boyle (I.25), May, 1940, J.S.T.

H. scorpioides L., nr. Naas (I.19), July, 1938, J.G.F.

H. stramineum Dicks., Crookham Common (22), July, 1939, A.D.B.; Cil-y-gofid, Cwmavon (41), Oct., 1943, A.D.B.

H. cordifolium Hedw., nr. Boyle (I.25), May, 1940, J.S.T.; Ardnaclyff (I.24), Sept., 1941, and Killykeen (I.30), Sept., 1941, J.G.F.; Drumnadrochit (96), March, 1942, U.D.

H. giganteum Schp., ditches by Combe Hill Canal nr. R. Severn (33), April, 1941, J. Carpenter per H.H.K.; Loch Lundie, Black Isle (106), Aug, 1942, U.D.; Feede, Co. Louth (I.31), June, 1943, J.S.T.

H. Schreberi Willd., Moire Abbey (I.19), Sept., 1938, J.G.F.

J.B.D.

HEPATICS.

List of Additional V.C. Records since the issue of the
Report for 1939.

Riccia glauca L., nr. Silchester (12), April, 1940, T.M.H.; Chippenham (29), 1941, E. F. Warburg, teste P.W.M.R.

R. fluitans L., nr. Cragley Green (22), March, 1940, T.M.H.

Conocephalum conicum (L.) Dum., Cragley Green (22), July, 1939, A.D.B.

Lunularia cruciata (L.) Dum., Reading (22), April, 1940, T.M.H.

Marchantia polymorpha L., Buchie Loch, Culbin Sands (95), Aug., 1942, U.D.

Aneura sinuata (Dicks.) Dum., var. *major* (Lindb.), Sands of Barry (90), June, 1939, U.D., conf. J.B.D.

Metzgeria pubescens (Schrank) Raddi, Creag Aoil, nr. Fort William (97), *B.B.S. Rep.*, 1939, p. 144; Hallaig, Raasay (104), June, 1939, U.D.; Cnochán (105), July, 1939, E.C.W.

Pellia Fabbriana Raddi, Kingston Woods, etc. (29), 1938, P.W.M.R.; var. *lorea* Nees, White Horse Hill (22), Jan., 1941, A.D.B.; Sugar Loaf, Abergavenny (35), June, 1941, A.D.B.; Margmony Hill, Moniaive (72), March, 1944, A.D.B.

Blasia pusilla L., nr. Meare (6), 1941, C.S.

Fossombronia Wondraczeki (Corda) Dum., nr. Newbury (22), Aug., 1941, T.M.H.

Alicularia scalaris (Schrad.) Corda, Burghfield Road (12), 1938, T.M.H.

Aplozia crenulata (Sm.) Dum., Silchester Common (12), Feb., 1937, T.M.H.; var. *gracillima* (Sm.) Heeg., Bedwyn Common (7), Sept., 1938, E.C.W.; Silchester (12), Jan., 1938, T.M.H.; nr. Newbury (22), May, 1940, T.M.H.; nr. Elgol, Skye (104), June, 1939, U.D., conf. F.E.M.; var. *inundata* (Schiffn.) Macv., Honister Pass (70), March, 1934, A.D.B.

A. sphaerocarpa (Hook.) Dum., New Abbey (73), Dec., 1943, A.D.B.; Canna (104), July, 1937, Glasgow Univers. Exped., pub. in *Proc. Royal Phys. Soc.*, Glasgow, vol. 23, part 1.

A. riparia (Tayl.) Dum., var. *rivularis* Bern., Lowther Hills (72), Feb., 1944, A.D.B.; forma *potamophila* Bern., High Scawdel, Borrowdale (70), March, 1944, A.D.B.; Birnock Water, Moffat (72), Feb., 1944, A.D.B.

Jamesoniella autumnalis (D.C.) Steph., Cnochan (105), July, 1939, E.C.W.

J. Schraderi (Nees) Schiffn., Potrail Water (77), Feb., 1944, A.D.B.

Gymnocolea inflata (Huds.) Dum., forma *laxa* Nees, Criffel (73), Jan., 1944, A.D.B.

Lophozia ventricosa (Dicks.) Dum., Mortimer Common (12), July, 1939, A.D.B.

L. confertifolia Schiffn., High Scawdel, Borrowdale (70), April, 1944, A.D.B.

L. bicrenata (Schmid.) Dum., Caversham Heights (23), April, 1939, A.D.B., det. W.E.N.

L. Floerkii (Web. et Mohr) Schiffn., Meare (6), 1942, C.S.

L. Kunzeana (Hübner) Evans, N. Harris (110), Aug., 1941, Dr. J. H. Harrison, det. J.B.D.

Sphenolobus minutus (Crantz) Steph., Isle of Eigg (104), Aug., 1938, Dr. K. Blackburn, det. E.M.L.

S. Pearsoni (Spruce) Steph., nr. Stonethwaite (70), June, 1940, U.D., conf. J.B.D.

S. exsectiformis (Breidl.) Steph., Checkenden (23), March, 1940, T.M.H.

Anastrepta orcadensis (Hook.) Schiffn., Lowther Hills (72), March, 1944, A.D.B.

Plagiochila asplenoides (L.) Dum., Wheatham Hill and Treefolk Wood (12), March, 1941, E.C.W.; var. *minor* Lindenb., Wheatham Hill and Noar Hill (12), March, 1941, E.C.W.; var. *major* Nees forma *subintegerrima* Schiffn., Dolgoch (48), Aug., 1942, A.D.B.; Longthwaite, Borrowdale (70), April, 1944, A.D.B.

P. spinulosa (Dicks.) Dum., var. *inermis* Carr., Langstrath, Borrowdale (70), April, 1944, L.B.C.T.

Leptoscyphus anomalus (Hook.) Mitt., Meare (6), 1941, C.S.; Crookham Common (22), Aug., 1939, A.D.B.

Lophocolea bidentata (L.) Dum., Canna (104), July, 1937, Glasgow Univers. Exped.

L. cuspidata Limpr., Wormsley (24), April, 1940, T.M.H.

Chiloscyphus polyanthus (L.) Corda, nr. Fawley (24), T.M.H. ; var. *rivularis* (Schrad.) Nees, River Emborne (12), April, 1941, T.M.H. ; Fence Wood nr. Newbury (22), May, 1940, T.M.H. ; stream on Sugar Loaf (35), June, 1941, A.D.B. ; Canna (104), July, 1937, Glasgow Univers, Exped. ; var. *fragilis* (Roth) K. Müll., White Horse Hill (22), Jan., 1941, A.D.B. ; Cwm Avon (41), Oct., 1943, A.D.B. ; Careg Wynt, Aberporth (46), A.D.B. per T.M.H. ; nr. Moniaive (72), Jan., 1944, A.D.B.

C. pallescens (Ehrh.) Dum., Noar Hill (12), March, 1941, E.C.W. ; Farley Hill (22), April, 1941, T.M.H.

Cephalozia bicuspidata (L.) Dum., var. *Lammersiana* (Hüb.) Broidl., nr. Blaengarw (41), June, 1941, A.D.B. ; Calverton Hill (56), A.D.B.

C. Loitlesbergeri Schiffn., Potrail Water (77), March, 1944, A.D.B.

C. media Lindb., High Rocks, Clipstone (56), 1941, E. F. Warburg, teste P.W.M.R.

C. macrostachya Kaal., Potrail Water (77), March, 1944, A.D.B.

C. fluitans (Nees) Spruce, Gylchedd, at 2,100 ft. (50), May, 1925, A.W. ; var. *gigantea* Lindb., High Scawdel, Borrowdale (70), March, 1944, A.D.B., teste W.R.S.

Cephaloziella Starkii (Funck) Schiffn., nr. Riseley (12), March, 1940, T.M.H. ; Mortimer (22), March, 1937, T.M.H. ; Nuffield (23), April, 1940, T.M.H.

C. myriantha (Lindb.) Schiffn., Frilford Bog (22), 1939, E.W.J.

Calypogeia Neesiana (Carex et Massal.) K. Müll., Potrail Water (77), March, 1944, A.D.B.

Bazzania trilobata (L.) S. F. Gray, nr. Kyleakin, Skye (104), June, 1939, U.D.

Lepidozia pinnata (Hook.) Dum., nr. Kyleakin (104), June, 1939, U.D.

L. reptans (L.) Dum., Weasenhams (28), 1941, E. F. Warburg, teste P.W.M.R.

Blepharostoma trichophyllum (L.) Dum., Cwm Einion, Aberystwyth (46), May, 1940, E.A. and H.H.K.

Anthelia julacea (L.) Dum., forma *gracilis* Hook., Sprinkling Tarn (70), April, 1944, A.D.B. and L.B.C.T.

Herberta Hutchinsiae (Gottsche) Evans, Lough Muskry (I.7), Sept., 1943, A. W. Stelfox, per J.S.T.

Ptilidium pulcherrimum (Web.) Hampe, Mapledurham (23), Feb., 1939, T.M.H. and A.D.B.; Oxton (56), G. R. Barker and A.D.B.

Trichocolea tomentella (Ehrh.) Dum., nr. Kyleakin, Skye (104), June, 1939, U.D.

Scapania compacta (Roth) Dum., nr. Abergavenny (35), June, 1941, A.D.B., teste W.R.S.

S. gracilis (Lindb.) Kaal., nr. Blaengarw (41), June, 1941, A.D.B.; nr. Ysppyty Ifan (50), Aug., 1926, A.W.; forma *minor* Pears., Stockley Bridge, Borrowdale (70), April, 1944, A.D.B. and L.B.C.T.

S. aspera Bernet., Butser Hill (11), Aug., 1939, E.C.W.

S. nemorosa (L.) Dum., nr. Kyleakin (104), June, 1939, U.D., conf., F.E.M.; Golspie (107), July, 1939, E.C.W.

S. dentata Dum., var. *ambigua* De Not., nr. Mortimer (12), July, 1939, A.D.B. and T.M.H.; Pen Trunan, Black Mountains (42), June, 1941, A.D.B. det. J.B.D.; Lodore cascade (70), April, 1944, A.D.B.; Corrig-na-binnia (I.7), Sept., 1943, A. W. Stelfox, per J.S.T.

S. irrigua (Nees) Dum., Silchester Common (12), Feb., 1937, T.M.H., per A.D.B.

S. curta (Mart.) Dum., nr. Newbury (22), May, 1940, T.M.H.; Clumber Park (56), 1941, E. F. Warburg and D.G.C. per P.W.M.R.

Radula complanata (L.) Dum., between Farley and Arborfield (22), March, 1940, T.M.H.

Madotheca laevigata (Schröd.) Dum., var. *Thuja* Nees, Butser Hill (11), Aug., 1939, E.C.W.

M. Thuja (Dicks.) Dum., Clifton Downs (34), 1944, C.S.; Ethie Haven (90), Jan., 1944, U.D.

M. platyphylla (L.) Dum., nr. Munlochy, Black Isle (106), July, 1942, U.D.

M. Cordeana (Hübner.) Dum., Avoch, Black Isle (106), Dec., 1942, U.D.

Lejeunea cavifolia (Lindb.) Buch, emend., Wheatham Hill (12), March, 1941, E.C.W.; Grimms Ditch, Streatley (22), March, 1940, T.M.H.; Mapledurham (23), May, 1939, A.D.B.; High Scawdel, Borrowdale (70), March, 1944, A.D.B.

Microlejeunea ulicina (Tayl.) Evans, nr. Pembroke (45), July, 1941, A.D.B.

Frullania germana Tayl., Ben Lui (88), Aug., 1941, C.V.B.M. and L.B.C.T.

Anthoceros punctatus L., nr. Mortimer (12), July, 1941, T.M.H. ; nr. Arborfield (22), May, 1939, T.M.H., conf. J.B.D.

A. crispulus (Mont.) Douin, Arborfield (22), Aug., 1941, T.M.H.

A. Husnoti Steph., nr. Georgetown (72), Dec., 1943, A.D.B. ; West Inverness-shire (97), *The Students' Handbook of British Hepatics*, p. 460.

A. laevis L., Mortimer (22), 1940, T.M.H. ; nr. Georgetown (72), 1943, A.D.B.

A.W.

NOTE on *CEPHALOZIA FLUITANS* var.
GIGANTEA Lindb.

Until March, 1944, when it was found by the writer at 1,700 ft, in Borrowdale, Cumberland (V.C. 70), *Cephalozia fluitans* var. *gigantea* Lindb. was known in Britain only from Abbot's Moss, Cheshire (V.C. 58), having been discovered there by G. A. Holt in 1887 (see Macvicar's "The Students' Handbook of British Hepatics" (2nd Ed.) p. 277).

A search in the British Museum (Natural History) for this original gathering revealed that Macvicar's herbarium contains no example of the variety, although one aquatic specimen of the type is labelled "approaching var *gigantea*." Pearson's herbarium, however, contains a plant named as the type and labelled "Abbot's Moss, Cheshire, 1887, G. A. Holt" in Holt's own handwriting. This plant agrees closely with Glowacki's Austrian gathering of the variety distributed by the B.B.S. in 1925 (see Report for that year) and, although the former is not named as such, Messrs. Sherrin and Gepp are of opinion that it is a piece of the original British gathering of the variety. It should, perhaps, be added that the Austrian plant bears the name "Breidl" as the author of the variety, but this is changed to "Lindb." in the B.B.S. Report.

The Borrowdale gathering, which agrees with both the Austrian and Abbot's Moss plants and has been confirmed by Mr. Wilson, has stems to 15 cm. long and occurred at a greater altitude than that at which the type is normally found.

It has not yet been possible to refer to Lindberg's original description, but it is of interest to note that Husnot ("Hepaticologia Gallica," 1922,) gives the stems as 10-20 cm. and cites Carr. and P. n. 259 as an exsiccata. Owing to war conditions the exsiccata cannot at present be consulted, so that the question of the naming of the Abbot's Moss plant in Pearson's herbarium must remain largely unexplained. It may be noted, however, that Pearson in his "The Hepaticae of the British Isles," 1899-1902, makes no mention of the variety at all.

The assistance of Mr. Sherrin in finding this information is gratefully acknowledged.

Nottingham,
June, 1944.

A. D. BANWELL.

RECENT BRYOLOGICAL PUBLICATIONS.

MOSSES.

- ANDERSON, L.E.—The Mosses of North Carolina, III. (Bryologist XLI., 82-90, 1938).
- BARTRAM, E.B.—Pleurorthotrichum and Polytrichadelphus in Costa Rica. (Ann. Bryol. XI., pp. 25-27, 1938).
Mosses of Interior British Guiana. (Bulletin of the Torrey Botanical Club, LXVI., pp. 221-230, 1939).
Mosses of Trans-Pecos, Texas. (Bryologist, XLIII., pp. 95-98, 1940).
- BEDFORD, T.H.B.—The Fruiting of *Breutelia arcuata* Schp. (Naturalist, pp. 113-115, May, 1940).
Hypnum cristacastrensis L., in Yorkshire. (Naturalist, pp. 201-2, Aug., 1940).
- BURRELL, W.H.—A Field Study of *Orthodontium gracile* (Wils.) Schwaeg., and its variety *heterocarpum* Wats. (Naturalist, pp. 295-302, Dec., 1940).
- CASTELL, C.P.—Some Mosses of the Wall-top. (Country Side Vol. XII., pp. 116-119, 231-234, 1943-1944).
- CHEETHAM, C.A.—Mosses at Driffild (Naturalist, p. 297, Nov., 1939).
Moss Flora of Boulders (Nat., pp. 153-6, June, 1939).
Habitats and Distribution of *Bryum argenteum* L. (Nat., p. 86, 1943).
Mosses and Lichens at Bolton Percy (Nat., p. 89, 1943).
Mosses at Scarborough (Nat., p. 119, 1943).
Mosses at Seckar Wood (Nat., p. 124, 1943).
- DIXON, H.N.—Sainsburia.—A new genus of Fissidentaceae. (Bryologist XLIV., pp. 40-41, 1941).
New and Rare Bornean Mosses. (Journal of Botany LXXIX., pp. 57-62, 72-77, 1941).
The Chinese Species of *Leucodon*. (Journal of Botany LXXIX., pp. 137-145, 1941).
Papuan Mosses. (Journal of Botany LXXX., pp. 1-11, 25-35, 1942).
Madagascar Mosses. (Journal of Botany LXXX., pp. 41-50, 1942).

- GROUT, A.J.—List of Mosses of North America, North of Mexico, (Bryologist XLIII, pp. 117-131, 1940).
 A Key to the Fissidentaceae of North America. (Bryologist XLIV., pp. 129-136, 1941).
- HARRISON, HESLOP J.W. and COOKE.—*Andreaea Hartmani* Thed and *A. Blyttii* Schimp. Two Mosses new to the British Isles. (Journal of Botany LXXX., p. 35-38, 1942).
- INGHAM, W.—Bryophyta of West Yorkshire (N.W. Nat., pp. 66-83 and pp. 189-202, 1942).
- MILSOM, F.E.—Mosses at Austwick (Nat., p. 210, 1940).
- PEARSALL, W.H.—The Mosses of the Stainmore District. (Journal of Ecology XXIX, pp. 161-175, 1941).
- STEERE, W.C.—*Barbula* in North America, North of Mexico. (Bulletin of the Torrey Botanical Club, LXVI., pp. 93-119, 1939).
Tortula in North America, North of Mexico. (Bryologist XLIII., pp. 98-109, 1940).
- WALLACE, E.C.—The Mosses of Surrey. (Journal of Botany LXXIX., pp. 1-25, 1941).
- WELCH, W.H.—Studies in Indiana Bryophytes (Proc. Indiana Acad. Sci. XLVII., pp. 78-85 f. 1-30, 1938).

SPHAGNA.

- ANDREWS, A.L.—The North American Atlantic Species of *Sphagna*. (Ann. Bryol. XI., pp. 15-20, 1938).
 List of North American species of *Sphagnum*. (Bryologist XLIII., p. 132, 1940).
- THOMPSON, A.—Bog-mosses near Sheffield. (Nat., pp. 294-5, 1939).
Sphagna at Austwick (Nat., p. 213, 1940).

HEPATICS.

- BLCMQUEST, H.L.—Another new Species of *Plagiochila* from the southern Appalachian Mountains. (Bryologist XLIII., pp. 89-95, 1940).
- CHEETHAM, C. A.—*Nowellia curvifolia* (Dicks.) Mitt. and its associates in a new locality. (Nat., p. 173, 1941).
- CLARK, LOIS and FRYE, T.C.—Some Hepaticae of Alaska. (Bryologist XLV., pp. 63-71, 1942).
- CLEE, DAVID A.—The Morphology and Anatomy of *Fegatella conica* in relation to the Mechanism of Absorption and Conduction of Water. (Annals of Botany. New Series Vol. VII., pp. 185-193, 1943).
- Structure and Mechanism of the Air Pores of *Fegatella conica*. (Annals of Botany, New Series Vol. VII., pp. 341-345, 1943).
- EVANS, ALEXANDER W.—List of Hepatics found in the United States, Canada and Arctic America. (Bryologist LXIII., pp. 133-138, 1940).
- ISAAC, IVOR.—The Structure of *Anthoceros laevis* in relation to its Water Supply. (Annals of Botany, New Series, Vol. V., pp. 340-351, 1941).
- PAGAN, F.M.—Catalogue of the Hepaticae of Guadeloupe. (Bryologist XLII., pp. 76-110, 1942).
- STUDHALTER, R.A. and COX, MARTHA ENNA.—The Gemma of *Riella Americana*. (Bryologist XLIII., pp. 141-187, 1940).
- The Ventral Scale of *Riella Americana*. (Bryologist XLI., pp. 29-40, 1941).
- The Lateral Leaf Scale of *Riella Americana*. (Bryologist XLIV., pp. 19-27, 1941).
- The Gemmaling of *Riella Americana* I. (Bryologist XLIV., pp. 77-93, 1941).
- The Gemmaling of *Riella Americana* II. (Bryologist XLV., pp. 49-62, 1942).
- SVIHLA, RUTH DOWELL.—Some Marchantiales from Mexico. (Bryologist XLIV., pp. 10-15, 1941).
- THOMPSON, R.H.—A second species of *Riella* in North America. (Bryologist XLIII., pp. 110-111, 1940).

- WALLACE, E.C.—The Hepatics of Surrey. (Journal of Botany LXXVIII., pp. 257-262, 1940).
- WATTHAM, W.E.L.—Growth of *Lunularia cruciata* D. (Nat., pp. 61-2, 1941).

BRYOPHYTES.

- ACOCK, A.M.—Vegetation of the Calcareous Inner Fjord Region in Spitsbergen. (Journal of Ecology XXVIII., pp. 81-106, 1940).
- CLAPHAM, A.R.—The Role of Bryophytes in the Calcareous Fens of the Oxford District. (Journal of Ecology XXVIII., pp. 71-80, 1940).
- DOBBS, C.G.—Vegetation of Cape Napier, Spitsbergen. (Journal of Ecology XXVII., pp. 126-148, 1939).
- GODWIN, H. and CONWAY, V.M.—The Ecology of a raised bog near Tregaron, Cardiganshire. (Journal of Ecology XXXVII., pp. 313-359, 1939).
- HOPE-SIMPSON, J.F.—Studies of the Vegetation of the English Chalk. (Journal of Ecology XXVIII., pp. 386-402, 1940).
- Studies of the Vegetation of the English Chalk VII., Bryophytes and Lichens in Chalk Grassland. (Journal of Ecology XXIX., pp. 107-116, 1941).
- JONES, E.W.—Appendix.—Annalated List of the Bryophyta on Tregaron West Bog. (Journal of Ecology XXVII., pp. 360-363, 1939).
- MILSOM, F.E.—Bryophytes in Uldale. (Nat., p. 130, 1939).
- Mosses and Hepatics in Teesdale. (Nat., p. 265, 1939).
- SOWTER, F.A.—Review.—The Cryptogamic Flora of Leicestershire and Rutland. (Journal of Botany LXXIX., pp. 192, 1942).
- THOMPSON, A.—Bryophyta at Cocket Moss. (Nat., pp. 128-9, 1943).

OBITUARIES.

HENRY HERBERT KNIGHT (1862-1944).

Many of our members who have been helped over some bryological difficulty by Mr. Knight were saddened by the news of his death on 4th January, 1944. He was one of the original members of the British Bryological Society and, previously to its formation in 1922, had been a member of the Moss Exchange Club for 16 years. For the Club he acted as Distributor in 1909 and 1910. From 1911 onwards he was a referee in Hepatics and continued the work for the British Bryological Society till 1933 when, owing to eye-trouble, he officially resigned, though his help was often sought in regard to critical hepatics during later years. In 1931 and 1932 he was the Vice-President of the Society and President in 1933 and 1934.

He was born on 24th May, 1862, at Sutton Maddock, Shropshire, where his father was curate. He was at Rossall School from 1874-1881, afterwards going to Clare College, Cambridge, where he obtained his M.A. degree. Mathematics was his main subject and he was the 7th wrangler and a Fellow of Clare College. From 1888 to 1908 he was the Mathematics Master at Llandovery School and the boys who obtained scholarships under his guidance, spoke highly of his help. His hobby, however, was natural history and many Caermarthenshire plants were first found by him. One of his colleagues, Littleton Powys, gives the following account in his book "The Joy of it." "Knight was a born naturalist, he loved the country round Llandovery and knew it well, he knew its flowers, its ferns, its mosses and no one could have been a more considerate teacher and guide. On these expeditions very often Knight was my companion and he it was who showed me for the first time not only many flowers but moonwort and adder's tongue, the club-mosses, the beech and oak and filmy ferns and many of those beautiful mosses which thrive among the moist woods and rocks of Wales. He also had a microscope and would spend hours examining mosses and the diminutive living organisms he found in swamps and pools."

At the end of 1907 he retired from scholastic life and came to live with his mother at Cheltenham. Gloucestershire benefited by this as he has given valuable help in regard to its flora. In 1909 he became a member of the Cotteswold

Naturalists' Field Club and in their proceedings published the following articles: "The Distribution of *Calluna* on the Cotteswolds" (1912), "The Mosses of Gloucestershire" (1914), "Cotteswold Plants and their Parasitic Fungi" (1918), "The Hepatics of Gloucestershire" (1920). In 1920 he presented the Moss and Hepatic collections to the Public Museum, Cheltenham. These consisted of 870 specimens in 9 fascicles, 680 being mosses and the rest liverworts, all beautifully mounted on cards and arranged according to recent classification. He was also interested in the Mycetozoa and Lichens and a work on the Lichens of Gloucestershire was in progress when he died. He was also a member of the British Mycological Society, attended many of their Forays and wrote accounts in its Transactions of the lichens found in the Forays held at Keswick (1923), Windsor (1924), Matlock (1925), Tintern (1926), Bettwys-y-Coed (1926), Marlborough (1928), Aviemore (1928), Arundel (1929), Whitby (1931), Ludlow (1933), Haslemere (1933) and Norwich (1935), the figures in brackets referring to the years of publication in the Transactions whereas the Forays in most cases were held in the preceding year. At one time he was a member of the British Ecological Society, and it was at one of its meetings that I first met him, but his interest in ecology was not sufficient for him to continue his membership. However, his interest was sufficient to afford me valuable help on many occasions in my ecological investigations.

He had for some time in his recent letters stated that he was feeling "very old" and his interest in solving plant problems had become less keen. After a few days illness he passed away on 4th January owing to a clot of blood near the heart, and was buried at Cheltenham on 7th January. Representatives of the Cotteswold Naturalists' Field Club were present at his funeral but owing to lack of knowledge no member of the British Bryological Society was present. His ready assistance will be missed but many happy memories will persist in our minds.

As most of his bryophytes and lichens were collected in S. Wales they have found a suitable home in the National Museum of Wales at Cardiff. Some beautifully mounted ferns collected chiefly in Carmarthenshire were also presented to the same institution. The herbarium of his old University (Cambridge) has been enriched by a collection of hepatics and Kew has acquired about 50 specimens of mycetozoa.

W. WATSON.

CHARLES HERBERT BINSTEAD, M.A., F.L.S.

The Rev. C. H. Binstead was an original member of the Moss Exchange Club and British Bryological Society ; he had lately been made an Honorary Life Member of the Society.

He was born in 1862 at Sandal Magna, in Yorkshire ; he was educated at Radley, at Pembroke College, Oxford (B.A. 1884) and at Wells Theological College. He was ordained at Carlisle in 1887, his first curacy being at Aspatria in Cumberland. In 1890 he came to be curate at Eardisley in Herefordshire ; all his subsequent clerical work, over 50 years, was in the same diocese (Hereford) ; between 1898 and 1923 he was successively Vicar of Breinton, Rector of Whitbourne and Vicar of Mordiford.

In 1890 he married Mary Agnes, daughter of the Rev. W. S. Browne, Somerset ; he is survived by his wife and only daughter. He died at Hereford on January 10th, 1941.

For the foregoing particulars I am indebted to Prebendary T. H. Parker.

C. H. Binstead's interests were artistic and literary. He delighted in water-colour sketching and was also a keen and successful gardener, a most successful grower of flowers and fruits.

Knowledgable in all branches of field botany, he concentrated on the study of mosses, making many microscopic slides for students and helping beginners in every way. He was indefatigable in collecting specimens for the yearly exchange ; the material was beautifully prepared and labelled in his clear calligraphy. He was one of the early Presidents of the Society and his presence at the yearly meetings was greatly appreciated. Later he was elected a Fellow of the Linnean Society of London. When possible he went abroad, once visiting Ceylon and Borneo.

Among his published works was : "The Mosses of the English Lake District," one of the Vasculum Monographs, April, 1922. Two papers in "The Bryologist," 30 : March, 1927, and 32 : September, 1929, dealt with the mosses of the French Riviera. His Herefordshire work is summed up in his "Mosses of Herefordshire," 1940, a well-produced pamphlet published by the Woolhope Field Naturalists' Club, consisting of a valuable introduction and then his detailed notes of the rarer mosses of the county. He discovered *Ceratodon chloropus* Brid., at Clevedon, Somerset, new to Britain. A hepatic *Lophozia Binsteadii* is named after him.

August, 1941.

ELEONORA ARMITAGE.