

## EXPLANATIONS OF THE CATALOGUE.

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**The Moss List.**—A new edition of this catalogue being called for, advantage has been taken of the opportunity to make some additions and corrections in details, without materially altering the technical arrangement first adopted, or greatly interfering with the numbers affixed to the specific names. The 1877 catalogue was arranged upon a system then recently promulgated by Jæger, from the impression not so much of its absolute perfection as of its general convenience, and the likelihood of its being in common use for some time as a reference and standard; and with so many methods of arrangement in the field, it seemed undesirable to introduce even one more. But few mere changes of names will be found in the present list to have been made out of regard to the somewhat fashionable doctrine of the claims of priority, the practice of which seems of very doubtful advantage, and rather likely to confuse than to aid the student in any way. The resuscitation of forgotten names seems dictated more by the vanity of writers than by desire to promote the study of the science, and in this instance, therefore, little heed is given to examples recently set, except in cases where some additional reason exists for a restoration. In some few cases, however, where the single line allotted to each species permitted, early names lately raked up have been given in brackets as synonyms. A mere catalogue should follow known and accepted models of nomenclature, and not attempt to lead the way; intended for reference, the more familiar the better. Authors of voluminous monographs may indulge in "views," but until they have cleared the road the list compiler should be content to keep in the old familiar path, or he becomes a bewilderer and a misleader who should be a useful guide.

Although the total number of species (568), here included as in strictness natives of the British Isles, appears to be the same as in the first edition, yet the alterations are much more numerous than would be revealed by any such superficial examination as a comparison of numbers. It was thought well to adhere to the original series—those denoting each species—as nearly as possible, and the correspondence in this respect between the two issues will rarely be found to differ above an unit or so. This result has been attained only with considerable trouble by a process of substitution. Bryological research during the past four years has shown the claims of many species hitherto included in British lists to be very slight indeed, in some cases absolutely nil; whilst, on the other hand, an almost equal number of species have been established as indubitably occurring within our limits. The one class has balanced the other, all new species up to date with good Authority for their sponsor having been inserted, and all in the *doubtful* category (parenthetically included and improperly numbered in the first edition)—with the exception of two, those numbered 333\* and 380\*, still *sub judice*—expunged from the body of the list, and relegated to a separate position at the end, after the fashion set in the Phanerogamic *London Catalogue of British Plants*. This concluding list, under the heading of *Excluded Species*, consists, then, of such as were certainly alien, such as were probably erroneously recorded, and such as are ill-understood, rather names than species, too hastily bestowed or referred to plants gathered in Britain, all representing confusion of one kind or another in the past.—H. Boswell.

**The List of Hepatics.**—A numbered catalogue of the British Species having become necessary to the Record Club as a basis for the working out of their comital distribution, a choice had to be made of some existing arrangement, or one entirely original had to be framed. The latter alternative seemed undesirable, notwithstanding the fact that there is in English no sufficiently recent completed monograph of the class which could be followed, and that the arrangement of *Synopsis Hepaticarum* by Gottsche, Lindenberg, and Nees (Hamburgh, 1844) is somewhat antiquated, however

exhaustive and trustworthy that work, as a whole unsurpassed to this day, may be. A hope was at one time held out to the compiler of the present list that a new arrangement, which would have been the outcome of a deep and wide experience of exotic as well as of European forms, and reflective and expressive of views matured by an unrivalled knowledge of the works of others as well, might be furnished to the Record Club, for the benefit alike of its members and of science; but advancing age, ill health, and other work with paramount claims calling for completion, has stood in the way. The framing of an arrangement both as natural and as little antiquated as possible was no easy task, since no model could be servilely followed. Dr. Spruce (without subscribing to the principles involved in any particular one) had expressed the opinion that several good classifications of genera and species exist: that of *Synopsis Hepaticarum*, that of Dumortier in his *Hepatica Europa*, that of Mitten at the end of Hooker's *Handbook of the New Zealand Flora*, and that of Lindberg, first outlined in 1874 in *Hepatica in Hibernia lecta*, and perfected in *Musci Scandinavici* in 1879. This latest elaboration has in this catalogue been in the main followed, although in one or two instances generic names having indisputable priority in age have been replaced by others less ancient, but more happily descriptive or familiar to British Hepaticologists—e.g., *Scapania* has been retained in preference to *Martinellia*, *Gymnomitrium* instead of *Cesia*, etc. Two groups included in other genera by Dr. Lindberg have been here accorded generic rank—*Adelanthus*, for example; and *Metzgeria* and *Ancura* have been removed from the Anomogamous and Opisthogamous Lindbergian sections, in which in many respects they seemed out of place, and put next the Fossombronieæ, after *Pellia*, more in accordance with their natural affinities, as well as with older systems of grouping. Moreover, they ill-agreed with the somewhat unweildy characters of the sections in which Dr. Lindberg included them. Sub-generic partitioning has been carried out as far as possible amongst the large residuum of forms still left under *Jungermannia*, with the view of suggesting to the student intra-generic alliances which in a catalogue it is impossible to define. As many Neesian synonyms, for both genera and species, have been inserted as the allotted line allowed; and the dates of publication of each generic name have also been given, so that those who work by *Synopsis Hepaticarum*, or have access to Hooker's rare *British Jungermannia*, will have little difficulty in correlating them with this catalogue.

**The Census of Distribution.**—The idea of tracing each species through the counties, or giving the mere aggregate number of known comital-occurrences, as does the *London Catalogue of Plants*, has been abandoned until the Record Club Reports have furnished a basis list of the species of at least 70 out of the 112 counties and vice-counties into which H. C. Watson has divided Britain; but the timely co-operation of some of the leading students of the Bryophyta has, nevertheless, enabled a geographical census, albeit a somewhat less detailed one, to be taken. The result is the provincial outline of distribution furnished in the series of numerals, and the italic letters *I.* and *C.* (for Ireland and the Channel Islands Province respectively) which are seen to follow the italicised *pater* of each specific name. The sixteen numbers, 1 to 16, and the lettered numerals 17A, 17B, 18A, 18B, and 18C, stand for the twenty-one Watsonian Provinces, and shew in which of those provinces each species is known to grow. Where the occurrence of a species in any particular county is in any way doubtful, or is reported extinct, the number of such province is placed within the parenthesis bracket. The names of these provinces, with the numbers standing for them in the catalogue, and the counties included in each province, are as follows:—

1. *Peninsular* (Cornwall, Devon, Somerset); 2. *Channel* (Wilts, Dorset, Wight, Hants, Sussex); 3. *Thames* (Oxon, Bucks, Berks, Surrey, Middlesex, Herts, Essex, Kent); 4. *Ouse* (Northton, Beds, Hunts, Cambridge, Norfolk, Suffolk); 5. *Severn* (Monmouth, Gloster, Hereford, Worcester, Warwick, Salop, and Stafford); 6. *South Welsh* (Glamorgan, Carmarthen, Brecon, Radnor, Cardigan, and Pembroke); 7. *North Welsh* (Montgom., Merioneth, Anglesea, Carnarvon, Denbigh, Flint); 8. *Trent* (Lincoln, Leicester, Notts, Derby); 9. *Mersey* (Cheshire, Lancashire, *sine* Lake Lanc.); 10. *Humber* (Yorkshire solus); 11. *Tyne* (Durham, Northumberland); 12. *Lake* (Lake Lanc., Isle of Man, Westmorland, Cumberland); 13. *West Lowland*

(Dumfries, Wigton, Kirkcudbright, Lanark, Ayr, Renfrew); 14. *East Lowland* (Berwick, Roxburgh, Selkirk, Peebles, Haddington, Edinburgh, Linlithgow); 15. *East Highland* (Perth, Stirling, Forfar, Kincardine, Aberdeen, Banff, Elgin, Easternness); 16. *West Highland* (Argyle, Arran, Islay, Mull, Skye, Westernness); 17A. *Upper North Highland* (Sutherland, Caithness); 17B. *Lower North Highland* (Ross-shire); 18A. *Hebridean* (Isles); 18B. *Orkney* (Isles); 18C. *Shetland* (Isles).

In this first attempt at an outline of the distribution of mosses and hepatics it is likely that omissions may have occurred, and possibly a few errors have crept in, which will be detected and corrected at a future time, but great care has been taken in examining specimens where doubts existed, in order to prevent the extension of false records, as far as lay in the Editors' power. The information from the various provinces is very unequal: from those of the Ouse (4), South Welsh (6), and Orkney (18B), especially, is it small.

**Coadjutors in the Work.**—Knowing that Union, even in a matter so apparently simple as a catalogue of the species of a country with a census of their range therein—if such work, when completed, was to occupy anything like the position of a reliable register, gives a strength not possibly attainable otherwise, the editor, in his capacity of general superintendent, has not hesitated to seek aid outside the ranks of the Record Club membership. Besides the Club's Referees—Mr. Henry Boswell, of Oxford, in the sphere of mosses, and Dr. Benj. Carrington, of Eccles, in that of hepatics—acknowledgment of indebtedness and sincere thanks on the Club's behalf must be given to several gentlemen (all with special knowledge of the points on which their help was sought) for material assistance freely rendered, especially with regard to the census of distribution. Foremost amongst these is the Rev. J. Fergusson, of Fern, who, apart from valuable facts as to new species, marked for the Club a catalogue showing the provincial distribution throughout Britain of all species so far as known to him, by doing which he unselfishly made available for the editors' use a large store of information amassed for a forthcoming work of his own, helping the Club in this respect to forestall an outline of distribution he plans publishing. Other helpers who have willingly given assistance to the best of their ability have been found in Messrs. J. E. Bagnall, W. Curnow, W. H. Pearson, John Ralfs, Geo. Stabler, William West, and John Whitehead, and suggestions have kindly been made in the course of the work by Drs. Braithwaite, H. F. Parsons, and Spruce, and Messrs. E. M. Holmes, E. D. Marquand, and Matthew B. Slater. To have furnished the outline of distribution would have been impossible without the hearty co-operation of all concerned, given ungrudgingly in face of the fact that it would be impossible in the united result to discern the relative amount or value of each individual quota. Every contributor must be content with equal share of credit. The very various data of each contributor, all drawn from personal knowledge, have, in one way or another, supplemented those from the rest, and the aid rendered by any single one could have been but ill spared. The experiment has been a novel one, not carried out without difficulties, for contributors' "views" will prove difficult to reconcile sometimes; but the result, if it be at all successful, must be held to say something in favour of such *botanical partnership* as the Record Club alone amongst scientific associations affords the facility for. Although views as to what constitutes a species, or as to the claims of priority in nomenclature, may differ, "splitters," "resurrectionists," and the rest may yet unite their forces for a common end, and work amicably together.

Suggestions, corrections, or inquiries relating to the nomenclature or distribution of any of the species mentioned in the *Catalogue* may be addressed to either of the Referees or to the Editor—

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