

fascination that the book will exercise upon him. Whatever else he may or may not be, Spengler is never dull: his generalisations, his handling of facts—many of them as unfamiliar as they are interesting—his *aperçus*, make his pages almost as entrancing, at least for the moment, as Gibbon's. Not that he has Gibbon's greatness—perhaps his keen and lively glance is more like Voltaire's. Students of science should read Spengler, if only as a moral discipline; he will suggest to their minds some profound doubts.

(2) Mr. Radhakrishnan's little book is, of course, of a much more limited scope, but it repays reading. His thesis is the familiar one that our ethical and religious development has not kept pace with the spate of scientific knowledge which has engulfed us all. He questions the too commonly held assumption that mechanical technique is equivalent to civilisation.

(3) M. Kadmi-Cohen's book on the Jewish soul is relevant to the subject dealt with in the other two volumes, since it is concerned with the problem of spiritual leadership for Europe. He holds that, much as Europe already owes to the Semitic genius, the debt is not yet complete. J. C. H.

*Primitive Beliefs in the North-East of Scotland.* By the Rev. J. M. McPherson. Pp. xii + 310. (London, New York and Toronto: Longmans, Green and Co., Ltd., 1929.) 12s. 6d. net.

It is perhaps owing to the fact that north-east Scotland has been less well served by students that it does not figure so largely as the west in the literature of folklore and primitive belief. That this is not due to a lack of material is shown by the data which Mr. McPherson has collected and published in this book. As he points out, no systematic study of the folklore of this area has been made since the publication of "Notes on the Folklore of the North-East of Scotland", by Dr. Walter Gregor, nearly fifty years ago. Mr. McPherson has here collected and classified the large amount of material which has accumulated since that date, and in addition he himself has examined the ecclesiastical and burghal records which, while wishing to ignore superstitious practices, frequently were forced to note old ways and modes of thought and life in opposition to the views of the Church. Hence much valuable information upon such subjects as well-worship, tree, river and water spirits, fire festivals, and, above all, magic and witchcraft.

This latter subject claims a large share of the author's attention, and the whole of the second part of his book is devoted to the Black Art, which he examines exhaustively and in its various manifestations. It was in this area that some of the most famous of the Scottish witches were found—Isobel Goudie, for example. The actions of which they were accused were among the most primitive cited in all the witch trials. This is especially to be noted in connexion with fertility rites, in which both nudity and the use of urine are recorded. Control of the winds was a common prerogative of the witch, as might be expected in

a country in which maritime activities play a large part. Belief in this ability continued until well into the nineteenth century. Although it has been possible to indicate only one or two points of interest in Mr. McPherson's collection, his book is a store of information on every side of old Scottish custom and belief.

*Morphologie und Physiologie des Formwechsels der Moose auf genetischer Grundlage, II. (Untersuchungen, ausgeführt mit Unterstützung der Notgemeinschaft der deutschen Wissenschaft zu Berlin und der Gesellschaft der Wissenschaften zu Göttingen.)* Von Fritz von Wettstein. (*Bibliotheca Genetica*, herausgegeben von Prof. Dr. E. Baur, Band 10.) Pp. iii + 216 + 10 Tafeln. (Leipzig: Gebrüder Borntraeger, 1928.) 48 gold marks.

THIS is the second part of Fritz von Wettstein's well-known experimental work on mosses, the first part having appeared in 1924. The present contribution deals largely with hybridisation between different species and genera of mosses, and with heteroploidy produced experimentally by Marchal's original method of wounding the sporophyte. By regeneration from a hybrid sporophyte, and subsequent hybridisation again, various unbalanced types can be obtained, in which the chromosomes may be regular multiples, but more sets will have been derived from one parent species than from the other. These are spoken of as heterogenomatic, homogenomatic forms being those derived from wounding successive generations of sporophytes in pure species, or from crosses giving a balance of chromosome sets. In a section on cell-size, a law for the increase of size accompanying various degrees and kinds of polyploidy is worked out.

Extensive comparative studies of the leaves, paraphyses, sex organs, capsules, stomata and cells in all the various kinds of polyploid hybrids form a basis for the analysis of the genetic effects of each chromosome set. This work has become sufficiently extensive to have wide bearings on various fundamental genetical problems; and mosses, in their structure and life-history, possess certain advantages which are not shared by flowering plants. R. R. G.

*Handbuch der Vererbungswissenschaft.* Herausgegeben von E. Baur und M. Hartmann. Band 1: *Die cytologischen Grundlagen der Vererbung.* Von Karl Béla. Pp. iv + 412 + 2 Tafeln. (Berlin: Gebrüder Borntraeger, 1928.) 80 gold marks.

WHILE the volume under notice is mainly devoted to the animal side of the cytological basis of inheritance, there is also a considerable amount of well-chosen evidence from plant material. Much of the evidence presented can be found in such works as Wilson's "Cell", but some of the recent developments have been more fully considered.

The earlier chapters deal with such topics as cytomorphology, cell and nuclear division, cell differentiation, fertilisation and parthenogenesis. In later chapters, considerable space is devoted to problems relating to chromosome reduction, individuality of the chromosomes, and the relation of