the German student. Also, in a general text-book, a study of the common finer adaptations of the parts of the plant machine to one another and to ordinary conditions of environment, *i.e.* general morphology and physiology, should certainly not be sacrificed to a study of the almost endless variety of special, grosser adaptations by which plants fit themselves to special conditions of life.

The book is certainly a marvellous example of German publishing, for it has 600 pages of good paper, 597 very good figures in the text, 36 fairly satisfactory coloured plates, and the whole is well bound in serviceable and artistic cloth covers; yet the cost is only 8 marks. In no other book can so much valuable botanical information be obtained at so cheap a price.

V. H. B.

A SYSTEM OF GEOGRAPHICAL CLASSIFICATION.

Katalog der Bibliothek der Gesellschaft der Erdkunde zu Berlin. Versuch einer Systematik der geographischen Literatur. Bearbeitet von Dr. Paul Dinse. Pp. xxvii+925. (Berlin: Mittler und Sohn, 1903.) Price 12 marks.

I NTENDED primarily as an index to the contents of the library of the Berlin Geographical Society, this catalogue will be of service to a far wider circle than is constituted by the members of that body. While forming probably the best guide that has yet appeared to the literature of geography in general (for few works of real geographical importance will be found to be excluded), it does a second and no less important service in the direction of a classification of geography, a service of especial value in the present stage of the development of the science.

Dr. Dinse, who is himself both a geographer and librarian, has evidently bestowed much thought and pains on the elaboration of the system adopted, and the general result is thoroughly satisfactory. whole arrangement of the body of the work is a subject one, all the purposes of an authors' catalogue being at the same time supplied by the alphabetical index, which has been kept within small compass by a judicious abbreviation of titles. In the rest of the work the compiler has wisely eliminated the alphabetical arrangement, the fetters of which too often mar the usefulness of attempts at subject classification. Two main divisions are laid down at the outset, the first concerned with the wider and more general aspects of geography, the second with the topographical subdivisions of the earth's surface. A glance at the schedule of classification for the former category shows in a striking way the great development of geographical science within recent years, the subjectmatter being divided into no fewer than eleven main divisions, most of them in turn subdivided into groups of the second, third or fourth order. It may possibly be thought that this minute subdivision militates against facility of reference, as few bibliographical items are of so restricted a scope as to belong definitely to one ultimate subdivision only. But this objection has to a certain extent been met by a duplication of entries. Of the eleven main headings, that denoted general physical geography" is naturally the most comprehensive, while of its eight subdivisions, the last, or "geomorphology," is perhaps the most important as dealing with what may be regarded as the kernel of the whole science. On the whole, the groups are logically and clearly defined, though it is perhaps inevitable that the boundaries should occasionally lack this character of precision. It is not easy, e.g., to draw a hard and fast line between geophysics and geomorphology, for both seismology and vulcanism might, from one point of view, be rather grouped with the former than (as is done by Dr. Dinse) with the latter. Again, the reason for the order adopted is sometimes not quite apparent. Thus historical topography (Länderkunde) seems separated by a needlessly wide interval from the history of geographical science in general. But such difficulties are no doubt inseparable from any attempt at a linear arrangement of mutually inter-related groups. In the topographical section political divisions are necessarily taken as a basis, but others of a more elastic nature, in part based on physical factors, have been wisely introduced alongside of the former.

It should be mentioned that the catalogue deals not with books only, but with the contents of a certain number of series or collections, besides including the titles of a large number of separate copies ("Sonderabdrücke") of articles in geographical periodicals.

E. H

OUR BOOK SHELF.

The Sporting Dog. By J. A. Graham. American Sportsman's Library. Pp. x+327; illustrated. (New York: The Macmillan Co.; London: Macmillan and Co., Ltd., 1904.) Price 8s. 6d. net.

Quite apart from its interest to the class for whom it is primarily intended (and to whose requirements it appears in every way admirably suited), this volume appeals strongly to the naturalist and to the student of variation. Despite certain pretensions (of which the author makes very short work) of some of them to derivation from "native breeds," American sporting dogs, other than mongrels, are admittedly derived from English stocks, but their new environment, and the different conditions under which they are employed, have in all cases, except that of the greyhound, caused them to display considerable variation from the parent type. It is the author's description of these variations which will cause his volume to have a considerable interest and value to the naturalist.

"It is foxhounds and shooting dogs," writes Mr. Graham in his introductory chapter, "which have become, under American conditions, something essentially different from what the British sportsmen established and have maintained as filling their conceptions of utility and good looks. Reduced to the simplest terms, the change wrought over here comes to this: the dry climate of extreme temperatures, the nature of the ground and game, and the methods of hunting the fox and shooting game birds cause the survival of the fittest to proceed in the direction of a faster, lighter, more enduring animal; perhaps not more sensitive of nose, but quicker in the reflexes of judgment and action which are the sequences of scent."

In a word, pace and the capacity to act on his own initiative, rather than as a member of a pack, are the