

out." Still, here is a book well worth buying and studying. The illustrations and diagrams are admirable; and Dr. Millard has not only authority, but an excellent style.

Bibliotheca Geographica: Jahresbibliographie der Geographischen Literatur. Edited by Joseph Müller. Band xviii. Jahrgang, 1909 und 1910. Pp. xvii + 483. (Berlin: W. H. Kuhl, 1914.)

ASSOCIATED for many years with the name of Prof. Otto Baschin, this excellent publication is as useful as ever under its new editor. In previous issues the "Bibliotheca Geographica" purported to be a bibliography of all geographical books and articles that appeared; the current issue is limited only to scientific writings. And the list of them runs to 480 pages! The student will find in the catalogue all manner of books and studies in learned journals bearing on the many-sided problems of geography, not omitting methods of teaching. Turn, for instance, to the section on Austria-Hungary. Books on physical geography, cartography, climatology, mountains, hydrography, biological geography, historical geography, and last, but not least, maps are mentioned. The diligence of the editor deserves all praise, and his book should prove of great use generally, more especially in countries like Russia, of which the language is a sealed book to most. In many cases, immediately after the entry of a particular book, stands a reference to a review of it. Thus, following Mr. A. L. Salmon's "Dorset" in the "Cambridge County Geographies," we have a reference to the *Geographical Journal*, vol. xxxvi., p. 178, where the book is noticed. This additional information is certainly useful. But it does not go far enough. If only we had some indication in these long lists of books of their relative value (even in a very general way) the "Bibliotheca Geographica" would add much to our indebtedness.

Science and the Miller. By J. S. Remington. Pp. 166. (Liverpool: The Northern Publishing Co., 1914.) Price 4s. 6d. net.

ENGLAND is justly proud of its milling industry, and the advances made in it both on the mechanical and the technical side during the last decade have given the lead both to Europe and America. Our biggest milling concerns are already willing to learn, and there are indications that the smaller miller, too, is prepared to accept the help that applied science will give him. It is essential, however, that his chemist should be of the right type; such, for example, as is portrayed in the work under notice. The chapter on the training of the flour-mill chemist is an admirable statement of what is necessary, whilst the remarks as to the position the employer should take towards the chemist will be applauded by every man of science with works experience.

Later chapters give hints as to the directions in which the chemist can make himself useful in the mill, and from these we would select that on improvers and enrichment processes for special commendation. This question is imperfectly understood, and has formed the point of attacks by

ignorant food reformers in the public Press, who would do well to study Mr. Remington's book.

Lengthy sections of the work are devoted to breakfast, invalid and infant foods, and to the more prosaic subject of feeding cakes and offals. The disposal of residues, such as are made into compound cakes, is a most important consideration to both the flour and oil miller, and it is to be regretted that the average farmer does not yet fully understand the many virtues of the scientifically compounded cake.

Impurities of Agricultural Seed, with a Description of Commonly Occurring Weed Seeds and a Guide to Their Identification. By S. T. Parkinson and G. Smith. Pp. 105 + xxxviii plates. (London and Ashford (Kent): Headley Bros, n.d.) Price 3s. net.

THE authors of this little book express the hope that it will be of practical use to farmers, seedsmen, teachers and students. This hope will, we believe, be fulfilled, but we hold that had the volume been prepared for a less mixed community it would have been more specifically useful. As it is, the first thirty or forty pages are taken up with generalities—so beloved by the present-day teacher—which, if they are included at all, should come as savouries and not as *hors d'oeuvres*. Farmers know well enough that weeds are bad, and if the main object of the authors is to help farmers to judge of a sample of seed, they might well relegate to an appendix their description of the harm done by weeds, and bring into first place the excellent descriptions and illustrations which now occur in the latter half of the book. These descriptions might also be so adjusted as to occur in all cases opposite the photographs.

Discussion of questions on such subjects as national seed-testing stations and State legislation with respect to weeds might, we think, be omitted altogether, and the space saved filled to better purpose by weed-analyses of actual samples of bought-in seeds, by lists of weeds characteristic of different types of soil, and by notes on the respective appearances of new and of old and "treated" seed. In short, if the authors in preparing a second edition will forget the teacher and the student in agricultural colleges, and think of the farmer—the seedsman can look after himself—they will add to the utility of an already useful little book. The more so if they can persuade the publishers to reduce the price to a shilling.

LETTERS TO THE EDITOR.

[The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts intended for this or any other part of NATURE. No notice is taken of anonymous communications.]

Enhanced Series and Atomic Models.

IN the Bakerian Lecture, "Series Lines in Spark Spectra," Prof. A. Fowler indicates an explanation on Bohr's theory of enhanced series in which the Rydberg constant is $4N$ instead of N . It may be of interest to point out how the model atom described