We cannot praise too highly the clearness of diction and simplicity of expression which prevail throughout the work. Were it not for the illustrations, we should have been at some trouble to find any cause for criticism of the work at all. The line blocks are good; they would, however, have been better in many cases if the size had been more carefully selected. On the other hand, the half-tones are, almost without exception, poor in quality, besides sharing with the line blocks the fault, in many examples, of being of unsuitable dimensions. The price limitation may have had someting to do with this marring feature, for the work is undoubtedly cheap as such publications go. A little more discrimination in regard to the scale of the drawings as reproduced, and the preparation of an entirely new set of half-tones from original photographs, would have enhanced the value of the book to a degree which would be out of all proportion to the additional expenditure involved.

## OUR BOOKSHELF.

*Standard Method of Testing Juvenile Mentality by the Binet-Simon Scale, with the Original Questions, Pictures, and Drawings.* By N. J. Melville. With an introduction by Dr. W. Healy. Pp. xi+142. (Philadelphia and London: J. B. Lippincott Co., 1917.) Price 8*s.* 6*d.* net.

ALL who have had experience of the Binet-Simon scale, or are acquainted with the literature of the subject, must have felt the difficulties which this valuable little book is intended to counter. The use of any series of mental tests depends so much upon delicate handling in the first place, and upon intelligent interpretation in the second, that the comparison of one set of results with another, even when taken in the gross, is always suspect. The difficulty still exists although the comparison concerns the work of the same inquirer. When we come to the pronouncement on the mentality of a particular child, the chances of error are enormously increased. A physical measurement may be repeated. Accuracy demands that it should be, perhaps many times. Repetition in the case of the Binet-Simon scale is out of the question. The importance of standardising both the way it is used and the interpretation of results cannot, therefore, be exaggerated.

Mr. Melville's handbook explains the fundamental object of the scale and describes the technique of its use with great care and precision. Nothing can make such an instrument "fool-proof," though the author points out the pitfalls and warns off the incompetent. Specimen record forms as used in the Philadelphia schools are given, and three supplementary tables provide useful data for assisting final judgment.

The book is in no sense a text-book. It is essentially a guide to practice, and as such may be warmly recommended. It is well printed and strongly bound. A thumb index gives ready access to the pages dealing with the several groups of tests, and there is a good bibliography.

*Papers from the Geological Department, Glasgow University.* Vol. iii. 1916. (Glasgow: James Maclehose and Sons, 1917.)

THIS collection of papers, previously published in various journals, records once more the activity of the geological school in the University of Glasgow. Prof. Gregory's address on Henry Darwin Rogers, professor of natural history in the University from 1857 to 1866, brings before the present generation of geologists views on mountain-building and on the relative rapidity of certain tectonic changes which are, indeed, worthy of consideration. Prof. Gregory's valuable review of the economic mineralogy of the war-zones has been already noticed in NATURE (vol. xcix., p. 110). With Miss Jean B. Trench, the same author describes Eocene corals from New Guinea, which further support the view that the Malay region was isolated in the early Cainozoic epochs. Montipora, which is here traced back to the Eocene, is thus indicated as originating in the western Pacific, as reaching the Indian Ocean, where it still lives, after the Miocene period, and as arriving on the shores of the Red Sea in Pleistocene times. It is unknown from either Sind or Europe, and the only known fossil species are those of the Pliocene of Borneo and the raised beaches of the Gulf of Suez. Among several papers elucidating local geology, which naturally form the strong point of a collection such as this, we may note Mr. W. R. Smellie's "Igneous Rocks of Bute" (see NATURE, vol. xcvii., p. 350) and Mr. Tyrrell's careful additions to our knowledge of the petrography of Arran.

G. A. J. C.

*Proceedings of the London Mathematical Society.* Second series. Vol. xv. Pp. liii+454. (London: F. Hodgson, 1916.)

THE latest volume of the Proceedings of the London Mathematical Society keeps up to the usual high standard. As regards pure analysis, attention may be directed to Prof. and Mrs. W. H. Young's papers on integrals and derivates, because they deal with fundamentally new notions of the integral calculus, with which every serious mathematician will have to make himself acquainted. Mr. G. H. Hardy contributes a paper of great interest on Dirichlet's divisor problem, and there is a little gem by Mr. T. L. Wren on the two-three birational space transformation, which incidentally gives a new, and we think finally satisfactory, aspect of the double-six configuration. In applied mathematics we have a paper by Prof. Bromwich on normal coordinates, based on the theory of complex integrals; one by Sir J. Larmor on transition from vapour to liquid; and one by Mr. F. B. Pidduck on the motion of ions, discussed by means of an integral equation. We must content ourselves with noting these few papers out of the whole thirty. The volume will doubtless receive the full attention that it deserves.