

Geometry.

- (1) *Practical Geometry: based on the various Geometry Books by Godfrey and Siddons.* By A. W. Siddons and R. T. Hughes. Pp. x+264. (Cambridge: At the University Press, 1926.) 4s.
- (2) *Theoretical Geometry: based on the various Geometry Books by Godfrey and Siddons.* By A. W. Siddons and R. T. Hughes. Pp. xvi+173. (Cambridge: At the University Press, 1926.) 3s.

THESE two books are intended to be used together in order to give a sound course in the methods of geometry.

In the practical geometry, intuition and experiment are skilfully employed to develop the power of intelligent inference.

In the volume on theoretical geometry, the Assistant Masters' Association's sequence of theorems has been followed, the object being to cover the requirements of the non-specialist. The whole treatment is so good that many teachers will regret the omission of the powerful method of limits in its application to tangency.

Analytic Geometry. By Prof. Maria M. Roberts and Prof. Julia T. Colpitts. Second edition. Pp. xii+261. (New York: John Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1926.) 9s. net.

THE courses given to students of engineering and science at the Iowa State College form the basis of this book, which embraces Cartesian geometry in two and three dimensions. Special emphasis is placed upon those portions of the subject essential to a working knowledge of the calculus. The treatment is lucid and practical, and there are numerous exercises designed to stimulate independent thought.

Miscellany.

Teaching Science in Schools. By John Brown. Pp. x+170. (London: University of London Press, Ltd., 1925.) 3s. 6d. net.

THE author of this small book is, as a critical onlooker in the rôle of a London County Council inspector of schools, eminently qualified in taking upon himself the task of a review of the present position of the teaching of science in schools. Much that he has to say is primarily the concern of the elementary-school teacher. Nevertheless, there is much that is common in aims and ideals and methods as between the elementary and the secondary school, and the teaching profession owes its thanks to Mr. Brown for a most valuable contribution to the literature of educational method.

A careful reading of his work impresses one vividly with a sane sense of balance. The swing-swing of the pendulum of method as between too much and too little formal laboratory work rightly has very little sympathy from the author. The pendulum must be damped down to its mean position. At the same time, we are bound to submit that there is no sign of an indifference to a rational realisation of the need for improvement on the part of teachers of science as a whole such as might be inferred to exist from a reading of this book. On the contrary, so far as secondary schools are concerned, there are few 'subject' organisations that compare either in vigour, effect, or for that matter in

numerical strength, with, for example, the Science Masters' Association. Most of the points and submissions contained in Mr. Brown's book have been or are being thrashed out by the science teachers of today. Nevertheless, this in no way detracts from the value of a book that succeeds admirably in placing before the reader a résumé of the problems that confront teachers of science, and the lines along which a sound solution may be found. I. B. H.

The Journal of the Institute of Metals. Edited by G. Shaw Scott. Vol. 35, No. 1. Pp. xii+988. (London: The Institute of Metals, 1926.) 31s. 6d. net.

A SUBJECT which is assuming great importance in metallurgical discussions is that of 'creep' at high temperatures, and the new volume contains two papers on this topic. R. W. Bailey reviews the experimental evidence and supplies the first real attempt to provide an explanation, whilst H. J. Tapsell and J. Bradley contribute the results of experiments with an alloy of nickel and copper. The constitution of the alloys of silver and tin, which is of importance for the knowledge of dental alloys, has been determined satisfactorily by A. J. Murphy, previous determinations having been badly in error, and another careful alloy investigation is that of the aluminium-copper-tin alloys rich in copper, by D. Stockdale. W. Hume-Rothery makes a bold and ingenious attempt to apply the Bohr theory of the atom to intermetallic compounds, supporting his theoretical work by interesting experimental data. The speculations have given rise to much discussion, but chemists will follow with interest an effort to find some system in these peculiarly puzzling compounds. Among the more practical papers, a useful account of the die-casting of aluminium alloys, by G. Mortimer, may be mentioned. The May lecture this year was by Prof. Carpenter, who dealt with some of the properties of single crystals. The high standard reached by several of the contributors in their photomicrographs is to be noted with satisfaction. As usual, the volume contains a very extensive and exceptionally valuable collection of abstracts.

A Catalogue of British Scientific and Technical Books. Supplement, 1925. Arranged by Daphne Shaw. Pp. viii+166. (London: British Science Guild, 1926.) 2s. 6d. net.

Book catalogues intended to occupy a permanent place on the reference shelves of libraries must be kept closely up-to-date, if the hopes of their compilers are to be realised. We are, therefore, pleased to note that the British Science Guild has found the means to publish a supplement containing 2258 entries completing its useful Catalogue of 1925, and that it further proposes to print annual supplements early in each year if sufficient support is obtained for these issues. Though the change of system of publication from the class to the dictionary order of headings has advantages, the break in the continuity of system in a serial publication may be resented by its users. The present dictionary headings and references are also not up to the standard of modern library practice. The entries, however, which have been taken from the monthly lists in NATURE, are admirably full, and the allotment of entries to their respective headings is generally satisfactory.