## NEW BOOKS.

A Laboratory Manual of General Chemistry. By W. S. HENDRIXSON, Professor of Chemistry in Grinnell College, Grinnell, Iowa, 1918. Fourth edition.

As explained in the preface, this book is an attempt to connect rationally general chemistry and qualitative analysis. In the accomplishment of this purpose the author has been undoubtedly successful. It is well adapted either for beginners or for those who have had some preliminary training. The first portion of the book is devoted to the usual study of the non-metals and the Ionization Theory. The metals are then introduced in groups where practicable and from a study of their salts the student is asked to devise schemes for their separation. In this way the foundation is laid for the general scheme of qualitative analysis which is given at the end of the book. This scheme is elementary and incomplete but is an excellent introduction to the study of some more extended work on the subject. The book should prove useful to both student and teacher.

E. B. Spear.

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Chemistry. First Stage. By F. P. Armitage, M.A., Chief Science Master at St. Paul's School. Longmans, Green and Co. X + 80 pp. London, 1918. Price, 60 cents.

This little manual comprises a set of 33 experiments and 6 demonstrations, covering chemical change, acids, bases and salts, and the alkalis and alkaline earths. Questions accompany each experiment, and there are additional sets of questions and three examination papers appended; also notes describing many substances and terms used in connection with the experiments, and a list of derivations of some words in common use. The little volume has the interest which always attaches to the expression of a teacher's method of presentation of his subject to beginners.

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