

istry is developed strongly and the presentation of this part is made very clear and attractive.

The part devoted to the detection and separation of the metals and acid radicles covers about the same ground that is included in most of the smaller works on this subject. The value of making comparisons between reactions brought about by the same reagent acting upon different solutions is left for the student to see for himself, it is not brought out here.

For training "future chemists" this book is inadequate, but for students taking the course in a general way it is remarkably well adapted as it points out plainly that there is something to qualitative analysis beside color and solubility of precipitates, and the separation of the "six groups," a point entirely missed in many courses and most books. O. L. SHINN.

A Manual of Qualitative Analysis. By J. F. MCGREGORY. 133 pp. Ginn & Company. 1909. Price, \$1.00.

This differs from most books on this subject in the arrangement. Groups and group reactions are not spoken of until all of the metals and the acid radicals have been studied separately. The groups are only discussed in the line of separations and the comparisons between the different metals are not made apparent. This method of treatment appears to multiply isolated facts and add confusion to the mind of the student. The term ion and the theory of dissociation are not used, and the old term radical is retained. The use of tables or schemes for group separations is condemned but one method of separating each group is described in the text.

The author states in the introduction that the book is not designed for those who intend to become chemists, but for those who can spend but a short time on this subject. For such students it would be a satisfactory book. O. L. SHINN.

An Introduction to Chemical Analysis for Students of Medicine, Pharmacy and Dentistry. By ELBERT W. ROCKWOOD, M.D., Ph.D. Third edition, illustrated, 247 pages. Philadelphia: P. Blakiston's Son & Co. Price, cloth, \$1.50 net.

The first edition of this excellent laboratory guide was reviewed in *THIS JOURNAL*, 24, 287. This third edition contains some new matter, and is especially characterized by the attention paid to the ionic interpretation of reactions. The preparation of a satisfactory book for a special class of students who have but a limited time to devote to chemistry is not an easy problem under any conditions; in the case of a work for medical students which must be full enough to prepare for physiological chemistry the difficulty is very great. Medical courses are already badly overcrowded.

The present book does not make any undue requirement on the time