

requirements of those for whom the book is designed. It is not too voluminous for the medical and pharmaceutical student nor too foreign to his interests.

In Part 1 (about 70 pages) the author presents the fundamental facts of chemical physics. Part 2 (about 40 pages) is devoted to theoretical chemistry, followed in Part 3 (nearly 200 pages) by descriptive inorganic chemistry. The author adopts Mendelejeff's classification of the elements, at the same time retaining the distinction of metals and non-metals. Part 4 (234 pages) is occupied with descriptive organic chemistry, including vegetable and animal proximate principles. The last section of the text, Part 5 (137 pages), is devoted to physiological and clinical chemistry. The author's familiarity with the subject and good judgment in the selection of material are well illustrated in the chapter on foods and diets which contains in less than thirty pages an unusually comprehensive and yet simple presentation of the chemistry of these subjects.

It is to be regretted that the author does not insist upon numerical urinary standards. An attempt to judge of the amounts of various constituents of urine by observing the bulks formed when they are precipitated is of little real value. Such methods are not chemical analysis and have no place in a chemical text-book. Moreover, they rob the clinician of what service a real knowledge might render.

The historical lists of tests for albumin and sugar in urine, which the text records, could with advantage be replaced by descriptions of selected methods. It is the more desirable, in this instance, since these tests are so important and yet confusing to those unaccustomed to urine analysis.

An appendix of twenty pages containing various tables increases the value of the book for reference, while a glossary and complete index render its subject-matter readily available. It is not speaking too highly of Prof. Bartley's work to say that it takes first rank among text-books on medical and pharmaceutical chemistry.

E. E. SMITH.

ESSENTIALS OF MATERIA MEDICA, THERAPEUTICS, AND PRESCRIPTION WRITING. Saunders' Question-Compends, No. 7. BY HENRY MORRIS, M.D. Fifth Edition. 288 pages. Philadelphia: W. B. Saunders. Price \$1.00.

This little book belongs to a class which has become very

popular with students of medicine in the last ten years, and, like the others, it is arranged in the form of questions and answers. As a matter of necessity the information it presents is very greatly condensed, furnishing often not more than an outline of the subject. It is, therefore, in extent, just about what the student needs and uses when "cramming" for an examination. It is possible that books of this class may be legitimately used, and thus possess for the student a real value, but in general their use is to be regretted as tending to encourage superficial reading. The present book seems to be, in the main, carefully compiled, and as free from error as can be expected with such condensation. A careless statement, or mistake, is found at the bottom of page 203, however, where it is said that potassium salts convert uric acid into the more soluble urea. The accuracy of the statement on page 206, regarding the solubility of lithium urate, is also questionable. J. H. LONG.

A MANUAL OF CHEMICAL ANALYSIS; QUALITATIVE AND QUANTITATIVE.
BY G. S. NEWTH, F.I.C., F.C.S., Demonstrator in the Royal College of Science. London: Assistant Examiner in Chemistry, Science and Art Department. New York, London, and Bombay: Longmans, Green and Co. 1898. xii + 462 pp. Price, \$1.75.

To all who value the previous works by Newth, "Chemical Lecture Experiments," and his two text-books on "Inorganic Chemistry," the appearance of the present manual on analysis will certainly be most welcome. As might naturally be expected from its predecessors, the manual is replete with modern methods of manipulation, clever devices to simplify time-honored reactions, and clear, concise explanations. The fundamental processes of quantitative analysis are accompanied by a wealth of illustration, which should enable the dullest intellect to grasp the successive steps in weighing, filtering, the incineration of filters, the ignition of crucibles, etc. These features could be confidently counted upon in advance.

The plan of the work is of course open to criticism. The qualitative part, which includes a fairly generous treatment of the rarer elements, and less common acids, occupies 188 pages; gravimetric and volumetric quantitative analysis extend also over 188 pages; gas analysis covers 37 pages, ultimate organic analysis, 20 pages; and physico-chemical determinations 10