

NEW BOOKS.

AN ELEMENTARY MANUAL OF CHEMISTRY. BY FRANK H. STORER, AND WILLIAM B. LINDSAY, BEING A REVISION AND REWRITING OF PROFESSOR W. R. NICHOLS' ABRIDGMENT OF ELIOT AND STORER'S MANUAL. pp. 453. New York, Cincinnati, and Chicago: American Book Company. 1894. Price, \$1.20

This work, which as the authors aptly put it, "is the lineal descendant of the Eliot and Storer Manual and the Nichols' Elementary Manual," will be greeted by its former acquaintances with the consideration due the scion of an ancient family. To those who knew not its antecedents, may be said, "it is not written in the interest of any particular theory or of any one system of nomenclature or of notation." Starting with the physical and chemical changes familiar to every one, the air and the water—mixture and chemical compound—the elementary substances composing them are studied and with these the elements naturally grouped with them. Following these are chapters upon theory, the non-metals, the metallic elements, and the periodic law, closing with an admirable appendix upon chemical manipulation, a subject too often neglected.

Nearly one hundred pages have been added to the abridgment, largely to the theoretical and physico-chemical parts, which in the former edition were conceded to be scantily treated, although there is scarcely a chapter of the descriptive part to which important additions have not been made. The sections upon chemical calculations, atomic and molecular weights, Avogadro's law, empirical and rational formulas are clearly and concisely written and should present little difficulty to the student.

The book is peculiar in the attention paid to organic chemistry, which one hardly expects to find in a manual of this kind, nearly one fourth of the volume being devoted to this branch. The topics of flame and combustion, isomerism and the three important "series" of organic compounds are carefully explained and illustrated, closing with a chapter upon "some carbon compounds derived from plants and animals" embracing the sugars and allied bodies, the principal alkaloids and dyes and a few

pages upon physiological chemistry. Nor have the newer methods of industrial chemistry been overlooked, as for example, the Solvay process and the bi-sulphite process of paper manufacture; a brief outline of the metallurgical treatment of all the metals which are technically important, is also a valuable addition.

Some may note the brevity of the account of the action of nitric acid upon the metals, and regret the omission of the Raoult method of the determination of the molecular weight by the lowering of the freezing point, and notice some points in which the old usage has been adhered to, as for example the Chevreul explanation of the action of soap, and the symbol of arsenious oxide given as As_2O_3 .

The work, however, leaves little to be desired as a text-book of general chemistry in our higher institutions of learning and cannot fail to be of more than ordinary interest to the general reader.

A. H. G.

NOTES.

THE CHEMICAL MIDWINTER FAIR CONGRESS AT SAN FRANCISCO.

The great success of the international congress held in connection with the World's Fair at Chicago, in August, 1893, was probably the stimulating cause which led the chemists of the Pacific coast to organize a similar congress in connection with the San Francisco Midwinter Fair. The committee in charge of the congress consisted of Prof. W. B. Rising, chairman, Professors E. W. Hilgard, John M. Stillman, G. M. Richardson, A. L. Lengfeld and Messrs. W. M. Searby, Alfred Ropp, Edmond O'Neill, Harry East Miller, Theodore J. Wramplmier and E. C. Burr. The sessions of the congress were held in Golden Gate Hall, 625 Sutter street, June 7, 8 and 9, 1894.

The attendance at the meeting was most gratifying in the number of chemists, although the public, not much interested in such matters, was but sparsely represented. Unfortunately, no record was kept of those in attendance and only an estimate can be made of the total number, but this was in excess of