

iron laboratories, these are used only for the determination of constituents which occur in small quantities. The amount of silica in slags and magnesia in slags and dolomitic limestones does not accord with this statement. A difference in the atomic weight of magnesium would also affect the determination of phosphorus as magnesium pyrophosphate. The commas should be omitted from some of the tables, and if they were arranged for one gram of sample and to cover larger percentages, they would be more valuable and much simpler.

More examples should be given to illustrate the manner of using the tables. Table XL should be headed "Factor Weights," and Table XLI "Atomic Weights." The tables are undoubtedly of value, but the arrangement might be much simplified.

EDWARD K. LANDIS.

INORGANIC CHEMICAL PREPARATIONS. BY FRANK HALL THORP, PH.D.
238 pp. Boston: Ginn and Co. Price \$1.60.

In this book are found directions for the preparation of nearly one hundred compounds. Naturally enough, the salts of sodium, potassium, aluminum, ammonium, and iron receive the greater attention, but the remaining preparations are numerous and well selected, although no element is found among them.

The introductory remarks concerning solution, precipitation, filtration, evaporation, etc., are clear, full, and satisfactory, and the directions are, in most instances, all that could be desired. In some cases, however, the methods given would not furnish chemically pure substances.

Nearly all questions, that a student might ask, are anticipated and answered, while the use of equations to explain the chemistry of the methods and the incorporation in the text of numerous tables of solubility and specific gravity add not a little to the usefulness of the book.

In an appendix are placed specific gravity tables of the more common acids and ammonia, and a table showing atomic weights and valence.

The paucity of books of its kind and quality in the English language makes its appearance most welcome. L. B. HALL.

NITRO-EXPLOSIVES. BY P. GERALD SANFORD. 8vo. 270 pp. 54 Illus.
London: Crosby, Lockwood and Son. 1896. Price, 9 shillings.

The sub-title states that this book is a "Practical treatise con-