

"sand or marble dust, gypsum, slaked lime, talc, mineral pulp, potassium carbonate and glue absorbed in quick-lime." 503,425, August 15, Kidwell, J. W., non-corrodible plastic composition for building blocks, titanic materials, and asphalt. 503,336, August 15, Turbull, G. A., composition of matter for roofing; contains "gypsum, plaster of Paris, powdered salt and flowers of sulphur."

Miscellaneous.—503,583-584-585-586-587, August 22, Dupont, F. G., and P. S., smokeless explosives. 502,416-417, August 1, Groat, E., apparatus for reducing and softening bituminous rock. 503,028, August 8, Archbold, G., extracting hydrocarbons from bituminous rock; subjecting rock to sulphurous acid. 503,556-558, August 15, Solvay, E., treatment of pulverulent materials. 503,451, August 15, Case, W. E., apparatus for electrolysis of fused salts. 502,360, August 1, Holland, E. K., regenerative salt furnace. 502,642, August 1, Tatham, E., illuminating gas; contains pure oxygen and a heavy carbonaceous gas. 503,612, August 22, Meitzler, G. R., silver cleaning and polishing composition; "whiting, powdered soap bark, oil of sassafras and carmine" are claimed. 504,105, August 29, Corleis, E., and Reinsch, H., carbon rods for electric arc lamps; carbon impregnated with tungstic acid or a salt of the acid. 504,199, August 29, Cheever, J. D., preserving fibrous materials; a solution of catechu, potassium bichromate, and creosote are used. 502,867, August 8, Schüler, L., fire-proofing composition; ammonium phosphate and ammonium sulphate are given. 502,964, August 8, Habedank, C. F., composition for lithographic transfers; "water, partly neutralized nitric acid, and tannic acid." 503,801, August 22, Mills, J. E., composition for tempering; "oak ashes, water, tallow, slaked lime, salt, ground horn, and potassium cyanide."

NEW BOOKS.

REACTIONS. A SELECTION OF ORGANIC CHEMICAL PREPARATIONS IMPORTANT TO PHARMACY IN REGARD TO THEIR BEHAVIOR TO COMMONLY USED REAGENTS. BY F. A. FLÜCKIGER, PH.D., M.D. Translated, revised, and enlarged by J. B. Nagelvoort, analytical chemist to the Pharm. Chem. Laboratory of Parke, Davis & Co. Authorized English edition. Detroit, Mich., U. S. A. George A. Davis. 1893. pp. x + 154.

This work aims to give the physical properties and principal reactions of the more important organic, chemical preparations used in medicine. The book opens with a numbered list of the reagents most commonly used and their preparation, and then follow 109 pharmaceutical products alphabetically arranged, with from one to ten reactions under each. Rather more than one-half the compounds treated of are alkaloids, among which

those of opium and the cinchona bark occupy a prominent place; nearly one-third are synthetic products introduced into pharmacy within the last few years. The compounds are well selected and the various reactions are fully and minutely described. As far as the scope of the book goes, the work is excellently and accurately done, and this is especially the case with the opium and cinchona alkaloids. Very few errors mar the book, and these few are evidently typographical, as " $C_5H_2(CH_3)$ " for $C_5H_2(CH_3)_3N_4O_2$, as the formula of theobromin (p. 145); "mercurous nitrate, (Millon's reagent)," p. 25,—Millon's reagent is mercuric nitrate, and the reaction given for brucin is very different from that originally described by Flückiger with mercurous nitrate.

The book, however, would have had a more practical value if its scope had not been confined so closely to the narrow limits of identity reactions. Differential reactions are indicated only by reference, and in the case of almost two-thirds the compounds not a single differential reaction is pointed out. A synoptical table of the principal reactions studied would have greatly enhanced the value of the book. Further, it is stated in the preface that the "reactions * * * are not to be relied upon where impurities of any kind are likewise to be considered." The chemist does not, however, always meet with pure substances, and while in a few instances methods of purification and of identification in the presence of impurities are given, these might with value have been multiplied. The reagents are generally designated merely by a number ("Reagents 6, 12, 13, 14, 16, and 24 give precipitates," p. 72, etc.), referring to the table at the opening of the book; this saves space, but its advisability from a chemical standpoint is questionable.

The translator's additions are valuable and the translation is generally well made, though in a few instances obscure (cocain, last sentence), or too literal ("amorph powder," p. 39; "the slowly colored in the cold * * * fluids," p. 51). The spelling laid down in the rules of the A. A. S. is used, and the book is neatly printed on fine paper, with wide margins for notes.

J. L. H.

A GUIDE TO STEREOCHEMISTRY. ARNOLD EILOART. 96 pp. Price, \$1.00. New York. Alexander Wilson. 1893.

In this book by Dr. Eiloart the endeavor is made to summarize the mass of speculation which has been published of late concerning the stereochemistry of carbon and nitrogen compounds. Although the volume is designed to serve as a text book the author's treatment is largely confined to recent speculative work, and it gives undue prominence to insignificant and weak points. As a text book planned to give a clear idea of results more generally accepted, the classical little *Stéréochimie* of van't Hoff (new edition, 1892) is likely to be of more service. Full half of Dr. Eiloart's book is devoted to an alphabetized list of citations, and to this is appended an illustrated description of wooden models (tetrahedra) designed to represent the structural formulas of organic compounds. J. E. T.

Note on the Determination of Phosphorus.—Mr. Edward K. Landis writes to the editor as follows: "I have been using for nearly a year a ground glass funnel for phosphorus after Dudley's method and find that the paper sticks tightly to the glass, permitting the upper edge to be thoroughly washed, and thus avoiding a source of error mentioned by Dudley in 'Discrepancy in Chemical Analysis.' This may prove useful to others."

ERRATUM.

In the July number, page 385, eighteenth line from the top, "(and methyl orange)" should read "(and not methyl orange.)"