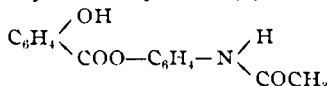


(493,241). Jakob Schmid has a blackish blue azo-dye (493,563) and a gray-black tetrazo-dye (493,564), and Jakob Schmid and Robert Gnehm patent a red azo-dye (493,583). Mr. Schmid and R. Paganini prepare mono-sulpho-dioxynaphthoic acid by heating the sodium salt of di-sulpho-beta-oxy-naphthoic acid with caustic alkalis at 200° to 260°, and precipitating the dissolved melt with hydrochloric or sulphuric acids (493,562). 489,623 is granted Fritz Bender on a "yellow-red" dye, by oxidizing the bluish-red dye stuffs derived from dialkylmeta-amido phenols. Albert Herrmann (490,408) derives a new color from tetralkyl-dianido-triphenyl carbinols, a copper red powder with metallic luster, "soluble in water, insoluble in alcohol and benzine, dyeing wool and silk in acid bath very uniform blue shades." Professor Peter T. Austen incorporates an alkaline nitrate with logwood extract, producing thereby a friable solid, soluble in cold, and very soluble in hot water (491,972). He uses a similar method in preparing a solid coloring matter from fustic (492,368), and to cure logwood chips, adds a solution of a nitrite (494,237).

Organic Compounds.—Joseph Berlinerblau (489,728) prepares para-phenetol carbamide by treating para-phenetidin or para-anisidin with phosgene, adding ammonia to the products, and crystallizing out the resulting compound. R. P. Pictet (489,552) purifies commercial chloroform by cooling to 80°-82°, filtering the cold mass, crystallizing the chloroform, separating the non-crystallizable part, and finally distilling the chloroform at a very low temperature, and collecting the middle products. An antiseptic and antineuralgic compound, derived from salicylic acid, is patented by Herman Janssen (492,868). It has the formula



NEW BOOKS.

LECTURE NOTES ON THEORETICAL CHEMISTRY. BY FERDINAND G. WIECHMANN, PH.D., INSTRUCTOR IN CHEMICAL PHYSICS AND CHEMICAL PHILOSOPHY, SCHOOL OF MINES, COLUMBIA COLLEGE. New York: John Wiley & Sons. 12mo cloth. Price, \$2.50.

A handy little volume of 225 pages, nicely put up both in type and paper, and intended to aid those entering upon a study of theoretical chemistry, more particularly those attending lectures on this topic.

The book differs in many respects from others dealing with the same subject. It does not pretend to philosophically survey and critically sift the existing theories in chemistry; it does

not address chemists who have been actively working for years, and who, perhaps, have arrived at distinct ideas of their own about the value of this or that theory in regard to the observed regularities and constants in chemical action. It addresses college students, accompanying them during the very time of their laboratory work. This is evident from the fact that the first eight chapters are almost exclusively explanatory of methods employed in the laboratory for making certain determinations such as specific gravity of solids, liquids, and gases, or explanatory of terms used in chemistry. The American spelling and pronunciation of chemical terms as adopted by the American Association for the Advancement of Science in 1891 has been fully reproduced at the end of the third chapter, which begins with the oldest chemical terms and gives the notation of the alchemists.

Chapters treating on valency, on the writing of chemical equations, and a very perfect description of chemical calculations, illustrated by numerous examples, follow.

It seems to us desirable that the sixth chapter, which devotes but half a page to "isomerism" and three pages and a half to "stereochemistry," should be elaborated more fully in the next edition.

The ninth chapter treats of the periodic law, and this as well as the following chapters down to the end, formed by chapter 14 on electro-chemistry, include in a very small space a great deal of matter important to the understanding of the outlines of theoretical chemistry.

The methods of measuring osmotic pressure are indicated, but not as perfectly treated as the methods treated in the earlier chapters dealing with specific gravity and vapor density, evidently for the reason that students are not called upon to practically perform these determinations, which lie beyond the range of practical college laboratory work.

The chapters on thermo-chemistry and electro-chemistry are concise and abound in practical data.

As a sign of honest work and at the same time a welcome help to the student we find at the end of the book ten pages of bibliography. An alphabetically arranged index of subjects as well as of names cited finishes the volume.