

There is a good index, but the omission of references to original articles is a serious defect.

F. H. THORP.

THE DYEING OF WOOLLEN FABRICS. BY FRANKLIN BEECH. London: Scott, Greenwood & Co. New York: D. Van Nostrand Co. 1902. viii + 223 pp. Price, \$3.50 net.

In the author's words the book is intended "to supply the dyer of woollen fabrics with a conveniently arranged handbook." Being designed for the use of practical dyers, it is liberally supplied with recipes applicable to special cases; these directions are frequently brief but sufficiently full to be understood by any one acquainted with the work of the dye-house. All reference to the composition and properties of the various dyes, mordants, etc., has been omitted as foreign to the purpose of the book. Chapter IV on the principles and practice of wool dyeing, the most important section of the book, contains a lucid account of the various methods of dyeing woolens, though written somewhat after the cook-book style; the chapters on the dyeing of union fabrics, and of gloria, also contain much valuable information; the numerous recipes comprise, altogether, nearly 80 pages of the book. The teacher of textile coloring may also gain some useful hints from a perusal of these pages.

Typographic errors are few, but on page 4 we find *photoplasmic* and also an obscure sentence concerning the amount of curl in wool; on page 27 appears *covered* for recovered; the cut on page 55 is inverted.

The style is simple and clear and the absence of theoretical discussions will cause the book to find favor with many to whom such material has little attraction.

F. H. THORP.

PRINCIPLES OF DYEING. BY G. S. FRAPS, PH.D. New York: The Macmillan Co. 12mo. 270 pp. Price, \$1.60.

This little book sets out to give a systematic presentation of the principles underlying the art of dyeing, illustrated and emphasized by laboratory exercises. The plan of study is to take one or two typical members of each of five main classes of colors and study them with reference to their action toward the different fibers. The groups of textile fibers are next taken up and their physical and chemical characters and behavior under differing conditions noted. The operations of bleaching, scouring and dyeing are then explained in their main outlines. The groups of dye

colors are then discussed in somewhat fuller detail and the methods of dye-mixing and dye-testing described.

This plan has, in our opinion, been carried out with a notable measure of success and we believe the book would be well adapted to the use of students in dyeing classes as well as for dyers who wish to learn more of the theory underlying the art that they have learned in the dye-house. Prior to the appearance of this book, the best little book covering this ground was Hummel's "Dyeing of Textile Fabrics," but this book we believe to be the better of the two for the purpose it has in view. We can, therefore, recommend it quite cheerfully as worthy of an endorsement, and believe that it will find acceptance at the hands of those looking for a convenient manual on this subject.

S. P. SADTLER.

SEALING-WAXES, WAFERS, AND OTHER ADHESIVES. BY H. C. STANDAGE.  
London: Scott, Greenwood & Co. 1902. 95 pp. Price, \$2.50 net.

The first thing that strikes one in looking at this book is that two dollars and a half is a large sum to pay for a book of about 20,000 words, equal to about one-third of one of the monthly numbers of this Journal, made up, apparently, of recipes culled from the technical papers. Half of the book is devoted to sealing-waxes. There is a short but clear and intelligible description of this process, a brief account of materials used, and a large number of formulas, all of which are probably practical, and useful to the amateur. But the amateur is not likely to make a very fine article, and probably almost any formula is good enough for him, while the professional will always work out his own. Four pages are given to an interesting account of wafers. The rest of the book is on cements and pastes. The statement is made that "gelatine differs from glue in its chemical nature, but in physical characteristics is very similar"; also "this fact" (the insolubility of glue in oil) "has not been made full use of, as, for example, in the preparation of a glue compound that could be used as a paint for coating the inside or outside of barrels containing such volatile fluids as benzene, etc." I had supposed that every manufacturer in the world used glue to line the barrels for benzine, turpentine, oil, varnish, etc., and I still think so. "Flour, as a material for producing adhesives, depends on the gluten it contains." No doubt gluten is useful, but flour also contains starch, which has some repute as an adhesive, and starch is nowhere mentioned in the