

29 on page 223 is evidently a misprint, and the paragraph is somewhat obscure. The typography and general make-up of the book is good. The literature of tanning has long needed such a work as this.

The importance of technical education for tanners is now generally recognized, and the appearance of this work by one who is an acknowledged authority and leader in this educational movement, will doubtless further elevate the technical school in the estimation of successful tanners.

F. H. THORP.

THE PRAXIS OF URINARY ANALYSIS. A GUIDE TO THE CHEMICAL ANALYSIS OF URINE. BY DR. LASSAR-COHN. Authorized English translation by DR. H. W. F. LORENZ. New York : John Wiley and Sons. 1903. 58 pp. Price, \$1.00.

This little book is printed on very heavy paper, almost cardboard thickness, and heavily leaded to increase apparent size. It contains a few of the simplest qualitative reactions employed by physicians in the analysis of urine and directions for three quantitative determinations. These are so meager, however, that they are of no practical use. In addition to the urine tests, a few pages are devoted to the analysis of stomach contents. The amount of practical information contained in the book is so small that it can not be recommended to students or practitioners of medicine. The English of the translation is not always good.

J. H. LONG.

A TEXT-BOOK OF VOLUMETRIC ANALYSIS. With special reference to the volumetric processes of the pharmacopoeia of the United States. Designed for the use of pharmacists and pharmaceutical students. BY HENRY W. SCHIMPF, PH.G., M.D. New York : John Wiley and Sons. 1893. Fourth edition. 60 figures. 12mo. xxiii + 553 pp. Cloth. Price, \$2.50.

As the title suggests, this work is intended exclusively for the use of pharmacists, and its appearance in a fourth edition gives evidence that it meets a need of those for whom it is written to a greater degree, in some respects, at least, than any other available book. Its merit lies chiefly in the variety of methods offered, a direction in which most texts on the subject are deficient.

It is a collection of receipts for volumetric analysis and is almost wholly lacking in explanatory matter or in any exposition of the

reasons for doing things in one way rather than in another. The few explanations given are often inaccurate or positively incorrect. As an instance of this, the statement is made (p. 183) that sulphurous acid must be diluted to 0.04 per cent. before titrating it, "for if it is not sufficiently diluted there is risk of the sulphuric acid formed, being again reduced to sulphurous, with liberation of iodine, thus causing irregular results." This explanation has, of course, been exploded long ago. If true, it would mean that sulphuric acid of a dilution corresponding to 0.04 per cent. of sulphurous acid has an oxidizing action on potassium iodide and is reduced by it, a state of things which every chemist knows does not exist.

The directions are not always couched in the clear and pure English that one may properly expect to find in a text intended for student use; witness the following sentence taken at random from page 478. "Warm the mixture . . . and add . . . iodine solution from a burette until the brown color of the iodine solution is no longer decolorized and the mixture in the flask assumes a permanent, brownish yellow color, and upon shaking deposits a red-colored precipitate if much carbolic acid is present." Comment is unnecessary.

On the same page, the name of the well-known chemist Vortmann appears as "Wortmann," and the source of a paper which was published in the *Berichte* is given as "Pharm. Zeit. f. Russland." Perhaps it was Russian influence that changed the *V* to a *W*!

The method of titrating iodides by a mercuric chloride solution, due to Personne, is described without a word regarding the precautions which must be observed to obtain even tolerably correct results. The book shows throughout, with the exception of Chapter LXII relating to the determination of alkaloids, abundant evidence of being a compilation from other text-books rather than from original sources. The illustrations leave something to be desired, both as to execution and design. It seems to the reviewer scarcely necessary to introduce a cut of a liter-flask, unless some point regarding the model, etc., is to be elucidated. The picture of a liter-flask in the text bears the inscription "14.° R."!

LAUNCELOT W. ANDREWS.