One chapter is devoted to "Soap Machinery," and another to the "Technology of Soap-Making." This subject, always difficult to treat in a manual, gives the novice a clear view of the principles and practice of soap-making.

In the analysis of soap the author shows himself to be entirely at home, writing from his own experience. Indeed, a single brief chapter of more use to the soap chemist can hardly be found anywhere. The practice of calculating the alkali combined with fatty acid as Na or K instead of the time-worn Na₂O and K_2O , is to be commended; for, besides being the modern and rational view of the composition of alkaline salts, it allows the fatty acid to be entered in the analysis as such, instead of as hypothetical anhydride, the total, on footing up the analysis, being only a trifle over 100, due to the acid hydrogen of the fatty acid.

A very brief chapter is given to the recovery of glycerine from lyes, and an appendix is added with the common specific gravity and hydrometer tables.

E. TWITCHELL.

BOOKS RECEIVED.

Some Notes on Chemical Jurisprudence. A digest of patent-law cases involving cases. By Harwood Huntington, 260 West Broadway, New York City. Price, 25 cents.

Outlines of Industrial Chemistry. A text-book for students. By Frank Hall Thorp, Ph.D. New York: The Macmillan Co. 1898. xx+541 pp. Price, \$3.50.

Preliminary Report of an Investigation of Rivers and Deep Ground Waters of Ohio as Sources of Public Water Supplies, by the State Board of Health, 1897-1898. Cleveland, Ohio. 1898. 259 pp. with maps.

A Report of Progress of Investigations in the Chemistry of Wheat. By G. L. Teller. Bulletin No. 53. Arkansas Agricultural Experiment Station, Fayetteville, Ark. September, 1898. 30 pp.

Report on the Investigations into the Purification of the Ohio River Water at Louisville, Kentucky, made to the President and Directors of the Louisville Water Company. By George W. Fuller. New York: D. Van Nostrand Company. 1898. 4to. vii+461 pp. Price, \$10.00.

Digest of Criticisms on the United States Pharmacopoeia: Seventh December 31, 1897. viii+146 pp. Published by the Committee of Revision and Publication of the Pharmacopoeia of the United States (1890-1900).

Chemische Technologie an den Universitäten und technischen Hochschulen Deutschlands. Von Dr. Ferdinand Fischer, Professor an der Universität Göttingen. Braunschweig: Friedrich Viewig und Sohn. vi+54 pp. Price, M 1.25.

Report of the Secretary of Agriculture. 1898. Washington: Government Printing Office. 1898. 60 pp.