

Redwood, or Engler viscosimeter should be employed, rather than a pipette which is no longer much used.

In the matter of references the volume leaves something to be desired, many of the later being omitted, especially in connection with the iodine value. No mention could be found of the heat of bromination test for oils although the valueless sulphur chloride test is given; nor of Halphen's test for cotton-seed oil, one of the most reliable.

There are, too, certain errors of proof-reading and statement which are not in accord with the usual ideas; for example the use of 5.0 instead of 50.0 grams of oil (p 22) for the Maumené test; and in the tables the specific temperature reaction of Gill and Hatch does not refer to the Maumené test but to the heat of bromination test as will be seen from their article.<sup>1</sup> On p. 52. "All good cylinder oils are a mixture of fatty acids and mineral oils;" the cylinder oil should not contain free fatty acids, as most railroad specifications require "acidless animal oil." "Most blown oils are a mixture of fatty acid and mineral oils," being all that is stated about "blown oils," implies that mineral oil is a normal constituent instead of an occasional adulterant.

The tables, however, make the book very valuable and it will doubtless be found very useful to the trade and profession.

AUGUSTUS H. GILL.

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### BOOKS RECEIVED.

The Oil-Chemists' Handbook. By Erastus Hopkins, A.M., B.Sc. New York: John Wiley & Sons. 1900. viii + 72 pp. Price, \$3.00.

The Elements of Inorganic Chemistry, for Use in Schools and Colleges. By W. A. Shenstone, F.R.S. London: Edward Arnold. 1900. xii + 506 pp. Price, 4s., 6d.

Experimental Chemistry. By Lyman C. Newell, Ph.D. Boston: D. C. Heath & Co. 1900. xv + 410 pp.

Fruit Diseases and How to Treat Them. Bulletin No. 66. West Virginia Agricultural Experiment Station, Morgantown, W. Va. 38 pp.

Air, Water, and Food, from a Sanitary Standpoint. By Ellen H. Richards and Alpheus G. Woodman, Instructors in Sanitary Chemistry in Massachusetts Institute of Technology. New York: John Wiley & Sons; London: Chapman & Hall. 1900. 225 pp. Price, \$2.00.

The Volatile Oils. By E. Gildemeister and Fr. Hoffmann. Translated

<sup>1</sup> This Journal, 21, 27.

by Edward Kremers. viii + 733 pp. Four maps and numerous illustrations. 1900. Milwaukee: Pharmaceutical Review Publishing Co. Price, \$5.00 net.

The Wellcome Chemical Research Laboratories, Established 1896. By Frederick B. Power, Ph.D., Director, 6 King St., Snow Hill, London, E. C. 18 pp.

The Question of Temperature-Influence on the Specific Rotation of Sucrose. By Ferdinand G. Wiechmann, Ph.D. 1900. 37 pp.

Nutrition Investigations at the California Agricultural Experiment Station, 1896-1898. By M. E. Jaffa, M.S. Bulletin No. 84. U. S. Department of Agriculture, Washington, D. C. 39 pp.

A Report of Investigations on the Digestibility and Nutritive Value of Bread. By Chas. D. Woods and L. H. Merrill, Maie Agricultural Experiment Station. Bulletin No. 85. U. S. Department of Agriculture, Washington, D. C. 1900. 51 pp.

Commercial Fertilizers. By H. A. Huston, State Chemist, Purdue University, Lafayette, Ind. Special Bulletin. August, 1900. 24 pp. Published by the author.

Elements of Mineralogy, Crystallography, and Blowpipe Analysis, from a Practical Standpoint, including a description of all common or useful minerals, the tests necessary for their identification, the recognition and measurement of their crystals, and a concise statement of their uses in the arts. By Alfred J. Moses, E.M., Ph.D., Professor of Mineralogy, Columbia University, and Charles Lathrop Parsons, B.S., Professor of General and Analytical Chemistry, New Hampshire College. New enlarged edition. viii + 414 pp., with 664 figures. New York: D. Van Nostrand Co. 1900. Price, \$2.00.

The Elements of Physics for Use in High Schools. By Henry Crew, Ph.D., Professor of Physics in Northwestern University. Second Edition, revised. New York: The Macmillan Co. 1900. xvi + 353 pp. Price, \$1.10.

The Laramie Cement Plaster. By E. E. Slosson and R. B. Mondy. Published as part of the Tenth Annual Report of the Wyoming College of Agriculture and Mechaucis. Laramie, Wy. 1900. 18 pp.

Alkali Studies, V. By B. C. Buffum and E. E. Slosson. Published as part of the Tenth Annual Report of the Wyoming Experiment Station. Laramie, Wy. July, 1900.

Medical Legislation. Gov. Thomas' Veto of the Colorado Medical Bill. The Love Medical Bill of Ohio. Medical Ethics. Medical Talk Publishing Co., Columbus, Ohio. 16 pp. Price, 5 cents.

Bulletin No. 88. Commercial Fertilizers. August, 1900. 50 pp. Bulletin No. 89. Wheat. September, 1900. 24 pp. Kentucky Agricultural Experiment Station of the State College of Kentucky.