and saline residues are very thoroughly discussed; then volcanic gases and sublimates and the molten magma are well considered. After this, rock-forming minerals, igneous rocks, sedimentary and detrital rocks and metamorphic rocks are well treated. An interesting discussion of metallic ores covering 77 pages follows, and finally comes a treatment of the natural hydrocarbons and coal.

The preparation of the work must have cost the author a great amount of painstaking labor, and much knowledge and ability have been displayed in the discussions which it contains.

H. L. Wells.

Report of the Eleventh Annual Convention of the Association of State and National Food and Dairy Departments. Jamestown Meeting, July, 1907. New York: John Wiley & Sons. 1908. 8vo. vii+416 pp. Cloth, \$3.00.

Besides the minutes of various sessions held, and a considerable number of routine reports of committees, this volume contains over thirty papers and addresses on topics related to food. While a few of these articles are of very indifferent merit, the majority of them possess interest for chemists and others who have anything to do with questions relating to the inspection and sale of food products.

The problem of food preservatives is touched upon in several of the contributions, and in view of the present agitation of that question, these papers will be read with profit. Other interesting papers are by A. L. Winton on "Diabetic Flours," E. F. Ladd on the "Bleaching of Flour," and William Frear on "Spice Standards."

J. H. Long.

RECENT PUBLICATIONS.

BECKMAN, E.: Das Laboratorium für angewandte Chemie der Universität Leipzig in seiner neuen Gestaltung. Leipzig: Guelle & Meyer. M. 2.50.

Berichte des Verbandes der Laboratoriums Vorstände an deutschen Hochschulen. 9 Heft. Leipzig: Veit & Co. M. 2.

Bericht über die Tätigkeit des chemischen Untersuchungsamtes der Stadt Ulm a. D. im Jahre 1907. Von Hofrat Dr. Wacker-Ulm a. D. 1908. 23 S. 8°.

BIGELOW, WILLARD DILL: Food Legislation during the Year ended June 30, 1907. Wash., D. C. (Office of the Superintendent of Documents.) 1908. 2 pts., 8° (U. S. Dept. of Agriculture, Bureau of Chemistry, bulletin) pap. (Address Supt. of Documents for price.)

Bothas, Dr. Ludwig, Regierungsbaumeister a. D., St. Petersburg: Massen-Distillation von Wasser, insbesondere zur Erzeugung von Trinkwasser und Lokomotivespeisewasser. Mit. 8 Abb. Berlin, Verlag von Julius Springer. 1908. 53 S. 8°. M. 2.

BROCHET, A.: Manuel practique de Galvanoplastie et de dépots électro-chemiques (Encyclopédie industrielle). Paris: J. B. Bailliers & Fils. 1908. Frs. 5.

BRUCE, EDWIN C.: Detection of Common Food Adulterants. N. Y.: D. Van Nostrand Co. 1907. 184 pp. \$1.25 net.

COLLETT, HAROLD: Water Softening and Purification of Hard and Dirty Waters. 2d ed., rev. N. Y.: Spon & Chamberlain, 1908, 177 pp., ill. 12°. Cl., \$2.00.