

Full attention is given in the revised work to many comparatively modern problems and processes such, for example, as the "cementing value" of soils and to the practical carrying out of the cementation tests; also to the increased use of the centrifugal machine in accelerating sedimentation, with a description of the most approved forms of machine. The importance of soil acidity in its influence on crop-producing power is also discussed, as well as the quantity and determination of phosphoric acid in soil waters. These are but a few of the newer topics treated.

The wonder is, however, not so much at the newer processes that have replaced the old during this twelve-year period between the two editions, but rather at the large number of old standard methods that have remained practically unchanged and are still in vogue.

The mechanical make-up of the revised work is much more convenient than the old, especially the feature of references by foot-note on the same page, rather than by being obliged to refer to the ends of chapters for authorities, etc.

ALBERT E. LEACH.

THIRD TREATISE ON THE EFFECTS OF BORAX AND BORIC ACID ON THE HUMAN SYSTEM. BY DR. OSCAR LIEBREICH. Translated from the German. London, 1906. J. and A. Churchill. Philadelphia: P. Blakiston's Son & Co. 70 pages, paper, \$1.75.

This pamphlet, as the title page explains, is called a "Critical Review of the Report of Dr. H. W. Wiley, Chief of the Bureau of Chemistry of the U. S. Department of Agriculture, to the Secretary of Agriculture," and is intended to throw doubt on the value of the experiments on the use of borax and boric acid as food preservatives, carried out some three years ago by the Department of Agriculture.

The author of the pamphlet has himself written several papers in which he defends the use of the borax preservatives, and his attitude in the present publication is distinctly hostile. The translation is said to have been made in the interests of the commercial concerns exploiting the use of borax and for this reason loses some of the value it might otherwise possess. It is possible that the translator is responsible for the peculiar arrangement and wording of the table of contents.

J. H. LONG.

NITRO-EXPLOSIVES: A PRACTICAL TREATISE CONCERNING THE PROPERTIES, MANUFACTURE AND ANALYSIS OF NITRATED SUBSTANCES, INCLUDING THE FULMINATES, SMOKELESS POWDERS AND CELLULOID. BY P. GERALD SANFORD, F. I. C., F. C. S. 2nd Ed. Revised and Enlarged. D. Van Nostrand Co. New York. Price, \$4.00 net.

This is a revised and large edition of a work which is well known by all workers in the explosives industries. Not only has the work been revised and enlarged, but it has also been considerably improved. The older edition was becoming out of date on account of the rapid developments in explosives. In the new edition the subject has been brought