

briefly but no allusion is made to the part which the United States have played in the development of this industry, nor do the names of Cowles or Hall appear in the text.

The second volume will treat of the chief chemical industries other than those referred to.

A. A. BRENNEMAN.

LABORATORY EXPERIMENTS IN GENERAL CHEMISTRY. BY CHARLES R. SANGER, A.M., PH.D. Paper. St. Louis. Published by the Author. 1896.

EXPERIMENTS IN GENERAL CHEMISTRY AND QUALITATIVE ANALYSIS. BY CHARLES R. SANGER, A.M., PH.D. Paper. St. Louis. Published by the Author. 1896.

These two little books by Professor Sanger contain well selected collections of experiments for beginners in chemistry. The first collection was prepared for students in a general college course, while the second collection appears to have been arranged for students beginning a medical course. In the first collection for college students there is evidence that the author had in mind the needs of those who spend but part of a year in the laboratory. What the student is told to do is clearly indicated and his attention is directed at every step to the important points in the reactions considered. The experimental course offered to medical students is not as extended as the present writer would like to see, but is as full as this class of students is supposed to need, and has, besides, the advantage of systematic arrangement.

J. H. LONG.

BOOKS RECEIVED.

Eighth Annual Report of the Kentucky Agricultural Experiment Station of the State College of Kentucky, for the year 1895. Lexington, Ky. lxvi, 150 pp.

North Carolina Weather during the Year 1895. North Carolina Agricultural Experiment Station, Raleigh, N. C. lii, 264 pp.

Bulletin No. 122. Cost of Nitrogen, Phosphoric Acid and Potash. Proper Use of Tables of Analysis of Fertilizers. Connecticut Agricultural Experiment Station, New Haven, Conn. 16 pp.

Reduction of Nitrates by Bacteria and Consequent Loss of Nitrogen. By Ellen H. Richards and George William Rolfe. 20 pp. Reprinted from the *Technology Quarterly*, Vol. IX, No. 1, March, 1896.

Nitro-Explosives. A Practical Treatise. By P. Gerald Sanford, F. I. C.,