

**Kolloides Silber und die Photohaloide.** CAREY LEA, translated by H. LUPPO-CRAMER. Dresden: T. Steinkopff. 1908. 147 pp.

This pamphlet is a collection of Carey Lea's papers on photochemistry which were printed in various English and American journals between 1887 and 1891. These pioneer investigations dealt with the red and purple silver halides, with the nature of the latent image, and allotropic (colloidal) forms of silver; and the translator has done a real service to photochemistry in bringing them together. No mention of the translator's own important contributions to the subject is made, except in a brief preface in which he states that he has carried Lea's work to the conclusion that the photo-halides are adsorption compounds of silver and silver halides.

L. DERR.

**Sewage and Sewage Bacteriology.** By DR. S. RIDEAL. Third Edition. New York: John Wiley and Sons. London: The Sanitary Publishing Co., Ltd. 1906. pp. 367. Cloth, \$4.00.

The first edition of this book was published in 1900, and its decided merits were immediately recognized, as was shown by a second edition being published in less than twelve months, and this was followed by a third edition issued in 1907. The value of the book lies not in its being a careful summary of the subject, or in its systematic arrangement, in which respect the book is woefully deficient, but because it gives to the student of sewage disposal a mine of valuable information regarding sewage bacteria and the changes produced by the agency of bacteria on the organic matter contained in sewage. The third edition follows the same general lines as the first edition, and the same criticism holds true, that for subject matter it is perhaps the most valuable of all the books on the subject which have appeared during the past ten years, but as regards the arrangement and subject classification of this matter, very little can be said. In the opinion of the reviewer the two best chapters, only very slightly changed from the first edition, are the ones entitled "Bacteria and Other Organisms in Sewage" and "Chemical Changes Produced by Bacteria." These two chapters give a better insight into the underlying principles of bacterial purification than is contained in any other book on the subject. The chapters on "Chemical Analyses of Sewage and Effluents," "Irrigation and Sewage Farms," and on "Chemical Precipitation" are essentially the same as in the first edition. The three chapters on "Bacterial Purification," though giving valuable facts and data, fail to give a clear idea of the development of the various processes, intermittent filtration, septic tank treatment, contact beds, and continuous filtration, and, to an American reader, very little space seems to be devoted to the work that has been done in this country. From a practical point of view the chapter on "Distribution and Distributors" is perhaps the most valuable, giving as it does a very good idea of the