and the vast majority of sewage- and water-chemists engaged in practical work are not competent to do it. The German and English school has long recognized the extreme importance of plankton in the process of self-purification, and the valuable deductions to be drawn from qualitative and quantitative plankton analyses. It must be acknowledged, however, that an investigation, such as the one carried on by Messrs. Weston and Turner, as far as practical application is concerned, is mainly of local inter-

est. Hardly ever are there two conditions which would be alike with reference to volume and character of sewage as well as flow and biology of receiving stream. A great many factors enter into such an investigation which make it very difficult to apply the results obtained in one locality to another. Many more such investigations should be made in various localities, and the one discussed here may well serve as guide.

Arthur Lederer.

Food Poisoning. By Edwin Oakes Jordan. *The University of Chicago Press, 1917. Pp. 107, illus. 10. Price, \$1.00.*

The author, a bacteriologist of note, has, naturally, discussed the subject from the bacteriological viewpoint, nearly all the detailed treatments being of that nature. The extent of food poisoning is but little known, and the author states that it may be responsible for certain of the degenerative diseases. He subscribed to a press clipping bureau for two years and obtained records of 1,032 cases, of which 657 were groups and 375 were individual. In all, 5,238 individuals were involved. The analysis of these reports is tabulated. The validity of this method of collecting statistics may be questioned, particularly in view of the statement on page 8 that the National Cannery Association during 1916 investigated fifty-one of these "libels on the industry" and found the alleged poisoning could not be traced to canned goods, as reported.

Anaphylaxis is described in an interesting manner and a number of examples, particularly those relating to egg poisoning, are given. Poisonous plants (conium, cicuta, mushrooms), poisonous fish and poisonous minerals are briefly discussed and food antiseptics more extensively discussed, giving a review of the celebrated benzoate controversy. The author cites the possibility of the high death-rate from degenerative diseases of the kidneys, blood

vessels and other organs being in part caused by the irritating qualities of these "chemical" preservatives.

Food poisoning by pathogenic bacteria is described in some detail. Typhoid infection by carrier and otherwise, asiatic cholera infection, paratyphoid infection and infection by *enteritidis*, including many examples, are given, as well as a discussion of the relation between the two latter forms of infection. The author also cites the means of avoiding these various infections.

A short chapter upon animal parasites is followed by a longer one on poisonous products formed in food, in which botulism and its bacteriology is discussed. Regarding decomposed foods in general the author thinks that there is lack of evidence as to their dangerous qualities and cites cheese, sour milk, ripened meat and Chinese "eggs" as examples of such food consumed with impunity. The book closes with a short chapter on poisoning of obscurer unknown causes, deficiency diseases and a summary of foodstuffs most liable to cause infection or sickness.

The book is written in good English in an entertaining and concise manner.

Hermann C. Lythgoe.

Standard Methods for the Analysis of Water and Sewage. *Third Edition. 1917. Thoroughly revised. Obsolete methods dropped. Many new methods added. Send \$1.25 to American Public Health Association, 126 Massachusetts Ave., Boston.*