Production of a considerable quantity of acid in litmus-whey.
Production of acid and gas in glucose and lactose media.
No fermentation of starch or saccharose.
A positive neutral red reaction.

The perplexing question of atypical forms is dealt with and the position taken that these are less and less significant as they depart from the normal type, and in quantitive work should be so weighted in the final estimation of the water.

In the chapter on the Eberth group a most excellent summary of our knowledge of the typhoid and dysentery bacilli is given, special attention being devoted to the question of the viability of the typhoid organisms.

The chapter on "Other Intestinal Bacteria" takes up the streptococcus group, *B. enteritidis sporogenes* and the cholera and other vibrios in the same thorough manner.

A chapter on "The Content of Various Waters in Regard to the Presence of *B. coli*, *B. enteritidis sporogenes and streptococci*" is followed by two chapters on "Bacterial Indicators of Pollution" and one on "Interpretation of Results." To the reviewer's mind these chapters are the best part of the book and constitute the most satisfactory discussion of these perplexing questions extant, and will place water bacteriology upon a firmer scientific basis than it has heretofore enjoyed. The conclusions are so thoroughly reasoned out that any attempt to abstract them in a review would be futile. Great reliance is placed upon *B. coli* properly determined, and less upon streptococci and *B. sporogenes*.

Part II, about one-third of the book, is devoted to laboratory methods. It contains among other things a valuable chapter on the typhoid organisms, giving descriptions of the best methods which have been proposed for the detection of this bacillus.

An appendix gives in summary the procedure recommended for the bacteriological examination of a water, and methods of preparing the ordinary standard solutions and media. An extensive bibliography completes the work. It is apparently an oversight that, in the bibliography, which is quite rich in American citation, Prescott and Winslow's "Water Bacteriology" is not mentioned. EARLE B. PHELPS.

SOLUBILITIES OF INORGANIC AND ORGANIC SUBSTANCES. A Handbook of the most reliable quantitative solubility determinations. Recalculated and compiled by ATHERTON SEIDELL. 8 vo. X + 367 pages. D. Van Nostrand Company, New York, 1907. Price $3.00 net.

This handbook of solubilities should find a place in every laboratory and chemical library, for it contains in one volume the solubilities of both organic and inorganic substances, not alone in water, but also in the other common solvents, and, in many cases in salt or other solutions as well. In including organic substances it is a distinct improvement

upon Comey's "Dictionary", which excluded the solubilities of metallic salts of even the common organic acids.

The author has not only collected his material from the original sources, but, after recalculating the various determinations to a common basis and plotting the curves of the results, has selected the most reliable values, when the data at hand are not too discordant. This feature, for the average chemist, is of particular importance, especially as from the complete references given the investigator may calculate, if he desires a value for himself, or compare the actual experimental results.

Naturally, as the author states, it is impossible to make such tables complete, for solubility determinations are often incidental to other investigations and thus are not included in the titles. What the author has done is to examine the indices and tables of contents of twenty-five of the chemical journals issued since 1875, and to consult all articles in these, as well as in other journals to which references were made. The tables are arranged alphabetically, but there is also an index with cross references, so that the subject matter, which is brought up to November, 1906, is instantly available. Certainly the chemical public owes a debt of gratitude to Dr. Seidell for his painstaking work.

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