

maker." The work is essentially a resumé of a series of articles which appeared in the *International Sugar Journal*.

Introductory remarks on the meaning of chemical control, on the role of the chemist in the sugar industry, and on chemical control without a chemist, are followed by a detailed discussion of the practical methods of the chemist, and of simple methods of chemical control.

The author clearly outlines and explains the value of a chemist's service on a plantation; to use his own words: "the chemist's duty is to acquire knowledge in the laboratory in order that he may advise in the factory. 'Nigger-driving requires no technical skill, and may be better performed by others.'" And again, in speaking of the importance and need of soil-analysis, etc., Heriot says: "The delicate balance of the chemist is less liable to err than the planter's judgment."

The book is primarily intended for use in tropical and sub-tropical countries and preference is expressed for Brix hydrometers graduated at "a mean tropical temperature of 84° F." It is therefore rather surprising that no reference is made to the important influence of temperature conditions in the graduation and control of polariscopes, a matter so fully discussed within recent years by the International Commission for Uniform Methods of Sugar Analysis.

It would also have been well to have mentioned (p. 57), that the normal weight of sucrose there cited, 26.048 grams, must be dissolved up to 100 *Mohr* cubic centimeters, even if the author should deem it best to make no reference to the equivalent sucrose solution—the normal sucrose solution now in general use, prepared by dissolving 26.000 grams of sucrose up to 100 metric cubic centimeters.

The meaning of the term "Non-chemical sugar" (p. 72) is unknown to the reviewer; if it be intended as an equivalent for "Organic non-sugars," the term is certainly open to criticism.

The chapter in the optical test is exceptionally well written, the author has certainly succeeded in giving a most lucid popular exposition of polarized light and of the polariscope. In fact the style of the book is good throughout—clear and concise, and the volume should certainly appeal to the practical man, to "the practical sugar man," for whom it is, in the first place, intended.

F. G. WEICHMANN.

THE VALUE OF PURE WATER, GEORGE C. WHIPPLE, JOHN WILEY & SONS, PRICE \$1.00.

This book is a timely contribution to the ethics as well as the economics of municipal undertakings. Responsibility for dangerous sanitary conditions is fast being placed where it belongs—upon that portion of the community which knows the remedy whether it be legal or educational.

This little book with its clear and convincing statement, its suggestive statistics, its rating of the financial value of human life should be in the

hands of every town official, in every public library, in every school library, in short, should be within the reach of every intelligent voter. The tone of the book is strictly scientific in that it claims not to be infallible but only to point in the right direction, which is, that the introduction of clean and safe water has benefited every community financially, sometimes far above the cost of the plant. Also, that there may be a money value in the esthetic appreciation of the appearance of the water supply apart from its safety; both together being quite sufficient to warrant the extra cost of filtration. It is therefore of the utmost importance that the average citizen should have the means of forming his own judgment on such municipal expenditures. This little book gives him in direct, untechnical language just what he needs.

The definitions of terms applied to water and the statements in regard to hard water and its effects are alone worth the price of the book.

ELLEN H. RICHARDS.

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