

scriber. This omission, it seems to us, is the most serious defect in this part of the book, if we assume that the statements have all been confirmed. Without such confirmation, it would hardly be safe to trust to the accuracy of statements taken from the current journals.

The author has quoted freely from Watts' Dictionary as revised by Muir and Morley, Allen's Commercial Organic Analysis, and other standard authorities.

Part II consists of a list of 325 complete prescriptions, written so as to include almost the whole range of the substances mentioned in Part I, in different combinations, with critical and explanatory notes upon each one. This part of the book, we believe, is almost entirely original, and bears evidence of great care, and many of the comments are based upon a trial of the prescriptions in hand. These prescriptions and notes are supplemented by an excellent reference index, by means of which it is possible to refer to prescriptions containing any of the drugs mentioned, as well as to the nature of the other ingredients of the mixture. A useful table is appended, giving the effect of rubbing together equal weights of thirty-one solid organic substances, including most of the recently introduced synthetic compounds. As a whole, the book bears evidence of careful selection, conciseness, practical knowledge of the needs of the pharmacist, and systematic arrangement of facts.

In spite of the defect above noticed, we believe that this book is a valuable contribution to pharmaceutical literature, and a very useful one as well. If every young physician should study it carefully, those who have to swallow his mixtures would be much better treated than at present. Every pharmacist should have it at his prescription case and consult it freely.

E. H. BARTLEY.

THE EARLY HISTORY OF CHLORINE. PAPERS BY CARL WILHELM SCHEELE(1774), C. L. BERTHOLLET(1785), GUYTON DE MORVEAU(1787), J. L. GAY-LUSSAC and L. J. THÉNARD (1809). ALEMbic CLUB REPRINT No. 13. Edinburgh: W. F. Clay. 48 pp. 12 mo. Cloth. Price 1s. 6d.

The Alembic Club of Edinburgh is doing students of physical science real service in reproducing in inexpensive form the researches of early masters in chemistry. This volume should

have preceded the earlier one (No. 9) on "The Elementary Nature of Chlorine," by Humphry Davy, the original of which bears the date 1810.

The first paper, by Scheele, "On Manganese and its Properties," is translated from the Transactions of the Royal Academy of Sciences of Stockholm, and shows his clear and remarkably correct views as to the nature of the substance accidentally obtained when treating black oxide of manganese with hydrochloric acid. Scheele writes concisely, using the language of the phlogistic theory, which forms a great contrast to that used by Berthollet in the second paper; Scheele's essay bristles with Latin terms, such as *acidum salis*, *spiritus salis ammoniaci*, and *alkali fixum*; Berthollet's essay shows the admirable influence on the language of chemistry exerted by the contemporaries of Lavoisier, and reads much more like a modern treatise.

A short extract from a Memoir on Nomenclature by de Morveau, is interesting since it introduces the word *radical*, not *radicle*, as some chemists would have it.

The Memoirs by Gay-Lussac and Thénard exhibit the share these chemical philosophers have in the investigation of "dephlogisticated marine acid," prior to the time of Davy. Davy, it must be remembered, demonstrated that the new gas contained no oxygen, and that it was of an elementary character; to him also is due the name chlorine.

H. CARRINGTON BOLTON.

AN OUTLINE OF THE THEORY OF SOLUTION AND ITS RESULTS. BY J. LIVINGSTON R. MORGAN, PH.D. Small 8vo. New York: John Wiley & Sons. 63 pp. Price \$1.00.

The period of unrest and debate in the modern theory of solution is, in the main, at an end. This theory has substituted for vague representations of isolated facts, clear and concise conceptions based on plausible hypotheses and stated with mathematical precision. Osmotic pressure, diffusion, lowering of freezing-point, and raising of boiling-point, etc.,—all these properties of solutions have been accounted for and brought into causal relationships, and "the hundred-year problem of the voltaic cell" has finally been solved.

A period of quiet but intense activity has now set in. Workers attracted by the brilliancy of the results thus far obtained,