

of suggestion and as a guide in the side lines of the various industries, particularly to those of limited practical experience.

WM. MCMURTRIE.

THE UTILIZATION OF WOOD-WASTE. BY ERNST HUBBARD. Translated from the German by M. J. SALTER. London: Scott, Greenwood & Co. 1902. 12mo. 192 pp. Price, \$2.50.

This little book is a translation of the second revised edition of one of the well-known Hartleben Library of technical manuals and deals with the various methods and proposed methods for utilizing sawdust and similar waste for the production of chemical products. It was one of three which have appeared in this library, the others being "Das Holz und Seine Distillationsproducte," by Dr. George Thenius and "Die Verwerthung des Holzes auf chemischen Wege," by Dr. Jos. Bersch.

This work takes up first the employment of sawdust as fuel either with or without the simultaneous recovery of charcoal and the products of distillation. This is a very important subject and one to which practical chemists have given some considerable attention, as in lumber districts where sawmills abound a profitable utilization of the sawdust would be desirable. Many of the older forms of retorts for the continuous carbonization of sawdust by means of endless screws, etc., have, however, been given up in practice because of the difficulties caused by the moisture in the sawdust. This has been overcome in some cases by briquetting and previous drying of the briquettes or by the use of a preparatory drying chamber through which the moist sawdust passes on a sheet-metal conveyor or before it goes into the distillation chamber proper. The earlier briquetting procedure of Bergmann is described but we find no mention of the later, more successful, Heidenstam Swedish method.

The manufacture of oxalic acid from sawdust is very fully described and the means of purifying the product given.

The manufacture of ethyl alcohol and organic dyes from waste wood is also referred to but these proposed methods are as yet of little practical value.

The manufacture of artificial wood and plastic compositions for moldings is a much more important matter and is very satisfactorily described.

The employment of sawdust as an ingredient of blasting-powders and explosive mixtures is similarly very fairly dealt with.

The book is well printed and presents a neat and attractive appearance and will no doubt be found to be a source of much useful information.

S. P. SADTLER.

PAPERS ON ETHERIFICATION AND THE CONSTITUTION OF SALTS. BY ALEXANDER W. WILLIAMSON (1850-1856). Alembic Club Reprints, No. 16, Edinburgh. The Alembic Club, Chicago: The University of Chicago Press. 1902. Price, 40 cents.

The study of the original, classical papers, which have been of epoch-making significance in the development of chemistry, cannot be too earnestly commended. The Alembic Club of Edinburgh is performing a valuable service in making a series of these papers easily accessible. The papers are published in a neat cloth binding. Previous numbers of the series, as well as the one mentioned above, may be obtained from the University of Chicago Press.

W. A. N.

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### INVESTIGATION OF THE PURITY OF CHEMICALS.

At the suggestion of Professor F. W. Clarke and others, a committee was appointed at the last meeting of the Society to investigate the purity of chemicals, especially reagents, as sold by dealers. It is a common experience that many articles marked "pure," "chemically-pure," or "C. P." are far from satisfactory, and it is believed by many analysts that the quality of reagent chemicals has grown worse instead of better in the last few years. At any rate the matter is of such importance as to merit investigation. The committee, which consists of Charles Baskerville, L. M. Dennis, W. F. Hillebrand, H. P. Talbot and the president of the Society as chairman *ex-officio*, is collecting data to show the extent of the evil of adulteration or wrong labeling, and requests information from all members of the Society who have had experience in the matter. This information should be sent to Professor H. P. Talbot, Massachusetts Institute of Technology, Boston.

The committee will be glad also to receive suggestions as to the best means of practically correcting the present unsatisfactory condition.