## **BOOK REVIEWS**

A. WEISSBERGER (Consulting Editor): The Chemistry of Heterocyclic Compounds, Vol. 14. Pyridine and Its Derivatives; Part 1a by R. A. BARNES and Part 1b by F. BRODY and P. R. RUBY (Edited by E. KLINGSBERG). Interscience, New York, London, 1960.613 pp., £18.7s. or £15.15s. by subscription.

This is the first of four volumes and contains two sections:

(a) "Pyridine and Hydrogenated Derivatives" and (b) "Synthetic and Natural Sources of Pyridine Ring". The first and much the shorter chapter deals with the properties of pyridine and its hydrogenated derivatives. This at once raises the point that such a contribution cannot be assessed in isolation. Omissions are noticeable but these may well be remedied in later chapters. Furthermore we are entitled to ask—what is the purpose of this compendium? It is obviously a mine of information but what kind of digger do we expect to extract its riches? This first chapter is a most interesting essay that is, it is suited to the needs of the student, albeit an advanced type with adequate leisure for reading.

The second section on "Synthetic and Natural Sources of the Pyridine Ring" is more encyclopaedic and could be used as a work of reference. Apparently the work falls between two stools. It is neither quite general enough nor sufficiently concise for the needs of the student, or even the research worker, and, in other places, there is a striving for complete coverage which develops some almost ludicrous anomalies. Why do we want to describe fully the natural sources of the pyridine ring? This is more usefully accomplished in text-books or small encyclopaedias on the alkaloids. Good illustrations of this lack of a sense of proportion are to be found on pp. 138 and 139. Surely nobody is nowadays interested in the fact that narcotine was oxidized to apophyllenic acid by Wöhler in 1844 or in the formation of isonicotinic acid from harmine effected by O. Fischer. One is reminded of Meldola's *Relations of Natural Products*, an enterprise that must have been a most laborious task in execution and which was nevertheless not well conceived and actually never finished.

Doubtless, however, this second section of Vol. 1 will be found serviceable in many laboratories until a more logically arranged work becomes available. If this were an inexpensive series, these criticisms would not be made.

In the first chapter the references to theoretical work are unsatisfactory, partaking of the modern vice of avoiding the duty of independent study of original sources by assuming the completeness of earlier monographs.

And in spite of all this the work is a fine contribution to the documentation of organic chemistry.

On the question of degree of exhaustive treatment, it is impossible to give a useful opinion. The reviewer applied the only test that he could devise, namely to look up a number of reactions which had fallen within his personal experience. In a dozen cases this proved a satisfactory criterion and it would thus appear probable that a full account of the synthesis of pyridines has been presented.

R. ROBINSON

HOUBEN-WEIL: Methoden der organischen Chemie (IVth Ed.), Vol. 1/2, Part 2. Allgemeines Laboratorium Praxis Eugen Müller. Georg Thieme, Stuttgart, 1959, 1017 pp.

This instalment of a new edition of Houben-Weil is dedicated to Hans Meerwein, whose 80th birthday fell on the 20th May 1959, and there is a preface by O. Bayer, H. Meerwein, E. Müller and K. Ziegler.

The subjects are related to the most fundamental techniques in chemistry, including such matters as sampling methods, the manipulation of gases, liquids (including liquefied gases) and solids both under ordinary conditions and in the absence of oxygen. There is a section on the manipulation of explosives.