

The similarity of these states to periodic psychoses is striking, and because of Richter's association with Adolf Meyer and the Phipps Psychiatric Clinic, he was able to study both. In this book he has catalogued many of his and other workers' findings. The word catalogued seems appropriate, and indeed the book is written as though it describes a tour of an exhibition of Biological Clocks. Most of the evidence is clear-cut, and the elegance of the work makes such clear results appear deceptively easy to obtain. Nevertheless from time to time when studying some of the charts, one does wonder about their statistical significance, and one is also left wondering how often the various operative procedures on the rat's endocrines and C.N.S. failed to evoke rhythms.

Richter's well-known paper on the Shock Phase Hypothesis of the production of rhythms is presented as one chapter. It is there suggested that normal function depends on randomized activity of individual cells each of which has the same intrinsic rhythm of activity and inactivity; the shock brings them "all" into phase with each other and so "rocks the boat". This is naturally among the more controversial parts of this book, as are speculations about kinds of clock, their role in somatic and mental illness, and their evolution.

Though most would agree that in human behaviour social factors have taken over the dominant role from the internal twenty-four hour clock, many will feel that Richter has underrated the latter's possible significance. He does not for instance refer to the human diurnal rhythms of electrolyte and steroid secretion, which persist even in an unstructured environment. Further, Richter ends by stating that, "A perfectly healthy well-integrated person, would not be expected to show any fluctuations in somatic or mental functions", and so classifies many of us as very sub-standard, especially early in the morning! He feels clear manifestations of cycles of any kind are diagnostic of disease processes.

Despite minor criticisms this book is an important work based on decades of careful work and a really prolonged study of the literature.

F. A. JENNER.

Neurophysiologie des États de Sommeil. Edited by M. JOUVER. Paris: Centre National de la Recherche Scientifique. 1965. Pp. 657. Price 00s. [Title of book on inside of cover is given as "Aspects Anatomico-Fonctionnels de la Physiologie du Sommeil".]

Here are the proceedings of another neurophysiological symposium including the verbal dis-

cussions. The research material described is available through the standard journals.

The 21 contributions, some written in French and some in English, but with bi-lingual summaries, are of a high standard, and deal with possible chemical factors underlying sleep, with orthodox sleep, paradoxical sleep, potentials evoked by sensory stimulation during sleep, respiration, and the relation between sleep and dreaming. Clinical and psychological problems are barely touched upon.

The symposium was held in Lyon in 1963. It is only fair that potential buyers should weigh this publication against a simultaneously published report of a symposium (*Sleep mechanism*, edited by K. Akert, C. Bally, and J. P. Schadé, Elsevier, Amsterdam), held just one year later in Zurich covering much common ground (some participated in both and gave almost identical papers), but also dealing with clinical and psychological problems. The Lyon symposium is therefore primarily for the specialist unit currently engaged on research into brain physiology and sleep.

IAN OSWALD.

Symposium on Advanced Medicine. Edited by NIGEL COMPSTON. London: Pitman Medical Publishing Company. 1965.

A series of lectures on selected medical topics was delivered at the Royal College of Physicians of London in November, 1964 and the lectures are now printed in book form. Certainly the book has been published very quickly, but only at the price of an unattractive format and of some major printing errors. For example, part of an otherwise excellent lecture on auscultation of the heart is rendered quite incomprehensible by such errors.

The lectures are of variable standard, some being detailed and comprehensive, others chatty and discussive. There are two notable set-piece lectures, on antibiotic research by Chain and on the genetic code by Crick. Most of the other contributions were no doubt instructive and even enjoyable to hear, but it is hard to see why they have been published. Is it impossible for a group of eminent physicians to deliver a series of lectures without every word being recorded?

There are four lectures on depression. No one can quarrel with their content and the non-psychiatrist would be instructed by them. But they hardly merit the title of Advanced Medicine.

J. L. GIBBONS.