BOOK REVIEWS

P. J. HEALD: **Phosphorus Metabolism of Brain.** Pergamon Press Ltd., Oxford, 1960. pp. vii + 195, 19 fig. 42s.

This book brings an up-to-date survey of the literature on the metabolism of phosphorus-containing compounds in brain. There are two main groups of phosphorus compounds on which attention is focussed: the acid soluble labile energy-rich phosphates which supply the energy for many metabolic processes, and the phospholipids whose importance as tissue components is greater in the brain than in any other organ.

Study of the labile compounds requires special techniques such as freezing of whole animals in liquid air, and tracer techniques are needed for much of the work on lipid metabolism. From the biochemical point of view, *in vitro* work is more satisfactory than work on the whole organism, but meets with greater difficulties in the functional interpretation of the results.

The technique of using electrical pulses for the stimulation of brain slices is a first attempt at bridging the gap between the *in vitro* and *in vivo* world, and the study of the action of drugs on such systems has sometimes yielded results when the study of the unstimulated tissue slice did not. The recent work by Hokin and Hokin who found striking biochemical actions of acetylcholine and atropine *in vitro*, represents another attempt at narrowing that gap; this work, however, receives rather limited attention. The biochemist will be grateful to the author for compiling much literature and including an appendix on analytical methods.

M. Vogt

BOOKS RECEIVED

- R. GOULDING: Handbook of Dental Pharmacology and Therapeutics. William Heinemann, London, 1960. 199 pp.
- H. P. KUEMMERLE, A. SENN, P. RENTCHNICK and N. GOOSSENS: Klinik und Therapie der Nebenwirkungen. Geor Thieme Verlag, Stuttgart, 1960. 1286 pp.