BOOK REVIEW

INTRODUCTION TO CHEMICAL PHARMACOLOGY, by R. B. Barlow. Pp. xiv + 343 including Index and 53 diagrams. Methuen & Co. Ltd., London, 1955. 35s.

The author states that the book is an outcome of the course in chemical pharmacology for students in chemistry commenced at the Department of Pharmacology at Oxford in 1945. Consequently the presentation of the material is such that students who have received little training in biological subjects are supplied with sufficient biological background to make the book intelligible. In the reviewer's opinion the author has succeeded in writing a stimulating and informative book which in certain sections exceeds the scope which the word "introduction" implies.

The book commences with a very short review of the theories of drug action. The next sections are arranged under the headings: (1) Drugs which produce general central nervous depression (such as general anæsthetics, hypnotics); (2) drugs which depress certain centres of the central nervous system (analgesics, anticonvulsants, etc.); (3) drugs which stimulate the central nervous system; (4) drugs which act on peripheral nerve endings of synapses (local anæsthetics, acetylcholine-like compounds, mydriatics, spasmolytics, ganglionic-blocking agents, neuromuscular blocking agents, anticholinesterases, adrenaline and related compounds); (5) drugs which act on tissues and organs (histamine and antihistamine drugs, drugs which act on heart muscle, etc.). In an appendix a brief account of the anatomy, physiology and biochemistry of the human body is given for the benefit of those readers who lack the necessary biological background.

The discussion of the drugs acting in a particular manner includes a brief description of the methods of testing, a detailed treatment of the type of compounds and a discussion of the attempts to correlate structure with activity.

A plentiful supply of structural formulæ and the use of tables greatly facilitates the reading of the text. It is unfortunate that a number of mistakes occur in these formulæ, e.g. p. 89 α-eucaine and β-eucaine, p. 75 camphor, p. 88 cocaine (incorrect stereochemically). Furthermore the piperidine ring of tropine (and related compounds) and ecgonine (and related structures) has been shown in the boat form in all cases, whereas there is much evidence available to show that it exists in the chair form. However, these are only minor blemishes in a well illustrated text.

This book will prove to be of great value to students reading for the B.Pharm. degree and it can also be highly recommended to all those who seek to get a background to the structure and action of many of the newer type drugs. The research student embarking upon the preparation of potential pharmacologically-active compounds will also derive much benefit from this introduction to the subject.

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(ABSTRACTS—*continued from page* 69)

Reserpine, Serotonin and Lysergic Acid Diethylamide, Interaction of in Brain. P. A. Shore, S. L. Silver and B. B. Brodie. (*Science*, 1955, **122**, 284.) Experiments in mice show that reserpine potentiates the hypnotic effects of hexobarbitone and ethanol, and lysergic acid diethylamide antagonises the potentiation. Lysergic acid diethylamide alone did not affect the hypnotic action of hexobarbitone or ethanol. The results suggest that some of the actions

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