

MEETINGS

DRUGS FROM ANIMALS

A collection of problems such as this is usually consulted both to test one's knowledge and to further it. In many ways these are separate functions, and perhaps the only real criticism of the book is that the two functions are not separated well enough. Undergraduate students in particular would often want to use the book as a practice for examinations, and it is a pity that the simpler problems are not differentiated from the others in some way: often the only way for such a student to discover that an apparently simple problem requires mathematical techniques beyond his ability, apart from wasting hours of effort, is to look firstly at the solution in the back of the book! On the other hand, more senior students who are using the book as advanced reading might well prefer the difficult problems to be clearly grouped together in each chapter.

This is a small point, however, which should not prevent this second edition being as widely read as the first, as it well deserves.

F. H. READ

Ultrasonic Engineering

By Julian R. Frederick. Pp. xii + 379. (New York and London: John Wiley and Sons, Inc., 1965.) 113s.

THE author of this book is an associate professor of mechanical engineering in the University of Michigan and as therefore might be expected he deals very competently with the engineering aspects of ultrasonics. He has also had the earlier benefit of being associated with Firestone when the latter was developing his ultrasonic flaw detection systems, and so Chapter 7 dealing with this subject is a very authoritative contribution to the literature. Inevitably, through compression into a single chapter, the basic theory has suffered somewhat in places through inadequacy of explanation, but these are small blemishes in a book which is written in a lucid style and where the text is supported by excellent line diagrams. It contains a wealth of practical and theoretical information which is by no means restricted to American sources. There is an excellent set of references and a most useful guide to ultrasonic literature which the growing field of users of ultrasonics will find invaluable.

R. W. B. STEPHENS

Parliament and the Executive

An Analysis with Readings. By H. V. Wiseman. Pp. xvi + 271. (London: Routledge and Kegan Paul, Ltd., 1966.) 18s.

APART from an introduction, largely historical, of 46 pages, this book consists of 120 short extracts from writings about the relations between Parliament and the executive. They range from standard authorities such as Dicey and Bentham, Bagehot and Mill to the current writings of Sir Ivor Jennings, D. N. Chester, K. C. Wheare and Lord Campion, and are classified in eleven sections dealing with such subjects as collective and individual ministerial responsibility, the power of the Cabinet, the role of the House of Commons, questions and the use of committees. Scientific aspects of the formation of policy are not specifically discussed in these extracts, although the introduction shows some awareness of these aspects in explaining the choice and arrangement of the extracts. There is in fact little of direct interest to the scientist in this book and, while the variety of the extracts indicates the extent of the field to be considered, the work is unlikely to prove more satisfactory for the general reader. The extracts generally are too short and the introduction fails to gain the coherence which a well-chosen anthology should possess. To those embarking on a first study of British history or politics it may well provide a useful introduction to the literature, but Prof. Wiseman contributes disappointingly by way of criticism himself, though his selection of extracts is representative and well designed to assist the formation of a sound opinion on the role of Parliament in relation to the increased power of the executive.

R. BRIGHTMAN

THE first international symposium on "Drugs of Animal Origin" was held at the Istituto di Ricerche Farmacologiche Mario Negri in Milan, during May 12-13, organized by Prof. Garattini (chairman) and Prof. Leonardi (secretary). As expected from the all-embracing nature of the title, the topics discussed varied enormously. They ranged from recent developments in the chemistry and pharmacology of hormones in well-established endocrine fields, to the introduction of new concepts about the part played by the body as its own pharmacologist and dispensing chemist.

The prostaglandins provided the largest single topic, and Prof. Bergström (Karolinska Institutet, Stockholm) opened the discussion with an excellent review of the present knowledge of their structure, biosynthesis, and metabolism. With this knowledge available, Dr. Vogt (Max Planck Institut, Germany) extended the scope to the release of prostaglandins from guinea-pig lung by cobra venom and by such milder stimuli as hypertonic saline. It would appear that prostaglandins provide a normal constituent of the slow-reacting substance released in this manner. The wider distribution of prostaglandins outside the site from which they take their name (the prostate) was clearly shown both by Prof. Horton (St. Bartholomew's Hospital Medical School, London) and by Dr. Paoletti (University of Milan). Prof. Horton's work demonstrated the presence of various prostaglandins in the central nervous system of the cat and the fowl, and showed the unusual pharmacological responses which injection of these drugs can induce. Dr. Paoletti's work was concerned with the systemic pharmacological and biochemical actions (for example, on blood pressure, heart rate, mobilization of glucose).

Another subject dealt with by a number of authors was the control of blood calcium levels. Until quite recently it was believed that the level of blood calcium was essentially under the control of parathormone—the hormone of the parathyroid gland. Dr. Aurbach (National Institutes of Health, Bethesda) presented a summary of the chemical, biological and immunological properties of parathormone, and suggested a probable structure. However, another hormone, thyrocalcitonin, has recently been isolated from the thyroid gland, and has been shown to possess an important plasma calcium-lowering property. This topic was briefly mentioned by Dr. Andreoli (Istituto di Patologia Medica, Rome) when considering the broader aspects of synthesis, metabolism and actions of thyroid hormones. A more detailed study was given by Dr. MacIntyre (Postgraduate Medical School, London), who described classical endocrine experiments in which perfusion of the vascularly inseparable parathyroid/thyroid gland of the dog was performed. Perfusion with blood containing high and low calcium levels resulted in low and high systemic blood levels respectively. Use of the goat (in which the thyroid and parathyroid glands are anatomically separate) strongly suggested that the hormone is secreted by the thyroid. The hormone was shown to act independently of the parathyroid hormone, and to produce its effect by increasing bone uptake of calcium, an effect probably arising from a reduction in the breakdown of bone. The possible clinical applications of thyrocalcitonin in hypercalcaemia and other diseases in which calcium metabolism is upset were discussed, both by Dr. MacIntyre and by Dr. Milhaud (Institut Pasteur, Paris), but so far only limited clinical results are available.

Other subjects discussed show the varied nature of the meeting. Dr. Schofield (Royal Veterinary College,