

BOOK REVIEWS

Drugs, Medicines and Man. By Harold Burn, M. D., F. R. S., Emeritus Professor of Pharmacology in the University of Oxford, Ruskin House, George Allen & Unwin Ltd., Museum Street, London, 1962, Pages 231, Price 25 S.

Prof. J. H. Burn, one of the foremost Pharmacologists of today, writes the book with the clear object that it should be intelegible to a person of ordinary letters. He has limited the treatment of the subject to more popular fields of drugs used in therapeutics and to a certain level of understanding. The subject is presented in a fascinating way and once one starts reading, it is so absorbing that the interest and curiosity of the reader is kept upto the end.

The book has been divided into twenty-three chapters dealing with drugs used in some of the popular diseases like constipation, heart and coronary, blood pressure, allergy, mental disorders, diabetes, anaemias, obesity, cancer and in others. The action of nicotine, properties of ergot, antihistaminic compounds, tranquillizing drugs, analgesics, sex hormones and contraceptives, cortisone and allied substances, antibiotics and sulphonamides were treated separately in different chapters.

After a brief introduction about the systems of medical treatment prevalent since the seventeenth century like Homeopathy, Christian Science, Osteopathy and Chiropratic till we come to the present system of Allopathic medicine, Prof. Burn begins with the present theory on how nicotine acts. The adverse effect of nicotine in releasing nor-adrenaline from the store in organs of the body may be responsible for the disorders of the heart and the blood vessels. The harmful effect due, perhaps to the release of noradrenaline in smokers cannot be underestimated. In a subsequent chapter Prof. Burn discusses the use of modern drugs in heart and coronary diseases. He has stressed the important role played by hexamethenium since 1949 for the successful treatment of high blood pressure. Dr. Burn discusses in length on the effect of alcohol on driving. He has emphasized the large part played by alcohol in causing road accidents which is already known but how large it is points out "is anybody's guess". He thinks if alchol is considered a poison, it is a "mild" one, and its effects could readily be overcome by sufficient exercise. It produces the most serious effect on a person with seden-

tary habit. The alcoholic could be treated, so long as the subject desires to be cured, for the effect of the antidote lasts as long as the treatment lasts.

Prof Burn then passes on to a discussion of recently introduced tranquilizing drugs and 'psychic energizers. One of the best drugs in this series is meproamate. In man, it is capable of checking emotional responses without interfering with the skill or with rational behavior. He rightly thinks that tranquilizers are more widely used than they should be. Many of these patients, according to him, could be quietened by giving inexpensive barbiturates only.

The doctor-patient relationship is an important part of medical practice. The personality of a doctor may determine the results of the treatment. He has cited an example where chlorpromazine was given as a clinical trial in mental cases. The report of the treatment could be divided into four groups. The first group of doctors were so enthusiastic as to report "This is it. Now we can throw away the shock machine." In the majority of physicians the attitude was calmer, the medicine had "some value." To the third group the use of chlorpromazine was contrary to their dynamic concept and they used it much against their wish. The last group contained doctors who refused to test. It was the natural conclusion that "conscious and unconscious factors determine how any given individual will report to the efficacy of a drug". The mentality of the patient is equally important. Results of treatment of 199 subjects complained of headache was surprising. One hundred and twenty patients said that sometimes their headache were cured by a placebo, the tablets which contained lactose only.

An important part of the book deals with sex hormones and contraceptives, cortisone and allied substances and the anti-cancer drugs. Prof. Burn believes if the next cure of cancer "comes through the invention of a new drug, it may be that it will cure only one form of cancer and not a large group". Occasionally patients with cancer succeed in "curing" themselves. It means the appearance of cancer indicates the failure of protective mechanism and that the disappearance of the cancer means the recovery of that mechanism. He has not speculated or indicated what that mechanism could be.

The number of new drugs produced after the last world war is simply "alarming". The severe competition amongst individual firms resulting in the introduction of many varieties of drugs and it is true, a part of the money is spent in research is recovered from the consumer. There is no justification

to have so many varieties of drugs in the market. He blames the doctor for this. The only check which is conceivable is through them. Nevertheless, he admits that in recent years astonishing discoveries of new drugs have been made and has greater hope for the future because of the rapid progress of pharmacology. Progress of science needs research and it costs money. Ultimately it is to be admitted that the consumer has to pay for all this.

The book would prove most interesting to students and teachers, relaxing to the busy practitioner and informative and easily understood by inquisitive readers and general scientists.

R. K. C.

Annual Review of Physiology. Edited by Victor E. Hall, Volume 24, 1962. Annual Reviews, Inc. in cooperation with the American Physiological Society, Pages 604, Price 7.50.

The 24th volume of Annual Review of Physiology has been published by the American Physiological Society in its desire to provide knowledge about the current researches carried out in the field of physiology and allied sciences during the previous year. In an article in the same review by Prof. Fenn it has been estimated that the number of biological journals being published now is about 6,000 to 20,000 and, therefore, the number of articles published every year in these is expected to be anything from 300,000 to 1,000,000. With this vast amount of material being published every year, it is becoming almost impossible for any research worker in the field of biology to keep track of the research activities all over the world. Keeping that in view the American Physiological Society has been trying to put in a very concentrated form some of the important and relevant observations taken from the various publications. Volume 24 is another energetic attempt in the same direction, which will be clear from the fact that various chapters of this volume refer to about 4,500 publications. When material taken out of over 4,000 papers is condensed in a volume of about 600 pages, it would be expected that full justice cannot be done to all those papers. This volume, therefore, only gives indication to the reader towards the trend of research in the subject (physiology), and the reader is expected to read the references which are of interest to him.

This volume has been published in 16 chapters dealing with important physiological phenomena on which extensive research is being carried out.

Some of the subjects like the central nervous system, the endocrines, the heart etc., have been finding a space in each and every volume published over the previous years, and rightly so. For want of space, other subjects of current interest could not be taken up in every yearly volume. This volume particularly has two chapters devoted to comparative physiology. Such a step will be of much interest to the students of human physiology because it is becoming more and more difficult to bring them in contact with the other workers who are interested in comparative physiology.

This volume has a most interesting introductory chapter written by Prof. Fenn on "Born fifty years too soon". This compares the conditions existing in physiology laboratories of today with such conditions before the last world war. Written with the mature experience of a person like Fenn, this chapter is recommended not only to workers in the field of physiology, but also to other workers in the field of biology.

This volume also contains a cumulative index of contributing authors and chapter titles from volume 20 to 24. A statistical analysis given in the preface shows that out of the articles written for Annual Review of Physiology from 1939 to 1961, only 31 per cent contributors belonged to departments of physiology in medical schools and the remaining 69 per cent contributors belonged to other departments and organisations. This emphasises the importance and the popularity of the study of physiology.

B. K. A.