BOOK REVIEWS 317

peutics. In common with the other pure sciences on which medicine depends, pharmacology has advanced rapidly in the past decade to a point where drug action and interaction is understood in much more detail than ever before, so that the effects of new drugs may often be predicted with remarkable precision. This book, edited by a clinical pharmacologist, contains contributions by 17 prominent workers in this field on both sides of the Atlantic, and its intention is to bring to the notice of the physician those aspects of pharmacology which are directly relevant to therapeutics. It is aimed at the postgraduate student of internal medicine, but those general practitioners who wish to modernize their ideas on drug action and usage will find much to help them within its pages.

Following an initial chapter which presents with clarity and brevity a summary of modern concepts in basic pharmacology, there are articles on diuretics, oxygen therapy, cardiac drugs, antimicrobial drugs, hyperlipidaemia, the regulation of the blood pressure and the chemotherapy of malignant disease, to quote only a selection. Each subject is treated from a practical point of view, but attempts to show how newly-established scientific concepts should govern the intelligent use of therapeutic agents. Although some general practitioners will doubtless find the language of modern pharmacology an obstruction to their free enjoyment of this book, the seeker after knowledge will find much to reward him.

Problems and progress in medical care. Edited by Gordon McLachlan, C.B.E. London. New York. Toronto. Published by the Oxford University Press for The Nuffield Provincial Hospitals Trust. 1968. Pp. ix+170. Price 25s. 0d

The third in the series, this collection of seven essays deals with (i) birth weight and perinatal mortality, (ii) medical manpower, (iii) manpower planning in the National Health Service, (iv) staffing maternity services, (v) child guidance, (vi) hospital communication, and (vii) the applications of computors to medicine.

Most of us have wished, at one time or another, that all junior hospital doctors were British, without wondering what would happen if our own medical schools turned out the 4,000 doctors per annum needed to fill these posts, leaving the present establishment of consultants and general practitioners unchanged. In fact it would be *essential* for 2,000 doctors to emigrate each year; this country would have no place for them apart from a few years service as junior hospital doctors.

This is one of the many facts highlighted by the authors of these informative and thought-provoking essays. The chosen subjects are complex, needing so much thought and investigation for full understanding that biased opinions can be formed all too easily. Realities must be recognized if the right decisions regarding the future of medical care are to be made. The essays, most of them by non-medical authors, deal with issues of importance in future planning and will give the medical reader new insight into problems which should be very much his concern.

## Computers in the service of medicine. Essays on current research and applications. Volumes 1 and 2. Edited by G. McLachlan and R. A. Shegog. London, New York, Toronto. Published for the Nuffield Provincial Hospitals Trust by the Oxford University Press. 1968. Pp. vol. 1, x + 188, vol. 2, vi + 194. Price 25s. 0d. each.

These two volumes bring together the first reports from study groups, supported by the Nuffield Provincial Hospitals Trust, whose ultimate aim is the classification of the value of computers in medicine. The use of computers in epidemiological 318 Book Reviews

research and in many aspects of the administration of medical care seems already established on an economic basis and these reports would bear this out. The same cannot yet be said for the application of computers in clinical practice. The reasons for this are many, perhaps the most important of which arises from the unsystematic nature of clinical problem solving. If science is that which can be consistently reproduced and consistently communicated, and if these two criteria are also the basic essentials for any system which is to be computerized, then it is evident that we still have a large number of problems to solve before the art of medicine is reduced to a science. These problems are spelt out and always against some practical background in the excellent papers which constitute these volumes.

## Principles and practice of screening for disease. WILSON, J. M. G. and JUNGNER, G. Geneva. World Health Organization. 1968, Pp. 163, Price 14s, 0d.

The authors deal with the subject under three main headings: the basic principles of early disease detection; practical considerations, including the application of screening procedures in a number of different disease conditions; and present techniques and possible developments in methodology. The authors perform an invaluable service in clearly defining the terminology and in particular the distinction between presymptomatic diagnosis, preventive medicine and surveillance. In those conditions which can be diagnosed presymptomatically, they clearly distinguish between those for which some preventive treatment is available and for those, the majority, where there is no such treatment. They also clearly distinguish between those conditions for which selective screening is more appropriate than mass screening.

General practitioners may still feel that the relative importance of what is defined as 'surveillance' (that is the deliberate and routine testing of urine, blood pressure, or even weight as part of good clinical practice, even when the physician has no reason to expect illness related to these findings) is under estimated, in relation to the other forms of screening. In all screening, the ultimate measure of any procedure must be the economic yardstick of returns in terms of the probability that the assessment procedure, whether as part of good clinical practice or of a deliberate screening campaign will turn up information which has some therapeutic pay-off. Against this yardstick, there is no doubt that the screening procedure built in empirically into good clinical practice, has enormous advantages still over any formal screening procedure.

Cardiovascular survey methods. G. A. Rose, D.M., M.R.C.P. and H. BLACKBURN, M.D. Geneva. World Health Organization. 1968. Pp. 185. Price 32s.

This is No. 56 of the World Health Organization monograph series. It is in three parts. The first is a description of general principles of survey methods. The second describes examination techniques, and the last part is made up of 11 annexes, the first of which is a long one on the subject of coding electrocardiograms and is followed by model forms and questionnaires.

It has been observed that the end results of many surveys are not strictly comparable because observers have not always applied the same standards. Similarly, general practitioners occasionally avoid taking part in large surveys because the standards and criteria are so indefinite that it is difficult to imagine a satisfactory conclusion. This book is designed primarily for cardiovascular surveys and the standards suggested are a little daunting. Much of the information contained could be applied with suitable modifications to other surveys and it could therefore be read with profit by members of the college who were planning almost any kind of research.