helpful, if there is evidence that it is the primary cause of the trouble, but in the majority of cases this is unnecessary.

When the treatment has ceased, the patient should be told to report periodically for the next twelve months and a catheter specimen of urine should be examined to eliminate the possibility of recurrence. If this has occurred, it is almost certain that a predisposing factor exists which has been overlooked.

CONCLUSION

With careful diagnosis and thorough treatment the prospects of a successful outcome in pyelitis are great, and the practitioner has the satisfaction of achieving a success which would have been impossible less than twenty years ago. In the pyelitis of pregnancy the success of modern treatment has been particularly effective, and termination for this reason alone is now never necessary.

Reviews

STATISTICAL METHODS FOR MEDICAL AND BIOLOGICAL STUDENTS.—By Gunnar Dahlberg, M.D., LL.D. 1940. George Allen and Unwin, Limited, London (Ruskin House, 40, Museum Street, W.C.1). Pp. 232. Illustrated. Price, 10s. 6d.

The appearance of this book is opportune as there seems to be a growing desire on the part of medical research workers to base their conclusions on a statistical analysis of their experimental data. For the purpose of planning experiments and of drawing valid conclusions from them it is desirable that the medical worker should himself be familiar with statistical methods. This book should serve to fulfil this purpose to a large extent.

The book explains the applications of elementary statistical methods for analysing those types of data with which medical and biological workers have to deal. Although it is not free from mathematical symbols the author has struck a compromise between the mathematical demands of statistical science and the limitations of the average medical or biological student. The exposition is lucid. The examples illustrating the application of statistical methods are based on medical problems. However, certain statistical terms such as 'histogram' given on page 43, 'exponential equation' on page 48, 'standard error' and 'probability equation' on page 73, 'correlation' on page 94 and 'coefficient of correlation' on page 113 have been introduced at a stage when their meaning is not likely to be understood by the beginner.

In the first four chapters the author explains the conception of probability and the simple theorems of combination and permutation. With these simple concepts he proceeds to demonstrate how the proportion of dizygotic and monozygotic twins among twin pairs can be calculated and how the existence of certain hereditary characters among them can be studied. The remaining chapters deal with the different ways of analysing qualitative and quantitative sets of observations and with their presentation in the form of charts and diagrams. The scope includes the majority of the methods which have been generally employed in recent medico-statistical papers and the knowledge of which should therefore be considered to be an essential equipment of a medical research worker. Fully-worked-out numerical examples have been given to illustrate the application of these methods and this adds greatly to the usefulness of the book.

In a first edition some errors are likely to occur inadvertently and we may draw attention to the following—(i) figure 132 in the last line of page 21 should read 169; (ii) the probability of both twins being born alive has been shown incorrectly on page 26; (iii) in the third line from the bottom on page 83, II should replace I; (iv) the word 'tenth' should replace 'hundredth', in the fourth line from the top on page 8; (v) in the fifth line from the bottom on page 163 the limits should be from 2 sigma to $2\frac{1}{2}$ sigma; (vi) in table I of appendix II for the values of 'X', after the value 1.00 the next nine values should be 1.10, 1.20, etc., and not 0.10, 0.20, etc. A similar correction is necessary throughout this table.

Certain paragraphs we feel could have perhaps been left out from this work, because they are likely to puzzle the non-mathematical reader. One of such para-

graphs is the last one on page 72 and another on page 116. For the purpose of carrying out comparisons between mean values and variations exhibited by different sets of data, the author has described methods which, though they were considered important some years ago, have now given place to statistically sounder tests. Tests on the lines of those suggested by the author on page 99 for comparing two standard deviations are not only out of date but are also inexact, and we feel it would have been better if the author had instead described the use of tests designed by Fisher which are easier to apply, and at the same time are valid for small as well as large samples.

The value of the book will be enhanced if, in the next edition, space is devoted to the description of tests which are valid for small samples, to a discussion of growth curves and life table, to certain fundamental considerations to be adopted in the designing of experiments and to an elementary exposition of the technique of the analysis of variance and covariance.

The appearance of a book of this type, written for medical men by a medical man, has long been overdue and we trust that it will now bridge the gulf that has existed between the mathematical teacher of statistics and the average medical research worker. The book bears the mark of having been written by an experienced teacher.

S. S.

MATERIA MEDICA OF PHARMACEUTICAL COMBINATIONS AND SPECIALITIES.—By Dr. U. B. Narayanrao. Second Edition. 1941. Published by 'Medical Digest', Girgaum, Bombay 4. Pp. xlix plus 322. Price, Rs. 7-12; postage, As. 10

In the small space of 322 pages, the author has made an attempt to introduce short references of nearly 400 patent medicines of both indigenous and foreign origin, and has added special chapters on therapeutic index, hormone and vitamin therapies. The author has succeeded in giving much information, in a concise manner, regarding the composition, doses and indications of these specialities. The book also furnishes the name and address of the manufacturers of these patent drugs and enables the practitioner to find out substitutes if one or more of them are not available as a result of war conditions.

It is, however, to be regretted that Dr. Narayanrao has not been able to give a little more time and attention to the pharmacological side of these drugs and to investigate the relative values of various preparations, suggested for the same disease. It is obvious that a young practitioner will be puzzled in the selection of the right remedy when he has to choose one out of a dozen or so preparations, all claiming equal superiority, as is almost always the case with patent drugs.

With these limitations, the book will serve the purpose of a reference book on the patent drugs available in the market.

J. C. G.

SURGERY OF MODERN WARFARE.—Edited by Hamilton Bailey, F.R.C.S. Part III. 1941. E. and S. Livingstone, Edinburgh. Pp. 321 to 480. Illustrated. Price, 12s. 6d.; postage, 6d.

The first few pages of this part conclude the section on wounds of blood vessels, and section V is a short