Volume 1 is taken up by a 450-page treatise on distributions and transformations. This section deals with theoretical statistics in a rigid mathematical way, starting with probability as an exercise in set theory and the use of Japanese icosahedric dice, passing at length through gamma and beta functions and winding up with a consideration of Gompertz's Law. Volume 2 similarly starts with gentle chapters on statistical inference and hypothesis testing, and then deals with the everyday tools of the statistician such as analysis of variance, regression, correlation and sequential analysis.

The editor of this work appears to have started with an ambitious brief—to avoid a "livre de cuisine"—and then to have lost his nerve. Certainly the majority of pharmacologists consulting this book as an encyclopedia will derive most value from the last chapter of all, which lucidly presents bioassay as a series of worked examples. It is unlikely that the section on distributions (which occupies over 40% of the total bulk) will reach an audience who will either appreciate or profit by it. Those who do digest this section will be disappointed to learn early in Volume 2 that only near-normal, binomial and Poisson distributions need be considered, as all other distributions can be dealt with by non-parametric methods.

If an encyclopedia is meant to be a book of reference, this attempt fails because of repetition, omission and poor indexing. Probit analysis, for instance, is discussed in both theory and practice by the authors of several chapters, yet the book contains no tables of probits. Type II errors are also mentioned extensively in many chapters, are not fully explained in any, and receive a single largely irrelevant entry in the index. The reader who wishes to understand the logical principles of statistics and become versed in their application would be well advised to stick to his copies of Fisher and of Snedecor.

C. M. Conway


It took over 100 years for doctors in general and surgeons in particular to realize that of the many factors connected with an anaesthetic, the technical administration of the anaesthetic, important though that is, is probably secondary to the recognition and treatment of any general disease of the patient which might contribute to the risks of the whole procedure. Thus the bad chronic bronchitic patient will owe his survival far less to the anaesthetic, on which the rapid return to health is largely irrelevant entry in the index. The standard of writing is extremely high, the test being that the chapters are readable and the information is clearly transmitted.

The barrel of rare diseases has been well and truly scraped, and no anaesthetist need now be scared of anaesthetizing a patient suffering from Goodpastures syndrome or Wegener's granulomatosis. If after reading the appropriate entry he still wants more, the ample reference lists of original sources should satisfy everyone. This is not a book for the anaesthetist-in-training. It is rather a reference book for the clinician faced with a patient suffering from a disease he has never heard of before. It is also a book for intellectual reading for anaesthetists and physicians, and for the increasing number of surgeons who realize that they are not just performing an operation, but treating a whole patient.

This edition will be avidly taken up and no doubt the editors are already considering the next one. Their colleagues, grateful for the invaluable first edition, will be even more so if they will discipline their authors to prune any material which is not of immediate relevance to an understanding of the problems these exotic diseases present to the anaesthetist. The publishers cannot be faulted on the excellence of their production, and the price is modest for a volume of this size and nature.

William W. Mushin


This short book, of 120 small pages, covers Pain, Local Anaesthesia, Amnesia, Muscle Relaxants, and Electrical Signs of Anaesthetic Drug Effects on the Brain. The level of knowledge assumed in the anaesthetist reader is remarkably accurate for a non-anaesthetist author, but none the less some of the statements could have been more explicit and concise, particularly in the section on Pain.

Although the presentation is very suitable for anaesthetists, it is doubtful whether many will read the book in its entirety, since most of the information contained is available in the standard anaesthetic textbooks. This is not true, however, of the final chapter on the electrical signs of the effects of anaesthetics on the brain for, in this section of the book, the author presents much of the newer information on the subject in a most clear and helpful manner. It is a pity that a topic so dependent on illustrations of typical recordings should be so ill-served in the standard of these recordings. Many of the illustrations are so small that only those already aware of the significance of the electrical patterns involved will be able to detect them.

None the less, the final section in particular is recommended, as it forms a useful introduction to the newer literature appearing on the electrical changes induced in different brain areas with different anaesthetic agents.

D. G. McDowall