almost a relief after struggling with some of the numerical complexities to learn that the pattern of ventricular cycle lengths in digitalis intoxication with atrial fibrillation defies analysis.

The last 100 pages deal with the management and treatment of arrhythmias, and the author's wide clinical experience is evident in this section. Inevitably there are areas where readers may diverge from his viewsfor example, on the prophylactic value of propranolol. His condemnation of oral lanatoside C because of its rapid dissipation and poor absorption is interesting. section on coronary care is too short and impersonal to be of real use. The references to the literature on this vast subject cannot have been easy to select, but even so I was dismayed to find no mention of Lewis's superb monograph The Mechanism and Graphic Registration of the Heart Beat.

Despite the variable quality of the illustrations this is an excellent and strongly recommended account of an often difficult subject, which amply justifies the author's belief that a close study of arrhythmias is "fascinating and intellectually rewarding."

ARTHUR HOLLMAN.

## Recent Developments in Urological Surgery

Urologic Surgery, Edited by James F. Glenn, M.D. (Pp. 770+xiii; illustrated. \$32.50.) New York: Harper & Row. 1969.

As the editor points out "Urologists arefirst and foremost-surgeons, and excellence in urologic surgery can be achieved only through diligent and exhaustive application to both the fundamentals of surgery and the advancing technology of the urologic specialist." The aim of this book is to provide a panorama of modern urological surgery in keeping with these principles, and to evaluate the merits of the various techniques described. In this respect it becomes more than an atlas of urological surgery, with a substantial text dealing with the history, indications for operation, and complications of the wide range of surgical procedures currently employed in the specialty. Progress in urology has been such that it may be difficult nowadays even for the expert to keep abreast with contemporary opinion and all technical refinements which have emerged. The careful selection of a distinguished group of contributors, however, has ensured that the reader is given up to date and practical information on most aspects of urological disease which are at present amenable to surgical treatment.

The scope ranges from adrenal surgery at one extreme to renal transplantation at the other, and includes reference to all commonly performed operations on the genito-urinary tract. All the sections are well illustrated, and the uniformity of the drawings throughout is particularly commendable. With few exceptions the balance of the text is similarly preserved, though in some instances the contributions of British urologists might appear to have been overlooked—as in the management of hydronephrosis and urethral stricture. Emphasis on surgical treatment

has necessarily restricted reference to alternative methods in other instances—as, for example, cancer of the prostate—but the purpose of the book is well sustained. In short it can be strongly commended to all who practise surgical urology, and especially to those who seek rapid and reliable reference to recent developments in their craft.

J. D. FERGUSSON.

## Macabre Bedtime Stories

The Scientific Aspects of Forensic Medicine. By C. J. Polson, M.D., F.R.C.P. (Pp. 144+vii. 7s. 6d.) Edinburgh: Oliver & Boyd. 1969.

Professor Polson says in the preface to this interesting little book that he has in mind the general reader as his audience, but more especially the police officer or lawyer. fact, this is a fascinating volume even for those who have a professional lifetime in legal medicine-to whom it might best be described as an aide-mémoire on scientific aspects not commonly encountered in forensic practice. The expert knows where to go for more exhaustive information, while the layman will probably be fascinated by the slightly desultory application of science to the investigation of crime. Indeed, the expert needs to know where to go, since there is no true bibliography-only a list of major works on the subjects and some obscure reference to "Dr. Gee's case" and "Dr. Manock's case 1967," which are presumably intended to give the text some authenticity but in fact give the impression of rather hurried editing.

At a cost of 37.5 new pence this book is worth buying, and fits in somewhere between the light reading of the bedside table and the well-thumbed "steppingstones" series of the serious library for the medical reader.

R. DONALD TEARE.

## Parenteral Feeding

A Clinical Guide to Intravenous Nutrition. By P. C. Allen, M.B., L.D.S., and H. A. Lee, B.Sc., M.R.C.P. (Pp. 174+xi; illustrated, 45s.) Oxford: Blackwell. 1969.

This short monograph on intravenous feeding deserves to be widely read, because only in comparatively recent years has it become feasible to supply complete nutritional requirements parenterally. As a result, while intravenous correction of dehydration and electrolyte depletion is commonplace, other parenteral replacement therapy is usually limited to 5% glucose, which supplies a few calories but is otherwise inadequate.

The authors of this monograph make out a good case for the employment of complete parenteral feeding in a variety of clinical situations, such as after major trauma if natural feeding is impaired, after severe surgical operations, in serious disease of the gastrointestinal system, internal fistulae such as gastrocolic fistula, in severe burns, and in many patients already debilitated when they develop a disease or a surgical condi-

tion. In any of these circumstances a patient may suffer from the effects of starvation in addition to those of his primary illness.

The book begins with a short historical introduction which sets the background in succinct terms. Next comes a chapter on the biochemical principles involved in parenteral nutrition which is helpful for the average reader. Then follows an important chapter on pharmacological principles. Modern amino-acid mixtures are virtually non-toxic, though some workers have found local thrombophlebitis a troublesome complication. For the body to utilize the amino-acids to build up proteins, it is essential that their administration should be accompanied by other sources of calories-namely, carbohydrates, alcohol, or fats. Ethanol is a safe source of calories when used in correct con-Among the carbohydrates, centration. fructose has some advantages over glucose, especially in encouraging the utilization of alcohol. The intravenous use of fat emulsions has been associated with a number of complications, notably liver dysfunction, but modern preparations seem to be relatively safe, particularly those made from soya bean oil; the actual process of emulsification to yield a stable emulsion of small particles of the order of  $2\mu$  in diameter is crucial.

There are several chapters dealing with the clinical applications of parenteral nutrition, including one by Professor Harold Ellis on its uses in paediatrics. The book ends with a valuable chapter on how to design an intravenous diet, together with some important practical observations.

It seems to me that it will not be many years before we are accustomed to using complete parenteral feeding almost as readily as we now think of using intravenous glucose and saline. If so, this monograph will have served its purpose. In the meantime, it can be recommended to all hospital doctors.

S. C. TRUELOVE.

## Blood Groups

Human Blood and Serum Groups. By Professor Otto Prokop and Professor Gerhard Uhlenbruck. (Pp. 891+xvi; illustrated. 315s.) London: Maclaren. 1969.

This massive volume has many merits, but it appears at an unfortunate time, for many of those interested in its contents will already have bought two excellent books which between them cover much of the same ground: Blood Groups in Man, 5th edition, by Race and Sanger, and Genetic Markers in Human Blood, by Giblett (see B.M.J., 15 March 1969, p. 698, and 18 October 1969, p. 155).

It should at once be said, however, that the emphasis is different, for the present book gives more space to immunology and biochemistry and less to the broader aspects of genetics than the other two, though there is frequent mention of forensic genetics. main account of the blood groups follows closely that of Race and Sanger, but is less detailed. It is, however, followed by a very full account of what is known of the biochemistry of these factors, a subject to which the second author has made important contributions. Among the serum groups the haptoglobins and the Gm groups are treated at some length, and the other systems more briefly, with the curious exception of the