Bonding of Fractures by Plastic Adhesives, With Further Applications in a Research Project. By Bernard BLOCH, M.B., Ch.B.(Rand.), F.R.C.S.(Eng.). 10×7½ in. Pp. 23, with 24 figures. Sydney, Australia: Distributed by the Surgical Research Centre, Prince of Wales Division of Sydney Hospital.

This is a brief report of preliminary experiments with an industrial adhesive, an epoxy resin, which has been used in the repair of fractures of long bones in sheep and in man. An outline of the general chemistry of epoxy resins is given and the toxicity of certain constituents of the adhesive is mentioned. A full analysis of the particular resins employed is not given. The curing or polymerisation of an epoxy system is an exothermic reaction, but with the particular resins used the temperature rise does not seem to have been of importance. No toxic effects have been demonstrated in any of the experiments. The ingredients of the adhesive were supplied in collapsible tubes, the resins being mixed with the catalyst about eight minutes before use. The setting of the adhesive occurred twenty-three to twenty-five minutes later. The fracture site was exposed in the usual way and the bone cleared of all tissue, including the periosteum, for two inches on either side of the fracture. In the early experiments a polythene intramedullary plug was used. A thick adhesive mix was applied to the bone ends. Glass-fibre cloth impregnated with a thin resin mix was then applied around the bone. The adhesive was used in man in the treatment of twenty-three fractures of long bones. Some post-operative inflammatory reactions with bone resorption occurred. In seven cases the patients were able to resume full activity and there was both radiological and clinical evidence of bony union. In the other sixteen cases pseudo-arthritis, infection, sequestration and mechanical failure of the glue occurred.

The experimental work so far reported does not justify at the present time the further use of this adhesive for the treatment of fractures in man.—John T. SCALES.

The Royal Edinburgh Hospital for Sick Children, 1860–1960. By Douglas GUTHRIE, M.D., F.R.C.S.Ed., F.R.S.E., Consulting Aural Surgeon, Royal Edinburgh Hospital for Sick Children. With seven other contributors. 9×6½ in. Pp. xii+75, with 34 figures. Index. 1960. Edinburgh and London: E. & S. Livingstone Ltd. Price 17s. 6d.

A centenary is a good excuse for looking back to the beginning and then trying to look into the future. Dr Douglas Guthrie has gathered together the facts about the foundation of the “ Sick Kids ” in Edinburgh with some short reminiscences, both of the staff and by the staff, administrative, medical and nursing. The change in the type of patient and the methods of treatment during what is historically so short a period as one hundred years, would be startling were it not commonplace. One hardly dares to imagine what change the next century will bring.

Professor R. W. B. Ellis points out one possible development for the immediate future when he writes of “ improving child health throughout the world.” Edinburgh has the duty to do in the backward areas of the world what its medical school, of which this hospital is a part, has done in the city's own back streets.

Orthopaedic surgeons may be interested to notice that except for the appointment of a plastic surgeon after World War II and of a chaplain and a psychiatrist following the establishment of the National Health Service, the orthopaedic department was the last recognised special department to be given its own specific head, an appointment made as recently as 1937. Nevertheless a most important place is occupied by two of the Hospital's surgeons in the story of bone and joint tuberculosis. Harold Stiles and his pupil and successor John Fraser gathered much of their experience at this Hospital, two out of the very distinguished staff which has given the Hospital its great reputation for teaching and for treatment.—A. White FRANKLIN.

Outline of Orthopaedics. By John Crawford ADAMS, M.D., F.R.C.S., Consultant Orthopaedic Surgeon, St Mary's Hospital, London, and St Vincent's Orthopaedic Hospital, Pinner; Assistant Editor, *Journal of Bone and Joint Surgery*. Third edition. 9×6 in. Pp. vii+440, with 313 figures. Index. 1960. Edinburgh and London: E. & S. Livingstone Ltd. Price 35s.

That *Outline of Orthopaedics* should have reached its third edition within four years of its birth is testimony enough to its popularity amongst undergraduate medical students, for whom it is primarily intended; the contents of this book are more than adequate for the qualifying examinations.

The present edition, which follows exactly the pattern of the last, has twelve pages more, because of the addition of a dozen illustrations, an increased size in some of the original illustrations and some addition to the text—notably a discussion of electro-diagnosis in neuromuscular conditions and a fuller

description of treatment by manipulation. That the book should not be enlarged greatly is not surprising, because in recent years there has been hardly anything new in the orthopaedic world for undergraduate consumption.

I enjoyed reading *Outline of Orthopaedics*; I found it well illustrated, concise and reasonably accurate, which one would expect from this clear-thinking author. The sections on clinical examination are really first class. There are a few minor criticisms one could offer: for example, the differential diagnosis of a lateral protrusion of a cervical disc is discussed but not that of a central one; and it was surprising to read that a tuberculous abscess should be drained.

It is to be hoped that in future editions this book will not expand, but that every endeavour will be made to keep it within reasonable bounds for the medical student.—David TREVOR.

Body Fluids in Surgery. By A. W. WILKINSON, Ch.M., F.R.C.S.E., F.R.C.S., Nuffield Professor of Paediatric Surgery, The Institute of Child Health of the University of London; Surgeon, The Hospital for Sick Children, Great Ormond Street, London. Second edition. 9×6 in. Pp. xi+276, with 12 figures and 30 tables. Index. 1960. Edinburgh and London: E. & S. Livingstone Ltd. Price 21s.

In the four years since its original publication Professor Wilkinson's monograph has become established as one of the outstanding British texts on problems of body fluid in surgery, and its virtues are widely recognised. In this new edition the whole text has been thoroughly revised to incorporate recent advances. In addition to including new material about the problems of surgery in hot climates, two major alterations have been made. First, the section on acid-base balance has been rewritten in terms of the Bronsted-Lowry convention, with a consequent emphasis on the H-ion. Professor Wilkinson is to be congratulated on this alteration. The basic concepts involved in the understanding of acid-base balance are not easy, but hitherto their comprehension has been made unduly difficult by the confusing terminology in which they were discussed, and this chapter should be of great assistance to anyone wishing to understand the processes involved in the maintenance of acid-base balance. Secondly, there is a new chapter on fluid balance in paediatric surgery. This chapter emphasises that in infants the problems differ not only quantitatively but also qualitatively from those in adults, and the careful detailed information will be of value to all those responsible for the surgical care of young children.

This monograph is an excellent, up-to-date, concise review of an increasingly important aspect of surgical care. Although in places the language is obscure, in general the information is clearly set out, and this book can be highly recommended as a guide to the physiology and pathology of the body fluids.—L. P. LE QUESNE.

Rose and Carless Manual of Surgery. Consulting Editor: Sir Cecil WAKELEY, *Bt.*, *K.B.E.*, *C.B.*, LL.D., D.Sc., M.Ch., F.R.C.S., F.R.S.E., F.A.C.S., F.R.A.C.S., Fellow of King's College, London; Past President of the Royal College of Surgeons of England; Consulting Surgeon, King's College Hospital, and to the Royal Navy. Editors: Michael HARMER, M.A., M.B.(Cantab.), F.R.C.S., Surgeon, Royal Marsden Hospital and Institute of Cancer Research (Royal Cancer Hospital), Paddington Green Children's Hospital and St Andrew's Hospital, Dollis Hill, London; and Selwyn TAYLOR, M.A., D.M., M.Ch.(Oxon.), F.R.C.S., Surgeon, King's College Hospital, Belgrave Hospital for Children, and Hammersmith Hospital; Lecturer in Surgery, Postgraduate Medical School, London. Assisted by fifteen contributors. Nineteenth edition. 10×7 in. Pp. xv+1,389, with many figures. 1960. London: Baillière, Tindall and Cox. Price 84s.

The nineteenth edition of Rose and Carless's Manual of Surgery has fifteen contributors, two editors and a consulting editor. The regional layout, form and illustrations of previous editions are recognisable, but the text has largely been rewritten and new illustrations added, with sections on electrolyte deficiencies, surgical infection and chemotherapy. Orthopaedics, including injuries, are well covered in 350 pages, about a quarter of the book, peripheral nerve injuries being included separately under the nervous system. This remains a sound general text-book of surgery particularly intended for final year students and postgraduates but also a good reference book for surgeons wishing to refer to progress in other fields of surgery. The text-book is now published in one volume instead of two, but remains of reasonable size, and I think this adds to its attraction.—Charles MANNING.