

varieties of this accumulation of uveal diseases, and advises on specific as well as on non-specific treatment where possible. This work brings up to date our present incomplete knowledge of a baffling problem and will be of interest and value to all practising ophthalmologists.

HAROLD RIDLEY.

## *Stones in the Kidney*

**Proceedings of the Renal Stone Research Symposium held at Leeds April 1968.** Edited by A. Hodgkinson, D.Sc., and B. E. C. Nordin, F.R.C.P. (Pp 332+xv; illustrated. 70s.) London: J. & A. Churchill. 1969.

This book contains the 31 papers read at an international symposium on renal lithiasis, which was devoted almost entirely to recent research into the aetiology and pathogenesis of calcium stones. The epidemiological studies which are described in the opening chapters contain some fairly convincing evidence that external factors such as diet, climate, and occupation are of aetiological significance, but throw no light on the precise role of such factors in the pathogenesis of stones. It is, however, interesting, if somewhat depressing, to learn that the sharp decline in endemic bladder stones in children which follows improvements in standards of living is succeeded in turn by a rise in the incidence of renal calculi in adults.

The text continues with papers on a wide variety of topics including the nature and role of the organic matrix, the composition of calculi as determined by x-ray diffraction studies and quantitative chemical analysis, the anatomical sites at which the nuclei of calculi first become visible, and the nature and role of inhibitors of mineralization. This section of the book contains a number of impressive papers, but it has to be remembered that there is still no convincing evidence that some of the factors studied are actually involved in the pathogenesis of calcium stones. The majority of the remaining papers centre around the question of whether or not the formation of calcium stones can be fully explained by alterations in urine composition which lead to oversaturation with the substances concerned. Although no clear-cut answer to this problem was forthcoming, it is encouraging to learn that, at long last, attempts are being made to measure the relevant ion-activity products rather than the total urinary calcium, oxalate, and phosphate.

Perhaps the most obvious conclusion to be drawn from this symposium is that the problems and uncertainties which surround the formation and growth of calcium stones are not going to yield tamely to the assault

of modern research methods. However, many of the papers in this book contain the germs of new ideas which may well prove fruitful. It is not a book for the general reader, but should prove invaluable to everyone who is engaged on research into renal lithiasis. It is well produced and, by present day standards, modestly priced; and a special word of praise is due to the editorial committee who would seem to have hit on one of the best ways of publishing a written account of an international symposium.

A. R. HARRISON.

## *Hip Arthroplasty*

**Acrylic Cement in Orthopaedic Surgery.** John Charnley. (Pp. 131; 60s.) E. & S. Livingstone. 1970.

The title of this book suggests a general review of the use of acrylic cement in orthopaedic surgery, but in fact refers mainly to the author's well-known low friction arthroplasty, and only the briefest mention of other actual and possible uses of the material is made.

The author relates his experience in using acrylic cement over eleven years, and much of what he writes will be familiar to visitors to the Centre for Hip Surgery. In addition, Mr. Charnley has collected a considerable body of supportive evidence from other sources about the inertness and non-toxicity of methylmethacrylate in the tissues of the human body over long periods. He also advances histological evidence for the absence of movement of the cement/prosthesis complex in the upper femoral shaft, a feature which he amply demonstrates as essential to the success of the device.

The style is inimitable; reading it, one might be back in the corridors of Wrightington, listening to the author expounding his views with characteristic enthusiasm and vigour. The undoubted success in the long-term of the low friction arthroplasty is being recognized by its rapidly increasing adoption in orthopaedic centres throughout Britain, and this book is a useful source of both theoretical argument and practical advice on its use and problems associated with it.

J. A. HAMILTON.

## *Neural Ultrastructure*

**The Fine Structure of the Nervous System: The Cells and Their Processes.** Alan Peters *et al.* (Pp. 198; \$18.75.) Harper & Row. 1970.

This is an account of the cells that constitute the nervous system. It starts with an interesting historical review of the morpho-

logy of the neuron, and then proceeds to a detailed description of the nerve cell itself, its dendrites, axon, and the surrounding cellular sheathes, of both the peripheral and central nervous systems. The constituent cells of the neuroglia are then considered, and the book ends with an account of synapses and the neuropil.

The descriptive writing is notable not only for its detail but also for its clarity, and the text is a pleasure to read. Included are 61 full-page electron micrographs of animal nervous tissue, taken mostly from the rat. These are well produced and adequately described. The references are copious and up to date. In all, this is a first-class monograph, and workers interested in the cellular structure of the nervous system will find it of great value.

MARTIN ISRAEL.

## *Health and Well Being*

**Endurance Fitness.** Roy J. Shephard. (Pp. 246; 63s.) Oxford University Press. 1970.

Perhaps one of the greatest hazards to health in a technically advanced country is the lack of fitness of the average member of the population. While most people probably think they know what constitutes fitness a precise definition has eluded physiologists. First one must answer the question: "Fitness for what?"

As the author points out in the introduction to his book, most ordinary citizens, if interested in fitness at all, are concerned to be able without distress to undertake the activity of moderate duration required in their work and recreation. This fitness he calls "endurance fitness," and he proceeds to offer a definition acceptable to a physiologist. A physician is specially concerned with the suggestion that lack of endurance fitness increases the risk of cardiovascular disease, and that a fit person is more likely than an unfit one to remain a productive member of the community. The author then proceeds methodically to examine the physiology of endurance fitness and examine its impact upon health and nutrition, and the relationship of muscular development to fitness. Of particular interest and considerable potential help to medical men is the chapter on the use of tobacco, alcohol, and drugs.

This is a book well worth reading by those who advise their patients about the sort of exercise they should take and about related matters which will contribute to a state of health and well-being. While being useful for the human physiologist it is worthy of a much wider readership.

E. S. WILLIAMS.

## **Books Received**

*Books noticed here may be reviewed later*

**Frontiers of Alcoholism:** Ed. Morris E. Chafetz, M.D. *et al.* (Pp. 424; \$12.50.) Science House. 1970.

**General Anesthesia and the Central Nervous System:** A Basic Science and Clinical Consideration. Leonard C. Jenkins, F.R.C.P. (Pp. 544; 160s.) E. & S. Livingstone. 1970.

**Advances in Surgery:** Vol. 4. Ed. Claude E. Welch. (Pp. 413; 164s.) John Wiley. 1970.

**Peripheral Manipulation:** G. D. Maitland, A.U.A. (Pp. 176; 60s.) Butterworths. 1970.

**Clinical Gastroenterology:** Howard M. Spiro, M.D. (Pp. 1011; 350s.) Collier-Macmillan. 1970.

**The Distribution of the Blood Groups in the United Kingdom:** Ada C. Kopeč. (Pp. 146; 170s.) Oxford University Press. 1970.

**An Atlas of Children's Surgery:** Robert E. Gross, M.D. (Pp. 191; 161s. 6d.) W. B. Saunders. 1970.

**Bleeding Problems in Clinical Medicine:** Armand J. Quick, M.D. (Pp. 225; 81s.) W. B. Saunders. 1970.

**Psychology: In Relation to Medicine.** 3rd edn. R. M. Mowbray, M.A., and T. Ferguson, C.B.E., F.R.C.P. (Pp. 421; 36s.) E. & S. Livingstone. 1970.