

There can be little doubt that subtraction techniques have greatly improved the quality of reproductions by demonstrating major vessels very clearly, but even some very small minute branches of the cerebral circulation are well outlined, particularly in the areas of the skull where overlying bone structures tend to obscure detail. The simple photographic technique has found its place as a routine method and is now fully accepted, but one wonders how much more will be gained by the much more complex and expensive technique of subtraction television and colour enhancement. Some of the colour reproductions are of interest, but they do not appear to be of any help in providing additional detail and so make film interpretation easier.

The monograph is short and very well illustrated, with good examples of a variety of pathological conditions, but there is very little new information in the text apart from the points on photographic techniques already mentioned. Its scope and interest is therefore somewhat limited and only of help to those who are particularly interested in the newer techniques of subtraction.

R. E. STEINER.

Technique in Neurosurgery

Operative Neurosurgery. Vol. 1. By Ludwig G. Kempe, Col., M.C., U.S.A. (Pp. 269+xii; illustrated. 360s.) London: William Heinemann, 1968.

It is the function of textbooks of operative surgery to teach basic principles, to provide a source of information from which experi-

ence may be enlarged, and to be a stimulus for further exploration. The first volume of this work describes most of the major operative procedures of the anterior and middle fossae (it is not confined to vascular disease as the subtitle suggests), and it fulfils all these criteria. The surgical anatomy of the brain is illustrated and described in a most succinct and clear way which excels many anatomical texts. Duplication is avoided, and the more complicated procedures are made to appear relatively simple by the excellence of the description and drawings. A three-dimensional understanding of anatomy is the foundation on which the book is built, and the operative procedures form a natural sequel.

There are many ways in which the techniques described differ from the practice of other neurosurgical centres, but as they have been well tried the point is of relatively minor importance. The author is aware of this problem, and rightly maintains that flexibility of technique is desirable provided the basic principles are sound. The operations are described and illustrated step by step according to a regional arrangement, and not according to the lesion. Diagnostic procedures such as arteriography and ventriculography are omitted, and the treatment of hydrocephalus has been purposely left out. There is, however, a sufficiently detailed outline of the basic techniques to provide guidance for certain other operations, such as leucotomy, which are not discussed.

The second volume will be concerned with the posterior fossa, spine, spinal cord, and the peripheral and autonomic nervous systems. Together they should provide a very useful and beautiful, but expensive, work of reference. This will be sought for not only by those who are being introduced to neurosurgery for the first time, but by all those

who still seek to improve their operative technique.

PETER H. SCHURR.

Mutation and Growth

An Inquiry Concerning Growth, Disease, and Ageing. By Philip R. J. Burch, M.A., Ph.D. (Pp. 213+vi; illustrated. 63s.) Edinburgh: Oliver & Boyd, 1968.

The success that attended Burnet's theoretical formulations of immunological tolerance and clonal selection had many consequences for biological science. They provoked a good deal of additional speculation, including those of Dr. Philip Burch, a physicist with biological leanings, whose views this monograph presents.

Dr. Burch's hypothesis, briefly, is that somatic mutation, in particular cumulative random change in the characteristics of body cells, lies at the root of ageing and of much disease. Linked with this theory is the suggestion, derived from the author's collaboration with Professor Burwell, that the lymphoid system plays a primary role in the control of growth. Comments on Dr. Burch's theories range from the statement that his place alongside the great scientists of all time is assured to the comment that his formulae prove that membership of the Privy Council is the result of somatic mutation. A middle-of-the-road approach would suggest that somatic mutation is a likely cause of some manifestations of senescence, though it would be difficult to say when and where this idea was first advanced.

Dr. Burch puts his case forward in a lively and readable fashion, and medical practitioners with an interest in mathematics in relation to biological theory will find the book stimulating.

W. G. SPECTOR.

Books Received

Books noticed here may be reviewed later.

Cybernetics. By John F. Young. (Pp. 139. 21s.) London: Iliffe Books, 1969.

Lung Cancer. A Study of Five Thousand Memorial Hospital Cases. Edited by William L. Watson, M.D. (Pp. 584+xv; illustrated. 265s.) London: Henry Kimpton, 1969.

The Mentally Abnormal Offender and the Law. An Inquiry into the Working of the Relevant Parts of the Mental Health Act, 1959. By Henry R. Rollin, M.D., D.P.M. (Pp. 139+xvi. Hard cover, 30s.; flexi-cover, 20s.) Oxford: Pergamon Press, 1969.

Symposia Series in Immunobiological Standardization. Vol. 10. International Symposium on Biological Assay Methods. Edited by R. H. Regamey. (Pp. 262+xiv; illustrated. 84s.) Basle and New York: S. Karger, 1969. U.K.: Academic Press.

Medical Interviewing. A Programmed Manual. By Robert E. Froelich, M.D., and F. Marian Bishop. (Pp. 116+ix, 43s.) London: Henry Kimpton, 1969.

Water and Electrolyte Metabolism and Acid-base Balance. By Edward Muntwyler, Ph.D. (Pp. 169+viii; illustrated. 53s.) London: Henry Kimpton, 1969.

Pulmonary Emphysema and Related Lung Diseases. By Theodore Rodman, M.D., and Francis H. Sterling, M.D. (Pp. 468+xii; illustrated. 247s.) London: Henry Kimpton, 1969.

The Genesis of the Classical Conditioned Response. By Irene Martin, Ph.D., and A. B. Levey, M.A. (Pp. 145+xi. 67s.) Oxford: Pergamon Press, 1969.

Textbook of Immunopathology. Edited by Peter A. Miescher, M.D., and Hans J. Muller-Eberhard, M.D. (Vol. 1, pp. 384+xxiv; illustrated. \$19.75.) (Vol. 2, pp. 420+xxi; illustrated. \$24.75.) London and New York: Grune & Stratton, 1969.

Interdisciplinary Topics in Gerontology. Vol. 4. Decision Making and Age. Edited by A. T. Welford and J. E. Birren. (Pp. 166+viii. 88s.) Basle and New York: S. Karger, 1969. U.K.: Academic Press.

Diseases of the Nose, Throat, and Ear. 9th edition. By I. Simson Hall, F.R.C.P.Ed., F.R.C.S.Ed., and Bernard H. Colman, F.R.C.S.Ed. (Pp. 443+xii; illustrated. 35s.) Edinburgh and London: E. & S. Livingstone, 1969.

Cerebral Vascular Diseases. Sixth Conference. Edited by James F. Toole, Robert G. Siekert, and Jack P. Whisnant. (Pp. 280+viii; illustrated. \$8.75.) London and New York: Grune & Stratton, 1969.

The Central Nervous System. Some Experimental Models of Neurological Diseases. Edited by Orville T. Bailey, M.D., and David E. Smith, M.D. (Pp. 364+xiii; illustrated. 170s.) Baltimore: Williams & Wilkins, 1969. Edinburgh: E. & S. Livingstone.

The Proliferation and Spread of Neoplastic Cells. A Collection of Papers Presented at the Twenty-first Annual Symposium on Fundamental Cancer Research, 1967. (Pp. 794+xiii; illustrated. 160s.) Baltimore: Williams & Wilkins, 1969. Edinburgh: E. & S. Livingstone.

Malabsorption. Proceedings of the Fourth Pfizer International Symposium. Edited by Ronald H. Girdwood, M.D., and Adam N. Smith, M.D. (Pp. 351; illustrated. 80s.) Edinburgh: Edinburgh University Press, 1969.

A Nurse's Guide to Anaesthetics, Resuscitation, and Intensive Care. By Walter Norris, F.F.A. R.C.S., and Donald Campbell, F.F.A. R.C.S. 4th edition. (Pp. 164+viii; illustrated. 25s.) Edinburgh: E. & S. Livingstone, 1969.

Congenital Facial Anomalies with Neurologic Defects. A Clinical Atlas. By John A. Aita, M.D., Ph.D. (Pp. 336+xv; illustrated. \$18.50.) Springfield, Illinois: Charles C. Thomas, 1969.

Immunology in Clinical Medicine. By J. L. Turk, M.C.Path. (Pp. 226+xi; illustrated. 40s.) London: William Heinemann, 1969.