

were it not for the rather stiff price. In most undergraduate curricula, apart from those of adequate honours courses, the lectures and practical classes are enough to stimulate interest and create a picture, but insufficient to supply any deep or wide understanding of the biology of bacteria. Chemistry, physiology, biochemistry, physics, genetics, taxonomy, and other disciplines are adequately treated in their own right in other textbooks and monographs. Here they are shown as part of the scientific study of bacteria as bacteria. The exercise is well done, with good examples, adequate references, insight, and imagination. This is not a book for the elementary student or for the worker whose interest is essentially the applications of bacteriology within his particular sphere. Rather it is a book for the graduate who desires to study bacteria as bacteria with a reasonable background of general science but necessarily without deep knowledge of all the disciplines used in bacteriology. The result is a book that will help the reader to become

a better bacteriologist and to gain a good insight into scientific method in general.

J. W. HOWIE.

Progress in Age Research

Biological Mechanisms of Aging. By Howard J. Curtis. (Pp. 133+xiii; illustrated. \$6.50.) Springfield, Illinois: Charles C. Thomas. 1966.

Dr. Curtis's lecture is a review of the cytogenetic and mutational theories of aging processes; his own thinking has now moved from simple mutation. It is a hazard of such reviews that they are overtaken by experiment, and mutation in somatic cells is already giving place as a subject for age studies to free-radical and cross-linking effects, and to the behaviour and stability of lysosomes. This, accordingly, is a brisk and comprehensive discussion of the progress of age research

as it was a couple of years ago. The author, who has himself done much to promote its obsolescence, will certainly not regret that he has been beaten to the post by the advance of the subject. The condensation necessary in a shortish lecture does, however, lead to some confusion between the discussion of actual mutation of single genes, which now seems an unlikely cause of age deterioration, and other forms of chromosomal damage. Since one of the author's own chief contributions to age theory has been the recognition of the importance of repair processes and of chromosomal stability in the determining of normal and of post-irradiation lifespans, the difference is a critical one, and the non-cytogeneticist reader risks missing the direction in which gerontological thinking is developing. These considerations apart, however, Dr. Curtis has provided an excellent introduction to the type of problem now concerning gerontologists.

ALEX COMFORT.

Books Received

Review is not precluded by notice here of books recently received.

Moncrieff's Nursing and Diseases of Sick Children. Edited by A. P. Norman, M.D., F.R.C.P. (Vol. 1: pp. 292+xvi; illustrated. 30s. Vol. 2: pp. 451+xvi; illustrated. 42s.) London: H. K. Lewis. 1966.

Nuclear Medicine. Edited by William H. Bland, M.D. (Pp. 819+xvii; illustrated. £7 4s.) New York, Toronto, Sydney, and London: McGraw-Hill. 1965.

Developmental and Metabolic Control Mechanisms and Neoplasia. Symposium, Houston, Texas, 1965. (Pp. 514. £6 8s.) London and Edinburgh: E. & S. Livingstone. 1966.

Drug Identification. Edited by C. A. Johnson, B.Sc., B.Pharm., F.P.S., F.R.I.C. (Pp. 133+ix. 35s.) London: Pharmaceutical Press. 1966.

A Prospective Study of the Incidence of Mental Disorder. By Olle Hagnell. (Pp. 175. 37 Swedish Kroner.) Stockholm: Scandinavian University Books. 1966.

Depth Psychology. A Critical History. By Dieter Wyss. Translated by Gerald Onn. (Pp. 568. 52s.) London: George Allen & Unwin. 1966.

Gastroscopic Photography. By Robert S. Nelson, M.D. (Pp. 122; illustrated. 73s.) London: Lloyd-Luke. Chicago: Year Book Medical Publishers. 1966.

Recent Advances in the Diagnosis of Cancer. Conference, Houston, Texas, 1964. (Pp. 310; illustrated. 90s.) London: Lloyd-Luke. Chicago: Year Book Medical Publishers. 1966.

Computers in the Hospital Service. Symposium, Glasgow, 1965. (Pp. 66. No price given.) Glasgow: Western Regional Hospital Board. 1966.

Photoelectric Colorimetry in Clinical Biochemistry. By G. E. Delory, M.Sc., Ph.D. (Pp. 80+xi. 25s.) London: Hilger & Watts. 1966.

The Year Book of Urology. 1965-1966 Series. Edited by John T. Grayhack, M.D. (Pp. 391; illustrated. 68s.) London: Lloyd-Luke. Chicago: Year Book Medical Publishers. 1966.

Treatment of Patients with Clefts of Lip, Alveolus and Palate. Symposium, Hamburg, 1964. Edited by Karl Schuchardt. (Pp. 237; illustrated. DM. 84.) Stuttgart: Georg Thieme. 1966.

Clinical Foot Roentgenology. An Illustrated Handbook. By Felton O. Gamble, D.S.C., F.A.C.F.R., Ed.D.(Hon.), and Irving Yale, D.S.C., F.A.C.F.R., Ed.D.(Hon.). (Pp. 295+x; illustrated. £6 4s.) Edinburgh and London: E. & S. Livingstone. 1966.

Undergraduate and Postgraduate Teaching in Psychiatry. Symposium, Little Bay, N.S.W., 1965. Edited by L. G. Kiloh, M.D., B.Sc., M.R.C.P., D.P.M., and J. G. Andrews, M.D., D.P.M. (Pp. 164. \$A.3.00.) Randwick: New South Wales University Press. 1966.

A Short History of Public Health. 2nd edition. By C. Fraser Brockington, M.A., M.D., D.P.H., B.Chir., M.Sc., M.R.C.P. (Pp. 240+vii. 30s.) London: J. & A. Churchill. 1966.

The Preparation of Decalcified Sections. By Edward B. Brain, B.Sc., F.I.I.P., F.R.P.S. (Pp. 266+x; illustrated. \$12.00.) Springfield, Illinois: Charles C. Thomas. 1966.

Current Diagnosis. Edited by Howard F. Conn, M.D., Robert J. Cloherty, M.D., and Rex B. Conn, Jun., M.D. (Pp. 843+xxix; illustrated. £6 13s.) Philadelphia and London: W. B. Saunders. 1966.

Pulmonary Tuberculosis. By R. Viswanathan, B.A., M.D., M.R.C.P., T.D.D., F.C.C.P. (Pp. 150+xiv; illustrated.) London: Asia Publishing House. 1966.

Research on Steroids. Transactions of 2nd Meeting of International Study Group for Steroid Hormones. Vol. 2. Edited by Cataldo Cassano. (Pp. 553+xv; illustrated. No price given.) Rome: Il Pensiero Scientifico. 1966.

Correlative Neurosciences. Part B: Clinical Studies. Progress in Brain Research. Vol. 21B. Edited by T. Tokizane and J. P. Schädé. (Pp. 437+xi; illustrated. £7 5s.) Amsterdam, London, and New York: Elsevier. 1966.

Pulmonary Diseases and Anomalies of Infancy and Childhood. By Milton I. Levine, M.D., F.A.C.C.P., and Armond V. Mascia, M.D., F.A.C.C.P. (Pp. 368+xii; illustrated. 96s.) New York: Harper & Row. 1966.

A Traveller's Guide to Health. By Lieutenant-Colonel James M. Adam, B.Sc., M.B., Ch.B. (Pp. 189+x; illustrated. 12s. 6d.) London: Hodder & Stoughton. 1966.

An Introduction to Blood Group Serology. 3rd edition. By Kathleen E. Boorman and Barbara E. Dodd, M.Sc., Ph.D. (Pp. 374+x; illustrated. 60s.) London: J. & A. Churchill. 1966.

The Corticovisceral Theory of the Pathogenesis of Peptic Ulcer. By K. M. Bykov and I. T. Kurtsin. (Pp. 321+xxx; illustrated. 70s.) Oxford: Pergamon. 1966.

The Vestibular System and Its Diseases. Symposium, Philadelphia, 1964. Edited by Robert J. Wolfson, M.D. (Pp. 557; illustrated. 96s.) London: Oxford University Press. 1966.

Die Lymphographie. In der Klinischen Praxis. By Dr. Friedrich Sieber. (Pp. 153; illustrated. £5 1s. 6d.) Leipzig: Georg Thieme. 1966.

Intensive Care and Resuscitation in Heart Disease. Symposium, London, 1965. (Pp. 64; illustrated. 12s. 6d.) London: Chest and Heart Association. 1966.

Basic Concepts of Inborn Errors and Defects of Steroid Biosynthesis. Symposium, Birmingham, 1965. Edited by K. S. Holt, M.D., M.R.C.P., D.C.H., and D. N. Raine, Ph.D., B.Sc., M.B., B.S. (Pp. 80+vii; illustrated. 15s.) Edinburgh and London: E. & S. Livingstone. 1966.

The Birth of Language. The Case History of a Non-Verbal Child. By Shulamith Kastein and Barbara Trace. (Pp. 182+x. \$6.75.) Springfield, Illinois: Charles C. Thomas. 1966.

Psychopathic Disorders. Edited by Michael Craft, M.D., F.R.C.P., D.P.M. (Pp. 234+x. 25s.) Oxford: Pergamon. 1966.

The Physiology of Trematodes. By J. D. Smyth. (Pp. 256+xvi; illustrated. 37s. 6d. Paper 25s.) Edinburgh and London: Oliver & Boyd. 1966.

Orthopaedics for Nurses. Edited by M. C. Wilkinson, F.R.C.S., and G. R. Fisk, F.R.C.S. (Pp. 381; illustrated. 45s.) London: Faber & Faber. 1966.

An Introduction to Psychopathology. 2nd edition. By D. Russell Davis, M.A., M.D., F.R.C.P., D.P.M. (Pp. 158+x. 16s.) London: Oxford University Press. 1966.