

tion of radiology to the study of normal variation in early skeletons. An excellent summary of the available palaeopathological evidence is given by A. T. Sandison, and he illustrates it with some of his own very fine histological sections. W. A. Marshall writes an interesting article on Harris's lines of arrested growth in bone. He shows that the problems of their aetiology, persistence, and disappearance are much more complicated than had seemed likely a few years ago. Their relationship to disease and their use as indicators of disease frequency in ancient populations will have to be clarified before we can know precisely how to interpret them.

The ecological aspects of palaeodemography in several peri-Mediterranean groups from Palaeolithic through to Classical times are discussed by J. L. Angel. He rightly places great emphasis on the occurrence of enamel hypoplasia, but perhaps overstates its significance as a pointer to episodes of starvation rather than disease. Imre Lengyel expounds a biochemical technique for examining early skeletons, and suggests that the sex, age, and blood group of ancient individuals may be determined chemically. It is too readily assumed in this article that conditions of inhumation tend to be uniform throughout any cemetery. There is impressive evidence that soil chemistry may vary dramatically in the space occupied by a single burial.

This book does not entirely avoid the patchwork quality which so often bedevils the publishing of these symposia. But it achieves a fair measure of unity, and most of the contributions are of a standard to compensate for the somewhat high price of the work. Its format and production are tidy if unexciting.

CALVIN WELLS.

Origin of the Mayo Clinic

The Doctors Mayo. By Helen Clapesattle. (Pp. 426+xiii; illustrated. 21s. 6d.) Minneapolis: University of Minnesota Press. London: Oxford University Press. 1968.

This book tells the remarkable story of the origin of the Mayo Clinic and Foundation. It is of absorbing interest.

William Worrall Mayo, a native of Salford, was 26 years old in 1845 when he emigrated to the United States. There he apprenticed himself to a doctor, obtained a medical degree, married in 1851, and for several years, with varying success, tried to establish a practice. When the Civil War broke out he was in Minnesota and was made surgeon-examiner of recruits for that State and settled in Rochester. His two sons William James and Charles Horace Mayo were born during that war. After the war had ended Dr. Mayo soon became well known, both by his medical and political activities, and built up a good practice. He had surgical ambitions, but waited till 1880 before he performed his first ovariectomy quite successfully. During the next 10 years he performed many more with the assistance of his sons, who became medically qualified as soon as possible. In 1883 a tornado did great damage in Rochester, and Dr. Mayo distinguished himself in caring for the injured. There was no hospital in Rochester, but the Sisterhood of St. Francis (with the backing of their Bishop) offered to build one, and in 1889 it was opened. The Sisters did the nursing. Very soon the Sisterhood insisted that either Dr. Mayo or one of his sons should see every patient

before admission. This made a private clinic of a considerable part of the hospital and furnished an unparalleled opportunity to the two sons, who soon took over most of the surgery. Both Will and Charles Mayo were skilful and courageous operators; they kept up to date by paying visits to all the most advanced surgical clinics in the U.S.A. and in Europe, and their results soon astonished the surgical world. The work increased rapidly, the hospital had to be enlarged, and a big diagnostic building was erected. Promising young surgeons were trained and taken as colleagues until the variety and extent of the work attracted surgeons from all over the world. The medical side of the work was also developed on a large scale. In the third decade of this century 60,000 new patients were seen at the Mayo Clinic in one year.

The Mayo brothers were business-like, but they kept in mind the saying of their father that "it is a disgrace to die rich." So, when they had achieved success and their earnings were great, they set aside half their income each year with a view to establishing a "Foundation of Medical Education and Research." Largely owing to Will Mayo's forbearance difficulties were overcome, the Mayo Clinic was incorporated and became affiliated to the University of Minnesota, and the Foundation was soundly established. The words of Will Mayo deserve to be remembered: "Every man has some inspiration for good in his life. With my brother and I it came from our father. He taught us that any man who has physical strength, intellectual capacity or unusual opportunity holds such endowment in trust to do with them for others in proportion to his gifts."

ZACHARY COPE.

Books Received

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

Comprehensive Biochemistry—Volume 20. Metabolism of Cyclic Compounds. Edited by Marcel Florkin and Elmer H. Stotz. (Pp. 533+xiii; illustrated. 190s.) Amsterdam, London, New York: Elsevier Publishing Co. 1968.

The Prevention of Damaging Stress in Children. Edited by Jonathan Gould, B.Sc., M.B., B.S., D.P.M., M.R.C.P. Report of the U.K. Study Group No. 1. Presented at the 7th International Congress on Mental Health, London, August 1968. (Pp. 156+xiv. 20s.) London: J. & A. Churchill Ltd. 1968.

Pain. Proceedings of the International Symposium on Pain organized by the Laboratory of Psychophysiology, Faculty of Sciences, Paris, 11–13 April 1967. Edited by A. Soulaia, J. Cahn, and J. Charpentier. (Pp. 562+xii; illustrated. 126s. London and New York: Academic Press. 1968.

Born to Trouble. Portrait of a Psychopath. By Ronald Lloyd and Stanley Williamson. (Pp. 247. 30s.) London: Faber & Faber. 1968.

A Handbook of Diseases of the Skin. 9th edition. By Herbert O. Mackey, F.R.C.S.I., L.R.C.P.I., D.P.H. (Univ. Dub.), L.M., F.R.I.A.M. (Pp. 424+xv; illustrated. 30s.) London: Macmillan & Co. Ltd. 1968.

Proceedings of a Symposium on the Interaction of the Laboratory Animal with its Associated Organisms, held in Cambridge on 6 October 1967. Vol. 2. Edited by Dr. Annie M. Brown. (Pp. 75; illustrated. 15s.) Alconbury, Huntingdon: Carworth Europe. 1968.

Infectious Diseases. Vital and Health Statistics Monographs. By C. Dauer, R. F. Korn, and L. M. Schuman. (Pp. 262+xviii. 47s. 6d.) Harvard University Press. London: Oxford University Press. 1968.

Principles of Microbiology and Immunology. By Bernard D. Davis, Renato Dulbecco, Herman N. Eisen, Harold S. Ginsberg, and W. Barry Wood, jun. (Pp. 853+ix; illustrated. 84s.) New York, Evanston, and London: Harper & Row. 1968.

Der Liquor Cerebrospinalis. Edited by Rudolf Manfred Schmidt. (Pp. 880+xxvii; illustrated. £19 10s.) Berlin: Veb Verlag Volk und Gesundheit. 1968.

Theory and Application of Gas Chromatography in Industry and Medicine. Edited by Henry S. Kroman, Ph.D., and Sheldon R. Bender, M.D. (Pp. 312+viii; illustrated. \$19.50.) New York and London: Grune & Stratton Inc. 1968.

Regulationsmechanismen der Arteriellen Hypertoniekrankheit und Signalverarbeitung des Zentralnervensystems. Edited by K. Hecht and Cl. Pfister. (Pp. 283; illustrated. £3.) Berlin: Veb Verlag Volk und Gesundheit. 1967.

Biological Oxidations. Edited by Thomas P. Singer. (Pp. 722+ix; illustrated. 185s.) New York, London, Sydney: Interscience Publishers. 1968.

Textbook of Otolaryngology. 3rd edition. By David D. DeWeese, M.D., and William H. Saunders, M.D. (Pp. 457+x; illustrated. 103s. 6d.) Saint Louis: The C. V. Mosby Co. London: Henry Kimpton. 1968.

Handbook of Experimental Pharmacology. Edited by O. Eichler, A. Farah, H. Herken, and A. D. Welch. (Pp. 1178+xxiv; illustrated. \$80.00.) Berlin: Heidelberg, New York: Springer-Verlag. 1968.

Systematik der Praktischen Pädiatrie für Ärzte und Studenten. By Dieter Palitzsch. (Pp. 383 +viii; illustrated. DM. 19.80.) Stuttgart: Georg Thieme Verlag. 1968.

The Prescription and Administration of Drugs in Hospital. By H. P. R. Hodge, M.A., A. J. M. Fraser, S.R.N., D. C. Coull, M.B., Ch.B., R. D. Weir, M.D., D.P.H. (Pp. 110+iii; illustrated.) Aberdeen: Foresterhill College. 1968.

La Grosse Jambe. Société Française de Phlébologie (Pp. 276; illustrated. 53 F.) Paris: L'Expansion Scientifique. 1968.

Food Values of Portions Commonly Used. 10th edition. Revised by Charles Frederick Church, M.D., M.S., F.A.C.N., and Helen Nichols Church, B.S. (Pp. 154. 50s.) Philadelphia: J. B. Lippincott Co.