pondered on the behaviour of the pulmonary circulation in health and disease, especially as the authors contribute much that is original.

LYNNE REID.

## History of Diabetes

History of Diabetes Mellitus. By N. S. Papaspyros, M.D. 2nd edition. (Pp. 104 + xv; illustrated. DM. 19.50.) Stuttgart: Georg Thieme. 1964.

This book, by an eminent Greek physician and medical historian, came out in London in a first edition in 1952. It was sold out, as Dr. Lawrence reminds us, in that year, and is now regarded as a classic on the subject. This revised and supplemented edition, also in English, is published in Stuttgart. Unfortunately, several words are misspelt and some sentences convey an opposite meaning to what the author intends, as on page 49 when mentioning Banting's experience in investigation. These minor criticisms can be met by corrections in a further edition.

Whether or no the reference in the Ebers papyrus (c. 1500 B.C.) recording a prescription for polyuria means that diabetes was known to the ancient Egyptians, it is a disease of antiquity, for it is mentioned in the Sanskrit Vedic literature of India "as the passing of urine with honey." Thirst, muscular weakness, and unpleasant odour are also described. Susruta, the great Indian doctor of the fifth century A.D., gave a good clinical account of the disease, as did also Japanese and Chinese writers of the third century. The Hippocratic writings ignore diabetes, perhaps because it was an incurable disease. Celsus (25 B.C.-A.D. 50) described a disease with polyuria, no pain, and weakness. Aretaeus (fl. A.D. 135) named the disease diabetes and gave an excellent clinical account of it, which Galen adopted. The Arabian physicians Rhazes, Avicenna, and others gave accurate clinical descriptions, but it is not until Thomas Willis (1621-1675) studied the disease that diabetes mellitus was distinguished from diabetes insipidus. He also noted that sugar was present in the blood. William Cullen (1710-1790) first considered diabetes as a malady of the nervous system.

Gradually, through the observations of Thomas Cawley in 1788, Richard Bright and others, it became recognized that changes in the pancreas could cause diabetes. Claude Bernard (1813-1878) discovered the function of the liver in storing grape-sugar as glycogen, that the pancreatic juice changes starch into sugar, and that puncture of the floor of the fourth ventricle of the dog's brain caused temporary diabetes. Diabetic coma was first recognized by W. Prout (1785-1850), who applied chemistry to medicine and physiology. Oscar Minkowski (1858-1931) removed the pancreas in dogs, the result being a severe and rapidly fatal diabetes. Paul Langerhans (1849–1888) described his islets in the pancreas in 1869. In 1916 Sir Edward Sharpey-Schafer (1850-1935) suggested that these islets secreted some substance controlling the metabolism of carbohydrates. For this hypothetical hormone he suggested the name of "insulin," and in 1921 Frederick Banting and Charles Best prepared this very hormone in pure extract from the islets of Langerhans in the laboratory of Professor J. J. R. Macleod, of Toronto. Thereafter, with the help of Professor Macleod and J. B. Collip, all technical difficulties were surmounted. Insulin was given to the world and diabetics were no longer the victims of a fatal disease.

Here in brief outline is a summary of Dr. Papaspyros's interesting history. He also discusses the history of treatment of diabetes (including oral administration of insulin, as yet only applicable to certain cases, and surgical treatment). Clinical experience, wide reading, and a scholarly appreciation of the value of history in the study of medicine have gone to the making of this

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## **Books Received**

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

An Introduction to Electrocardiography. Schamroth, M.B., B.Ch.(Rand.), M.R.C.P. (Edin.), M.R.C.P. (Glasg.). 2nd edition. (Pp. 165+x; illustrated. 20s.) Oxford: Blackwell Scientific Publications. 1964.

L'Insuffisance Lutéale. Rapports de la VIIe Réunion des Endocrinologists de Langue Française. Beyrouth, 9-13 September 1963. Edited by Professor A. Soulairac. (Pp. 354; illustrated. 68 F.) Paris: Masson et Cie. 1963.

Water and Electrolyte Metabolism-II. West European Symposia on Clinical Chemistry. Volume 3. Edited by J. de Graeff, M.D., and B. Leinse, Ph.D. (Pp. 251+viii; illustrated. 60s.) Amsterdam, London, and New York: Elsevier. 1964.

Clinical Orthopaedics and Related Research. No. 30. Editor-in-Chief: Anthony F. DePalma. (Pp. 251+ix; illustrated. 60s.) London and Philadelphia: Pitman Medical Publishing Co. Ltd. 1963.

Diagnosis and Treatment of Congenital Hip Pathology in the Newborn. By Stanko Stanisavljev, M.D. (Pp. 94 + xiv; illustrated. 52s.) Baltimore: Williams and Wilkins Co. London: Baillière, Tindall and Cox. 1964.

Conditioning and Enuresis. By S. H. Lovibond. (Pp. 219+viii. 50s.) Oxford, London, New York, and Paris: Pergamon Press. 1964.

Fermentdiagnostik Interner Erkrankungen. By Dr. Diethard Amelung. (Pp. 179; illustrated, DM. 29.70.) Stuttgart: Georg Thieme Verlag. 1964.

Nierendiagnostik mit Radioisotopen. Funktionelle und Morphologische Ergebnisse. By Priv.-Doz. Dr. med. Karl zum Winkel. (Pp. 160+ viii; illustrated. DM. 64.) Stuttgart: Georg Thieme Verlag. 1964. The Atrioventricular Node. And Selected Cardiac Arrhythmias. By David Scherf, M.D., F.A.C.P., and Jules Cohen, M.D., F.A.C.P. (Pp. 466 + xiii; illustrated. \$18.75.) New York and London: Grune & Stratton. 1964.

Advances in Veterinary Science. Edited by C. A. Brandly and B. L. Jungherr. Volume 8. (Pp. 453 + xi; illustrated. £5 14s. 6d.) New York and London: Academic Press. 1963.

The Doctor, His Patient, and the Illness. By Michael Balint, M.D. (Pp. 395 + xii. 40s.) London: Pitman Medical Publishing Company

Knox the Anatomist. By Isobel Rac. (Pp. 164; illustrated. 30s.) Edinburgh and London: Oliver and Boyd. 1964.

The Evolution of Hospitals in Britain. Edited by F. N. L. Poynter. (Pp. 294. 35s.) London: Pitman Medical Publishing Company Ltd. 1964.

Infantile Autism. The Syndrome and Its Implications for a Neural Theory of Behaviour. By Bernard Rimland. (Pp. 282+xi. \$5.00.) New York: Appleton-Century-Crofts. 1964.

Social Purpose and Social Science. By T. S. Simey. Eleanor Rathobone Memorial Lecture. (Pp. 30. 3s. 6d.) Liverpool: Liverpool University Press. 1964.

Communicable and Infectious Diseases. Diagnosis Prevention and Treatment. By Franklin H. Top and Collaborators. 5th edition. (Pp. 902; illustrated. £7 17s. 6d.) London: Henry Kimpton. 1964.

The Neurological Examination of the Full-term Newborn Infant. By Heinz Prechtl and David Beintema. A Manual for Clinical Use from the Department of Experimental Neurology, University of Groningen. Little Club Clinics in Developmental Medicine, No. 12. (Pp. 72; illustrated. 15s.) London: The Spastics Society Medical Education and Information Unit in Association with William Heinemann Medical Books Ltd. 1964.

Bibliography on the Epidemiology of Cancer. 1946-60. (Pp. 166. 17s. 6d.) Geneva: World Health Organization. 1963.

Animals Parasitic in Man. By Geoffrey Lapage. Revised edition. (Pp. 320; illustrated. \$1.85.) New York: Dover Publications Inc. 1964.

Textbook of Rheumatic Diseases. W. S. C. Copeman, O.B.E., T.D., M.D., F.R.C.P. 3rd edition. (Pp. 829 + x; illustrated. Edinburgh and London: E. & S. Livingstone Ltd. 1964.

Thirst. Proceedings of the First International Symposium on Thirst in the Regulation of Body Water, held at Florida State University in Tallahassee, May 1963. Edited by Matthew J. Wayner. (Pp. 570+viii; illustrated. £7.) Oxford, London, Edinburgh, New York, Paris, Frankfurt: Pergamon Press. 1964.

Sucht und Missbrauch. Ein Kurzgefasstes Handbuch für Ärzte, Juristen, Pädagogen. Edited by F. Laubenthal. (Pp. 685+xii; illustrated. DM. 84.) Stuttgart: Georg Thieme Verlag. 1964.

Clinical Psychiatry for Practitioners and Students. By Ian Skottowe, M.D., F.R.C.P., D.P.M. 2nd edition. (Pp. 306+x. 42s. J. & A. Churchill Ltd. 1964. 42s. 6d.) London:

Connective Tissue: Intercellular Macromolecules. Procedings of a Symposium Sponsored by the New York Heart Association. By Maxwell Schubert et al. (Pp. 260; illustrated. 40s.) London: J. & A. Churchill Ltd. 1964.

Leprosy in Theory and Practice. By R. G. Cochrane, M.D., Ch.B., F.R.C.P., D.T.M.&H., and T. Frank Davey, C.B.E., M.D., Ch.B., M.Sc. 2nd edition. (Pp. 659+xv; illustrated. £5 15s.) Bristol: John Wright & Sons Ltd.

The Physiology of Synapses. By John Carew Eccles. (Pp. 316+xi.; illustrated. DM. 36.) Berlin, Göttingen, Heidelberg: Springer-Verlag.