the present system, and analyses the effect of the past on the situation today. He also attempts to look into the future, and sounds some timely warnings about present trends. He points out that although automation is necessary and desirable mass automation is already posing a problem in the handling of report forms. Nearly a third of technicians' time is now spent on this. Moreover, he suggests that doctors are not yet able to make full use of the information they receive. He stresses, "as yet there is no evidence that . . . [multiple screening] will shorten the length of the patient's stay in hospital." Screening, he says, results in high total expenditure in spite of a relatively low cost per test. Another important and apposite point made is that Method Study "could recommend the best way of organizing the estimation of serum iron," but not whether it needs to be done or not.

This is a balanced and thoughtful book. As the Royal College of Pathologists now requires some evidence of knowledge of managerial problems in the Final examination for Membership, candidates will find that this book fills a gap in their reading. It should also be studied by all those concerned with running hospital laboratories, whether in teaching or district hospitals, and indeed might well be read with benefit by almost all of the more senior hospital staff.

JOAN F. ZILVA.

Fellows of the Royal Society

Biographical Memoirs of Fellows of the Royal Society. Vol. 15. (Pp. 266; illustrated. 50s.). London: The Royal Society. 1969.

The annual publication of illustrated definitive biographies of recently deceased fellows of the Royal Society should interest "educated outsiders" in the development of the

minds and methods of outstanding leaders in science. The 15th volume contains fewer names than usual-only 13-and sustains the thesis that "job satisfaction" conduces to longevity. Of the 13, three were Foreign Members (one each from America, Holland, and Russia), six only were U.K. citizens, and there was one each from Australia, Canada, Eire, and South Africa. The whole spectrum of science was represented by three physicists, three applied biologists, two geologists, one mathematician, one biochemist, one biophysicist, one chemist, and one physiologist. The two medically qualified men in the series (Conway of Eire and Miller of Canada) used their medical courses as springboards to careers in pure science.

E. J. Conway, the Irish biophysicist, combined ardent Roman Catholicism with an urge to study fundamental processes in physiology-especially in the ionic constitution of tissue cells in relation to that of tissue fluids and plasma. The "Conway Unit" is a simple and versatile method of micro-analysis still in use 35 years after its introduction, and his redox theory aroused much interest among investigators on the transport of ions across membranes. F. R. Miller, the Canadian neurophysiologist, combined great distinction as an original worker on the brain-especially the cerebellar connexions-with an exceptional devotion to the training of his medical students by personal example in the experimental and practical classes. E. V. McCollum, the American pioneer in the use of the albino rat as an experimental animal, suffered penury as a young man but achieved international fame in the field of accessory food factors, especially vitamin D.

With the public mind dwelling so much on the problems of Africa we must regret the death of two pioneers in the fields of diseases of African crops and animals—one British, Storey, and du Toit, who was proud to call himself "a true Afrikaner." H. H.

Storey's achievements in the field of virus diseases of sugar cane, maize, and ground nuts and on the mosaic disease of cassava ensure him a permanent place in the history of Africa. P. J. du Toit, one of the world's greatest veterinarians, pioneered advances in viral, protophytal, and protozoal diseases of animals and introduced prophylactic control measures against devastating diseases among stock animals of Africa.

J. Rothery, the chemist who took empiricism out of metallurgy, intended to be a soldier. While a cadet at Woolwich a near fatal attack of meningococcal meningitis made him completely deaf and despite this handicap he became the most distinguished exponent of his special branch of chemistry. E. C. Stoner was in 1923 starving himself and awaiting death from diabetes mellitus. The advent of insulin enabled him to reach his seventieth year and "to get through twice as much work as anyone else as he did not need exercise." He became a leader in the field of theoretical physics with special interest in magnetism.

Motor accidents claimed the lives of two Foreign Members-L. E. J. Brouwer, the Dutch mathematician, and L. D. Landau, whose memoir from the pen of his distinguished Russian colleague P. L. Kapitza reminds us of the vast international effort made to save his life. The life story of F. P. Bowden, that "Admirable Crichton" of science makes excellent reading. Australian born, he had the reputation of excelling in every field he entered-aesthetic, athletic, scientific, and administrative. An experimental physicist of the highest quality, he showed how university academics could work harmoniously and profitably with colleagues in vast industrial enterprises. His friend and colleague Lord Snow has drawn a picture of him as "Getliffe," the gifted, wise, sensitive scientist in his later Cambridge novels.

GEORGE R. MCROBERT.

Books received

Books noticed here may be reviewed later.

Asthma. A Guide for Patients. K. Michael Hume. (Pp. 103; 16s.) Health Horizon. 1970.

Medical Electronic Equipment 1969-1970. Vols. 1 & 2. Ed. G. W. A. Dummer and J. Mackenzie Robertson. (Pp. 1714; 400s.) Pergamon Press. 1970.

The Production and Hazards of a Hyperbaric Oxygen Environment. Proceedings of a Symposium held at University College, London. January 1968. Ed. G. S. Innes. (Pp. 121; 42s.) Pergamon Press. 1970.

Prenatal Respiration. Heinz Bartels. (Pp. 187; 84s.) North-Holland Publishing. 1970.

Basic Mechanisms of the Epilepsies. Ed. Herbert H. Jasper et al. (Pp. 835; 250s.) J. & A. Churchill. 1970.

A Physiological Approach to Clinical Methods. Robert D. Lowe and Brian F. Robinson, (Pp. 216; 40s.) J. & A. Churchill. 1970

American Indian Medicine. Virgil J. Vogel. (Pp. 583; 118s.) University of Oklahoma Press. 1970.

Birth Order and Life Roles. Lucille K. Forer. (Pp. 168; \$8.95.) Charles C. Thomas. 1970.

Termites. A Study in Social Behaviour. P. E. Howse. (Pp. 150; 35s. Hard Back. 15s. Paper Cover.) Hutchinson University Library. 1970.

Lubrication and Wear in Joints. Symposium held at the General Infirmary Leeds April 1969. Ed. Verna Wright. (Pp. 152; 53s.) Sector Publishing. 1970.

The Modern University. Structure, Functions and its Role in the New Industrial State. Symposium in Geneva October 1968. Ed. Peter A. Miescher et al. (Pp. 193; DM.29.80.) Georg Thieme Verlag. 1969.

Health and the Developing World. John Bryant. (Pp. 345; No price given.) Cornell University Press. 1970.

Methods in Microbiology. Vol. 2. Ed. J. R. Norris and D. W. Ribbons .(Pp. 432; 115s.) Academic Press. 1970.

Criteria of Brain Death. Selection of Donors for Transplantation. Palle Juul-Jensen. (Pp. 57; Dan.kr.22.00.) Munksgaard. 1970.

The Endocrines. Howard L. Steinbach and Hideyo Minagi. (Pp. 330; 234s.) John Wiley. 1970.

The Principle of Parsimony in Medicine. And Other Essays. I. M. Tarlov. (Pp. 65; \$4.75.) Charles C. Thomas. 1969.

Crime and Personality, H. J. Eysenck. (Pp .211; 10s.) Paladin. 1970.

Pain Analysis. A Guide to Diagnosis. Ed. Rudolph Janzen. (Pp. 87; 25s.) John Wright. 1970.

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

Neurosciences Research: Vol. 2. Ed. S. Ehrenpreis and Othmar C. Solnitzky. (Pp. 331; \$18.50.) Academic Press. 1969.

The Mechanical Basis of Respiration: An approach to Respiratory Pathophysiology. Richard M. Peters. (Pp. 393; 150s.) J. & A. Churchill. 1970.

Mediators of Cellular Immunity: Proceedings of International Conference held at Augusta, Michigan April 1969. Ed. H. Sherwood Lawrence and Maurice Landy. (Pp. 469; \$9.50.) Academic Press. 1969.

Essentials of Uveitis: T. F. Schlaegel. (Pp. 325; 190s.) J. & A. Churchill. 1970.

Measurement of the Facies: A Study in Down's Syndrome. Michael Joseph. (Pp. 114; 50s.) Spastics International Medical Publications. 1970.

Experimental Psychology its Scope and Method: Vol. 4. Learning and Memory. Ed. Paul Fraisse and Jean Piaget. (Pp. 376; 80s.) Routledge & Kegan Paul. 1970. In 1960 he took up the post of lecturer in plastic surgery at the Royal Postgraduate Medical School to develop experimental methods and became reader in 1966. His published work includes papers on cleft palate, speech, wound healing, the use of inert implants, and lymphoedema. His current interests are in the relationship of lymphatic and venous diseases to the interstitial fluid circulation and in the surgical treatment of rheumatoid arthritis.

Brucellosis Eradication

In the Lords on 18 March, in the course of a statement on the Annual Farm Price Review, LORD BESWICK announced new incentives to eradicate brucellosis through premiums on milk and on beef cows in accredited herds. These should amount on average to £5m. annually in the first years. They would automatically increase as more herds became accredited. The impetus to eradicate the disease would also help further to reduce costs. The proposals were in addition to the area eradication scheme. There would be additional costs in relation to that scheme-compensation for the slaughter of animals, for example—but the incentive given here would enable the area scheme when it was started next year to be more effectively implemented.

G.M.C.'s Annual Retention Fee

The Privy Council has approved the Medical Practitioners Registration (Fees) Regulations 1969 made by the General Medical Council. Under these regulations an annual fee is to be charged a medical practitioner for the retention of his name on the Medical Register. The regulations come into operation on 1 May. The Privy Council has informed the B.M.A.

Coming Events

Biological Engineering Society.—Tenth "Bio-Medical anniversary conference, Engineering 1970," 7-10 April, Oxford.
Details from Mr. J. D. Gasking, Department of Pharmacology, St. Bartholomew's Hospital Medical College, Charterhouse Square, London E.C.1.

B.M.A. (Salisbury and Dorset Divisions).—Symposium, "Coronary Heart Disease," 11 April, 10 a.m., Grosvenor Hotel, Shaftesbury. Details from Dr. T H. Barrie, 78 Newland, Sherborne, Dorset.

Institute of Urology.—Week-end course, "Urology for Higher Examinations," 17 to 19 April. For details see advertisement p. xxvii.

B.M.A. (Torquay Division).—Symposium, "Uses and Hazards of Corticosteroid Therapy," 18 April, 10.30 a.m., Torquay Medical Centre, Torbay Hospital, Torquay. Details from Dr. P. C. E. Gould, Clairville, Brunswick Square, Torquay, Devon.

Royal College of Physicians of Ireland.-Symposium, "Advances in Pathology for Physicians and Surgeons," 24 April, 9.45 a.m., at the College. The programme is primarily intended for hospital staff of consultant and registrar grade. Details from the Symposium Secretary, R.C.P.I., 6 Kildare Street, Dublin 2.

Royal Photographic Society: Medical Group.—Symposium, "Film Making," 25 April, Oxford. Details from Mr. R. Fletcher, Department of Audio Visual Communication, Institute of Ophthalmology, Judd Street, London, W.C.1.

Societies and Lectures

For attending lectures marked a fee is charged or a ticket is required. Applications should be made first to the institution concerned.

Tuesday, 31 March

Institute of Obstetrics and Gynaecology.—At Hammersmith Hospital, (1) Dr. I. Brosens (Belgium): Studies of Vessels of Placental Bed; (2) 4.30 p.m., Dr. P. Addison: Medico-legal Problems in Obstetrics and Gynaecology. (Admission by ticket only, obtainable from Secretary, Institute of Obstetrics and Gynaecology, Chelsea Hospital for Women, London, S.W.)

Wednesday, 1 April

GWENT POSTGRADUATE MEDICAL CENTRE.—At Royal Gwent Hospital, Newport, Mon. 2.15 p.m., combined round by Mr. W. B. Peeling; 5 p.m., surgical meeting, clinical research report by Mr. H. G. Roberts and Mr. R. Hodge.

NSTITUTE OF NEUROLOGY.—6 p.m., Neuro-otological clinical meeting: Treatment of Ménière's Disease. INSTITUTE

Institute of Urology.—5 p.m., Mr. D. M. Wallace: Carcinoma of the Kidney.

MIDLAND MEDICAL SOCIETY.—At Birmingham Medical Institute, 8.30 p.m., Professor H. V. Morgan: Tropical Medicine in Birmingham.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—5.15 p.m., Mr. K. E. D. Shuttleworth: Diagnosis and Management of Tumour of Testis; 6.30 p.m., Mr. E. Stanley Lee: Diagnosis and Management of Malignant Disease in the Oral Cavity.

Thursday, 2 April

Institute of Neurology.—5.30 p.m., Professor E. Gutmann (Czechoslovakia): Effect of Use and Disuse on Neuromuscular Function.

INSTITUTE OF PSYCHIATRY.—12 noon, Professor Andrew V. Schally (Tulane University): Hypothalamic Hormones and their Effect on Reproduc-

Kennedy Institute of Rheumatology, London.— 5 p.m., Dr. S. R. Pelc: Experiments on Cellular Kinetics and Metabolic DNA.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—5.15 p.m., Mr. M. Meredith Brown: Diagnosis and Management of Mediastinal Tumours, 6.30 p.m., Mr. G. B. Williams: Surgery of the Urethra.

Friday, 3 April

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—5.15 p.m., Mr. R. M. Feroze: Pathology, Diagnosis and Management of Malignant Tumours of the Ovary, 6.30 p.m., Professor D. F. N. Harrison: Diagnosis and Management of E.N.T. Emergen-

Saturday, 4 April

ROYAL NORTHERN HOSPITAL POSTGRADUATE CENTRE.—10.30 a.m., Therapeutics by Dr. P. D. Marsden: Tropical Diseases.

Sunday, 5 April

DISTITUTE OF LARYNGOLOGY AND OTOLOGY.—5.30 p.m., Mr. J. A. M. Martin: Assessment of the Late-talking Child.

Appointments

MANCHESTER REGIONAL HOSPITAL BOARD.—P. Anderson, M.B., F.R.C.S. (whole-time or maximum part-time consultant E.N.T. surgeon, Bolton and District group); J. M. Anderton, M.B., F.F.A.R.C.S. (whole-time or maximum part-time consultant anaesthetist, Wythenshawe and North Cheshire group); E. Freeman, M.R.C.S., M.R.C.P. (whole-time or maximum part-time consultant geriatrician, Wigan and Leigh group); R. Gulati, M.B., F.R.C.S. (whole-time or maximum part-time consultant traumatic and orthopaedic surgeon, Bolton and District group); J. B. Garland, M.D., F.R.C.S. (whole-time or maximum part-time consultant urologist, Salford and North Manchester groups); M. P. Mahoney, M.B., M.R.C.P. (whole-time or maximum part-time consultant physician, Blackburn and District group). MANCHESTER REGIONAL HOSPITAL BOARD .-- P. An-

Universities and Colleges

CAMBRIDGE

M.D.-P. J. N. Howorth, Pin Lim.

SHEFFIELD

Appointments.—Dr. A. J. M. F. Eisinger (honorary instructor in medicine); Dr. C. W. Potter (senior lecturer in medical microbiology); Dr. T. Shelley (senior lecturer in medical physics, department of obstetrics and gynaecology).

DUNDEE

Appointments.—Mr. A. Gunn (senior lecturer in surgery); Dr. J. M D. Thomson (lecturer in pathology).

LONDON

The title of professor of chemical pathology has been conferred on Dr. F. V. Flynn in respect of his post at University College Hospital Medical School.

MANCHESTER

Dr. J. R. Cronly-Dillon, senior lecturer in physiology, Manchester University Medical School, has been appointed the first professor of ophthalmic optics at Manchester University Institute of Science and Technology, from 1 May.

SOUTHAMPTON

The honorary title of clinical professor of renal medicine has been conferred on Dr. A. Polak, consultant physician, Portsmouth Group Hospitals, and physician, Wessex Regional Renal Unit.

The honorary title of clinical professor of pathology has been conferred on Dr. E. M. Darmady, senior pathologist to the Southampton Group Laboratory Service.

Deaths

Bryce.—On 8 March 1970, peacefully after a long illness at his home at 200 Thornhill Road, Streetly, Sutton Coldfield Warwickshire William Alexander Bryce, M.B., Ch.B., aged 84.

Corrections

Anti-psychiatry

In the review by Dr. H. R. Rollin (21 March, p. 741) the second sentence should have read "—omnipotent, omniscient, capable of pondering the imponderable, and solving the insoluble."

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