cytoplasm, and by a comprehensive discussion of abnormal metabolism and of the main disorders of respiration, circulation, blood pressure, growth, and development; this section also includes accounts of neoplasia, inflammation, and endocrine disorders. The next section is on heredity and environment in relation to disease, and includes discussions of physical agencies and vitamin deficiencies as causes of disease, chronic granulomas, and occupational diseases; it also contains an outline of meteoropathology—the weather in relation to disease. The final section is devoted to psychosomatic diseases and ends with a description of the growth and decay of what William McDougall would have termed a sentiment of love. The illustrations, printing, paper, and binding are all of the best quality and worthy of the Freiburg school of pathology.

The philosophical-historical approach to a science is probably easy and congenial to German students. Most British students find it difficult, and pathologists who try it usually revert to the traditional British method—unphilosophical, matter-of-fact descriptions of phenomena. Outside Germany, Büchner's work is most likely to appeal to practitioners of some experience—physicians and surgeons as well as pathologists—and also to biologists interested in medicine. Those who read it will find the author revealed as a true son of Aesculapius—modest and lovable as well as learned, and deeply devoted both to medicine and to his students.

RAYMOND WHITEHEAD

STERILITY

La Stérilité Involontaire. Evaluation des Méthodes de Diagnostic et de Traitement. By R. Palmer, with the collaboration of Mme. E. Palmer. (Pp. 492; illustrated. 1,600 francs.) Paris: Masson et Cie. 1950.

It seems a pity that this book is paper-backed and that its first perusal necessitates much tiring surgery with a paper-knife, for it contains such an amount of information that it deserves a permanent place in the library of all those concerned with the clinical aspects of human infertility. The illustrations, except for a few photomicrographs, are simple line drawings. While acknowledging opinions old and new, the author mainly gives an account of the views, experience, and practice of himself and his associates; the techniques and instruments developed in his clinic are naturally given prominence. Thus coelioscopy, which Dr. Palmer was the first to apply to the study of sterility in the female, is championed against culdoscopy. Certainly his claim that preliminary coelioscopy is of value in assessing whether a reconstructive operation on the tubes is likely to be successful merits careful consideration.

After a short account of the relevant normal physiology in both sexes, there is a full discussion of diagnostic procedures, including hormone assays, and the possible sources of error in their application. The final section is on the various aetiological factors individually, their diagnosis, and an evaluation of the methods of treatment available. A meticulous attention to detail is evident, but the broad outlook on the problem of the infertile couple is never lost sight of. The personal presentation of the material naturally invites disagreement on some points, but the book's graphic style makes it eminently readable, while the bibliography, with its many references to the Continental literature, will be found very useful.

S. BENDER.

EYES AT WORK

Eyes in Industry. A Comprehensive Book on Eyesight written for Industrial Workers. By Dorothy Adams Campbell, M.A., M.B., B.S., W. J. B. Riddell, M.D., F.R.S.Ed., F.R.F.P.S., and Sir Arthur Salusbury MacNalty, K.C.B., M.A., M.D., F.R.C.P., F.R.C.S., Hon. F.R.S.Ed. Preface by Lord McGowan, K.B.E., D.C.L., LL.D. Introduction by Sir Stewart Duke-Elder, K.C.V.O., D.Sc., Ph.D., M.D., F.R.C.S. (Pp. 234; illustrated. £1 10s.) London: Longmans, Green and Co. 1951.

This book, which is in three parts, covers the major factors concerned in the care of the eyes and the prevention of eyestrain and disease in industry. In the first part Dr. Campbell describes the structure and function of the eye and the conditions which influence sight. Professor Riddell in the second part describes the nature of the eye injuries and the risks to which both agricultural and industrial workers are liable. In the third part Sir Arthur MacNalty is concerned with industrial injuries from the administrative and public health points of view. In addition there is a preface by Lord McGowan and an illuminating introduction of some length by Sir Stewart Duke-Elder.

The book is written for the industrial worker in clear and simple language. Only in one place did the reviewer find that this was carried to an extreme—namely, calling the space behind the lens the posterior chamber. The part of the book headed "Eyesight and Work" includes chapters on the structure and function of the eye, movements of the eye and binocular vision, nutrition of the eye, preparation for industry, adolescent eyesight, visual requirements in industry, eye defects common in adults, illumination, and aids to vision. The second part, on visual hazards in industry and their prevention, includes material on agricultural and industrial hazards, prevention and first aid, and blind and partially sighted workers. Sir Arthur MacNalty discusses special aspects of industrial eye injuries and the psychology of sight. There are four appendices: the first-aid treatment of eye injuries, a schedule of recommended values of illumination, visual standards in industry, and a model form of certificate of blindness.

This is a comprehensive work. It is well illustrated and does all it sets out to do. It is a welcome addition to ophthalmic literature.

EUGENE WOLFF.

BOOKS RECEIVED

Review is not precluded by notice here of books recently received

Bentley and Driver's Textbook of Pharmaceutical Chemistry. Revised by J. E. Driver, M.A., Ph.D., M.Sc., F.R.I.C. 5th ed. (Pp. 671. 32s. 6d.) London: Geoffrey Cumberlege. 1951.

The Chordates. By H. W. Rand, Ph.D. (Pp. 862. 45s.) London: H. K. Lewis. 1950.

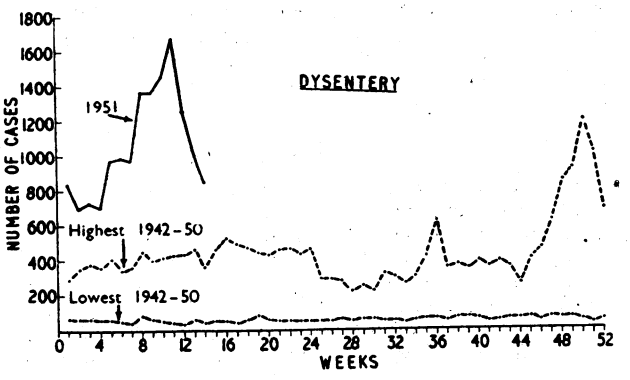
The Neurologic Examination. By R. N. DeJong, M.D. (Pp. 1,079. 110s.) London: Cassell. 1951.

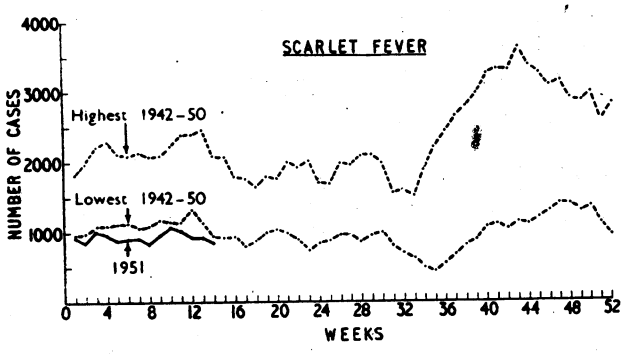
The Encircled Heart. By J. Elder. (Pp. 271. 8s. 6d.) London: Lutterworth Press. 1951.

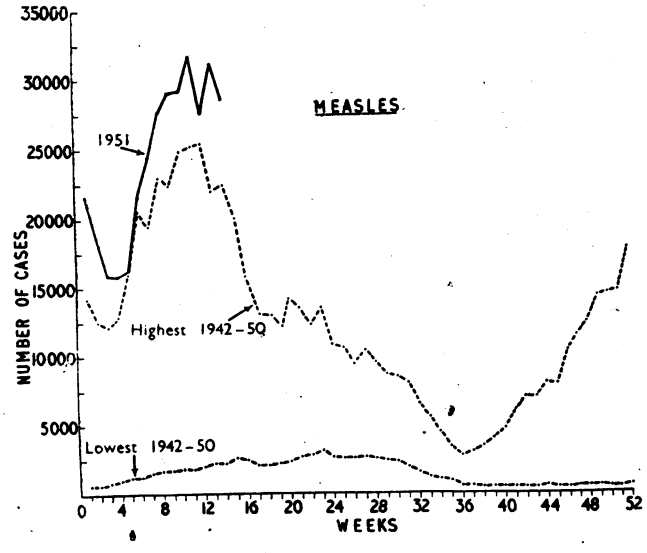
The Order of the Court. By J. D. Pank. (Pp. 191. 8s. 6d.) London: Hodder and Stoughton. 1951.

Animal Evolution. By G. S. Carter. (Pp. 368. 30s.) London: Sidgwick and Jackson. 1951.

The Biochemistry of Fish. Edited by R. T. Williams. (Pp. 105. 12s.) London: Cambridge University Press. 1951.







Infectious Diseases

During the week ending April 7 a fall in the number of notifications was recorded in England and Wales for measles 2,468, acute pneumonia 110, dysentery 153, whooping-cough 89, and scarlet fever 75.

The notifications of measles fell by over 100 in 13 counties, the greatest decline in incidence being centred on London and the adjacent counties. The largest falls in the number of notifications of measles were Middlesex 429, Essex 339, London 277, while the largest exceptions to the general decline in incidence were rises in Warwickshire 317, Yorkshire West Riding 190, and Leicestershire 145. The largest decreases in the number of notifications of whooping-cough were Essex 74, Devon 65, Kent 64, and the largest increases were Yorkshire West Riding 52 and London 49. There was little variation in the local returns of scarlet fever. The chief fluctuations in the trends of diphtheria were a rise of 5 in London and a fall of 5 in Staffordshire. In Scotland 23 cases of diphtheria were notified, the largest return for 12 months; 12 of these cases were notified in Glasgow.

Of the 35 cases of typhoid and paratyphoid fever 11 were notified in Lancashire, 6 in Staffordshire, and 6 in Durham. The only multiple cases of poliomyelitis were Lancashire 3 (Liverpool C.B. 2) and Yorkshire West Riding 2. A fall in the incidence of dysentery was recorded for the fourth consecutive week, but the incidence is still very high. The largest returns were London 187 (Islington 48), Lancashire 116, Middlesex 84, Essex 53, Yorkshire West Riding 51, Lincolnshire 43 (Scunthorpe M.B. 34).

Eight deaths were classified as due to smallpox in January. Two of these deaths occurred in Brighton C.B., three in Portslade-by-Sea U.D., and three in Dartford U.D.

Universities and Colleges

UNIVERSITY OF OXFORD

Mr. V. E. Negus will deliver a Litchfield Lecture on "Defences of the Air Passages, with Relation to Ciliary Action" at the Radcliffe Infirmary, Oxford, on Wednesday, May 16, at 5 p.m.

Professor E. Harlan Wilson, Columbus University, U.S.A., will deliver a lecture on "Fundamentals Related to Surgical Procedures in Orthopaedic Surgery" in the Nuffield Department of Orthopaedic Surgery, Oxford, on Thursday, May 10, at 8.30 p.m.

UNIVERSITY OF CAMBRIDGE

The Linacre Lecture on "The University and Clinical Medicine" will be delivered by Sir James Spence, M.D., F.R.C.P., Professor of Child Health in the University of Durham, in the lecture room of the Anatomy School on Saturday, May 5, at 5 p.m.

UNIVERSITY OF ST. ANDREWS

Donald Macleod Douglas, Ch.M., F.R.C.S., Reader in Experimental Surgery in the University of Edinburgh and Deputy Director of the Wilkie Surgical Research Laboratory, has been appointed to the Chair of Surgery in the University of St. Andrews.

John Louis Henderson, M.D., F.R.C.P.Ed., Senior Lecturer in the Department of Child Life and Health in the University of Edinburgh and physician at the Royal Hospital for Sick Children, Edinburgh, has been appointed to the James Mackenzie Chair of Child Health in the University of St. Andrews.

UNIVERSITY OF BRISTOL

The following candidates have been approved at the examination indicated:

DIPLOMA IN MEDICAL RADIODIAGNOSIS.—*Part II:* Sheila M. Cameron, A. G. M. Davies.

ROYAL COLLEGE OF SURGEONS OF ENGLAND

At a meeting of the Council of the College, held on April 12, with Sir Cecil Wakeley, President, in the chair, a Past-President's Badge was presented to Sir Hugh Lett.

Mr. C. D. Read was admitted to the Fellowship of the College *ad eundem*.

The Leverhulme Research Scholarships of Mr. A. T. Andreasen and Mr. L. I. Williams were renewed for a further year. The Begley Prize for 1951 was awarded to G. L. Howe (Middlesex Hospital). The Council selected "The Surgical Treatment of Carcinoma of the Stomach" as the subject for the Jacksonian Prize for 1952.

The Walker Prize of £100 for 1946–50 was awarded to Professor Alexander Haddow, Professor of Experimental Pathology in the University of London and Director of the Chester Beatty Research Institute, for his many notable contributions in the field of chemotherapy of cancer, for his leadership and organization in directing a great institute for cancer research, and for the high regard in which he is held by cancer research workers in this country and abroad.

The following were elected to the Fellowship of the College without examination as being medical practitioners of at least 20 years' standing: A. H. Harkness, M. C. Wilkinson, I. W. Magill, A. O. Parker, Surgeon Captain R. W. Higgins, R.N., and Professor Thomas Nicol.

Dr. James Craigie, F.R.S., and Professor Alexander Haddow were appointed Imperial Cancer Research Fund Lecturers for 1951.

Diplomas in Physical Medicine, in Ophthalmology, in Tropical Medicine and Hygiene, and in Child Health were granted, jointly with the Royal College of Physicians of London, to the following successful candidates:

DIPLOMA IN PHYSICAL MEDICINE.—M. Q. Birkbeck, B. O. Scott.

DIPLOMA IN OPHTHALMOLOGY.—G. W. Allen, C. H. Baker, H. H. W. Bennett, G. L. Cantrell, M. Cowan, J. A. Eustace, E. M. L. Evans, R. H. L. Ferguson, A. R. Gabbay, F. A. Hamdi, D. R. Ll. Hart, J. I. Heany, H. K. Indra, N. C. Jain, J. McLenachan, J. G. Madden, K. P. Milne, T. G. O'Driscoll, Winifred I. Pearce, R. P. Phillips, N. Pines, M. A. Qayyum, M. Q. K. Raja, J. Roche, J. H. Slade, Mona A. Smith, L. C. G.-L. Trichard, J. Whitwell, Kin Yip Wong.

DIPLOMA IN TROPICAL MEDICINE AND HYGIENE.—W. G. L. Allan, I. N. O. Asinobi, J. C. Babbage, Bo Kyaw, M. A. Botawala, J. Carswell, D. W. F. Charlton, B. J. Chelmicki, V. St. E. D'Abrera, C. R. Doering, A. C. Doshi, F. Elahi, T. Fernando, L. F. Gunaratna, B. P. Harris, H. Herlinger, J. H. Hobson, Ma Hpay, V. Israngura, L. Kant, I. S. Khutaina, K. D. Lahiri, Poo Ling, J. A. McDonald, W. H. McDonald, J. A. Mahoney, A. L. Meikle, H. O. L. Murray, R. J. Pitchford, B. Prasad, S. Singh, L. P. Spence, D. A. Thamotheram, M. Yildiz.

DIPLOMA IN CHILD HEALTH.—H. Altman, J. P. Anderson, G. C. Arneil, S. L. Balse, J. S. Beedie, Mary T. Behanan, S. K. Biswas, S. K. Bose, Lucy McL. C. Boyd, R. J. K. Brown, H. Chai, Isabel A. Cossar, Constance M. Cowan, Mary E. Curling, S. B. du Toit, J. S. Ebsworth, R. E. E. Edwards, J. Erulkar, D. G. Evans, Elspeth M. Evans, Loveday A. Farquharson, Ann Ferguson, Prudence A. FitzGerald, R. M. Forrester, J. B. Frost, Angela D. Fuller, Molly I. Govier, A. J. Gray, Zaida M. Hall, Yuen Ho, C. W. Howden, L. S. Jaikaran, T. K. Jari, J. G. P. Jones, S. M. A. Khadri, P. Lancer, K. W. Lavers, Lois M. Leitch, S. Levin, Joan V. Llewelyn, A. Macfarlane, Lisa E. Mandelbaum, Margaret G. Martin, Joan M. Milne, Mary D. Milne, L. H. Mofflin, Judith Murray-Jones, R. W. Nash, Margaret I. E. Neave, G. F. Newbold, Joan R. Nichols, Marjorie G. Nisbet, T. C. Noble, F. H. Patel, K. Rajasuriya, Margaret P. B. Reid, J. D. L. Reinhold, Jean Robson, F. C. Rose, Margaret M. P. Ryan, H. Sharma, S. Skulthai, Mary G. Southern Holt, Sybil H. Stephens, G. J. Sutin, H. T. Swan, Joyce M. Teasdale, Joan P. Tom, S. B. Vahidy, S. Vaishnava, R. H. Vines, Mary Vowles, Daphne M. L. Walters, B. W. Webb, J. W. Woodburn, Audrey J. Worman, Guan Eng Yeoh.

DIPLOMA IN PSYCHOLOGICAL MEDICINE.—J. B. Gordon Russell.

DIPLOMA IN INDUSTRIAL HEALTH.—D. Crichton.

The following hospitals were recognized under paragraph 23 of the F.R.C.S. regulations: Caernarvonshire and Anglesey General Hospital, Bangor (surgical registrar, first and second house-surgeons, all for six months); Leicester Royal Infirmary (five house-surgeons—general, orthopaedic house-surgeon, and house-surgeon to ear, nose, and throat departments—all for six months); St. Leonard's Hospital, London (two house-surgeons for six months).

The Services

Major-General R. D. Cameron, C.B.E., M.C., late R.A.M.C., has been appointed Honorary Surgeon to the King in succession to Major-General W. E. Tyndall, C.B., C.B.E., M.C., K.H.S., retired.

Brigadier W. R. D. Hamilton, O.B.E., late R.A.M.C., has been appointed Honorary Physician to the King in succession to Major-General J. Bennet, retired.

The name of Captain C. W. Bowen, R.A.M.C., appears in a *London Gazette* in a list of those awarded the Military Cross in recognition of gallant and distinguished services in Korea during the period July 9 to December 31, 1950.

A *Supplement* to the *London Gazette* has announced the following awards:

Four Clasps to the Territorial Efficiency Decoration.—Honorary Brigadier H. L. Garson, O.B.E., M.C., T.D., R.A.M.C., retired, and Colonel J. W. Hirst, O.B.E., T.D., R.A.M.C.

Three Clasps to the Territorial Efficiency Decoration.—Major (Honorary Lieutenant-Colonel) J. C. Barrett, V.C., T.D., R.A.M.C.

First Clasp to the Territorial Efficiency Decoration.—Lieutenant-Colonel (Brevet-Colonel) G. A. Kane, O.B.E., T.D., R.A.M.C., and Captain (Honorary Major) J. N. Martin, T.D., R.A.M.C., retired.

Territorial Efficiency Decoration and First Clasp.—Majors E. F. Baines and W. Kelly, R.A.M.C.

Territorial Efficiency Decoration.—Majors A. McArthur and W. F. Mair, and Captain (Honorary Lieutenant-Colonel) N. H. Martin, R.A.M.C.; Honorary Major P. S. L. Finlayson, R.A.M.C., retired.

Medical News

Medical Service in Korea

The United States Army in Korea is providing medical services not only for its own troops but for the two British and one Turkish brigades in action there, as well as for the forces (roughly a battalion each) contributed by France, the Netherlands, Greece, Thailand, Belgium, the Philippines, Australia, Canada, and New Zealand. Apart from an Indian medical unit and the Swedish Red Cross hospital there are three evacuation hospitals, five mobile surgical hospitals, four field hospitals, two 500-bed station hospitals, and several hospital ships. Since Japan is only 140 miles away (45 minutes' flying time) patients can be moved out of Korea at once if they are likely to be long-term cases. Forward evacuation is by jeep ambulance, field ambulance, and helicopter to the mobile surgical hospital, and thence by train, since 62 ambulance railway coaches have been shipped in. Most of the evacuation from Japan to the U.S.A. is by air, often now in two 16-hour hops, landing at Hawaii and then near San Antonio, Texas. For British and French casualties the R.A.F. provide transport home via Singapore and the Middle East. The mortality rate of the wounded in hospital is said to be 2½%, compared with 4% in the second world war and 8% in the first world war. The cold winter of Korea has provided some problems, and specially selected N.C.O.s have been made responsible for cold-weather discipline; among other duties they give permission for individual men to return to a warming-tent. For the wounded, plastic bags which can be slipped over blankets to cut down wind chill are being developed. The great bulk and weight (34 lb.—15.3 kg.) of the early model makes it unsuitable for forward use, but a new version weighing only 13 lb. (5.9 kg.) is due for test.

Research at the Buckston Browne Farm

At a reception held at the Buckston Browne Research Farm of the Royal College of Surgeons on March 30, Professor A. Sorsby spoke on retinal dystrophy in Irish setters, Mr. A. T. Andreasen on blood flow in the azygos vein after caval obstruction in dogs, Dr. D. Melrose on an artificial heart-lung, Mr. W. J. Dempster on transplantation of the kidney, Dr. I. G. Graber on the effect of unilateral adrenalectomy on the function of the kidney of the same side, and Dr. K. Digby on the function of the lymphoid tissue in the rabbit's appendix.

Prize Essay Competitions

The council of the Royal Sanitary Institute has announced particulars of the prize essay competitions for 1951. Two prizes are offered: the John Edward Worth Prize of £40 for an essay on "The Planning of Old People's Dwellings and the Provision of Communal Facilities and Services in Connexion Therewith," and the John S. Owens Prize of £15 for an essay on the ventilation of dwellings and its effect upon human health. Intending competitors should apply to the Royal Sanitary Institute, 90, Buckingham Palace Road, London, S.W.1, for a copy of the general conditions. Entries must be submitted by December 31.

Foreign Members of the Royal Society

At a meeting of the Royal Society on April 19 the following were elected: Herbert McL. Evans (Berkeley, Cal.), aged 69, noted for his work on endocrinology, the discoverer of vitamin E, of pituitary growth hormone, and A.C.T.H.; Karl S. Lashley (Cambridge, Mass.), aged 61, distinguished for his studies of the neurological basis of animal behaviour and of learning; Carl Störmer (Oslo), an authority on the motion of charged particles in magnetic fields and on the aurora borealis; and R. W. G. Wyckoff (Bethesda, Md.), aged 53, a crystal physicist and electron microscopist, who has recently contributed greatly to knowledge of viruses and bacteriophage.

APPOINTMENTS

Dr. Isaac Newton has been reappointed an Official Member of the Legislative Council of Hong Kong.

EASTERN REGIONAL HOSPITAL BOARD.—*Consultant Assistant Surgeons, Eastern Regional Orthopaedic Service*, James Hutchison, M.B., Ch.B., F.R.C.S.Ed., and I. D. Sutherland, M.D., F.R.C.S.Ed. *Part-time Ophthalmologist (Senior Hospital Medical Officer)*, H. E. Walker, M.B., Ch.B., D.O.M.S.

EDWARDS, C. G., M.B., Ch.B., D.M.R.(D.), Consultant Radiologist, North Staffordshire Royal Infirmary.

HILSON, DON, M.B., M.R.C.P., M.R.C.P.Ed., D.C.H., Consultant Paediatrician, Oldham and Ashton areas, Manchester Regional Hospital Board.

HOSPITAL FOR SICK CHILDREN, Great Ormond Street, London, W.C.—*Assistant Resident Medical Officer, Tadworth Court (Senior House Officer Grade)*, Prudence A. Fitzgerald, M.B., Ch.B., *House-physicians (Senior House Officer Grade)*, H. McC. Giles, M.B., B.Chir., M.R.C.P., D.C.H., A. W. N. Oatway, M.B., B.Chir., M.R.C.P., R. H. Vines, M.R.C.P., D.C.H. *House-surgeon to Orthopaedic and Plastic Departments (Senior House Officer Grade)*, W. D. Smith, M.B., B.Ch., B.A.O. *Surgical Registrar (Senior Registrar Grade)*, N. K. Connolly, M.D., F.R.C.S. *Part-time Orthopaedic Registrar (Registrar Grade)*, M. M. Erenst, M.D.

LIVERPOOL REGIONAL HOSPITAL BOARD.—The following Consultant appointments are announced: *Part-time Anaesthetist for St. Helens and Warrington*, P. S. Dearden, M.B., Ch.B., D.A. *Whole-time Senior Radiotherapist at Liverpool Radium Institute*, B. A. Stoll, M.R.C.S., L.R.C.P., F.F.R., D.T.M.&H. *Part-time General Surgeon, at Southport General Infirmary*, C. T. A. Burgess, M.B., B.Chir., F.R.C.S. *Part-time General Surgeon at Sefton General Hospital*, J. G. Gow, M.B., Ch.B., F.R.C.S.Ed. *Part-time General Surgeon for North Wirral Area*, J. A. Shepherd, M.D., Ch.M., F.R.C.S.Ed. *Whole-time Assistant Radiologist at Broadgreen Hospital*, B. B. Harrison, M.B., Ch.B., M.Rad., D.M.R.D. *Whole-time Assistant Radiologist at Mill Road Maternity Hospital*, A. S. Whitehead, M.B., Ch.B., M.Rad., D.M.R.D. *Assistant Radiologist for North Liverpool and Liverpool and District Eastern Hospital Management Committee Groups*, F. B. Wright, M.B., Ch.B., M.Rad., D.M.R.D. *Whole-time Anaesthetist for North and South Liverpool Areas*, Pamela Westhead, M.B., Ch B., D.A.

NORTH-EAST METROPOLITAN REGIONAL HOSPITAL BOARD.—*Full-time Consultant Physician (Physical Medicine), Leytonstone and Romford Groups of Hospitals*, B. E. Brocks, M.B., Ch.B., D.Phys.Med.; *Part-time Consultant General Physician, The Mothers' Hospital (Salvation Army)*, M. Lina Newhouse, M.B., B.S., M.R.C.P.

POWER, PATRICK J., M.B., B.Ch., Assistant Medical Officer, District Mental Hospital, Sligo, Co. Sligo, Eire.

ROUILLARD, L. M., F.R.C.S.Ed., Consultant Plastic Surgeon at Norfolk and Norwich Hospital and United Cambridge Hospitals, East Anglian Regional Hospital Board.

BIRTHS, MARRIAGES, AND DEATHS

BIRTHS

Bailey.—On April 18, 1951, at Greendown, Sonning, Berks, to Nancy, wife of Dr. Grenfell Bailey, a son—Charles Grenfell.

Griffiths.—On April 17, 1951, to Joan, wife of Dr. Donald Barry Griffiths, of Stanmore, a son—Michael John.

Saunders.—On April 9, 1951, at Capetown, South Africa, to Dr. and Mrs. Charles F. Saunders, a sister for Christopher and Margaret.

Smerdon.—On April 12, 1951, at Liverpool Maternity Hospital, to Celia (formerly Tewkesbury), wife of Geoffrey Smerdon, B.M., B.Ch., the Churchill Hospital, Oxford, a daughter.

Teasdale.—On March 21, 1951, at St. James's Hospital, Balham, London, S.W.1, to Elizabeth (formerly Edwards), wife of Derek Hall Teasdale, F.R.C.S., a daughter—Julia Diana.

DEATHS

Agar.—On April 19, 1951, at The Lawn, Henley-in-Arden, Warwicks, Willoughby Agar, M.R.C.S., L.R.C.P., J.P., aged 62.

Comyn.—On April 14, 1951, at 27, Napier Gardens, Hythe, Kent, Arthur Fitzwilliam Comyn, M.B., B.Ch., aged 68.

Games.—On April 11, 1951, at 21, Monton Green, Monton, Eccles, Manchester, John Henry Paisley Games, M.R.C.S., L.R.C.P., aged 62.

Hart.—On April 8, 1951, at Ottery St. Mary Cottage Hospital, Henry Percival Hart, M.C., M.B., B.Ch., Lieutenant-Colonel, R.A.M.C., retired, of Heath Hayes, West Hill, Ottery St. Mary, Devon, aged 70.

Hayman.—On April 14, 1951, George Atkin Hayman, M.R.C.S., L.R.C.P., of 9, Cardington Road, Bedford, aged 72.

Hood.—On April 18, 1951, Martin Crichton Hood, M.R.C.S., L.R.C.P., D.P.M., of West Didsbury, Manchester.

King.—On April 17, 1951, at Hillside, Stratton, Cornwall, Thomas Arthur King, M.R.C.S., L.R.C.P., J.P., aged 78.

Loughlin.—On April 13, 1951, at St. Helier's Hospital, Douglas Loughlin, M.R.C.S., L.R.C.P., of 54, Kinross Avenue, Worcester Park, Surrey.

Mackenzie.—On April 11, 1951, at Druim, Inverness, Theodore Charles Mackenzie, M.D., F.R.C.P.Ed.

McKane.—On April 4, 1951, at Sheffield Royal Infirmary, William Oliphant McKane, M.B., Ch.B.

Olive.—On April 14, 1951, at 19, Kenilworth Road, Leamington Spa, Eustace John Parke Olive, O.B.E., M.D., F.R.C.S.

Playfair.—On April 16, 1951, at New Copse, Fishbourne, Isle of Wight, Ernest Playfair, M.B., M.R.C.P., aged 79.

Rohan.—On April 18, 1951, at a London nursing-home, James Virgil Reynolds Rohan, L.R.C.P.&S.Ed., L.R.F.P.S., L.D.S.Ed., of 32, Coombe Road, Croydon, Surrey, formerly of Mauritius, aged 69.

Ryan.—On April 11, 1951, at his home, Knockrea Park, Douglas Road, Cork, Eugene Ryan, C.M.G., D.S.O., L.R.C.P.&S.Ed., L.R.F.P.S., Colonel, late R.A.M.C., retired, aged 77.

Stewart.—On April 6, 1951, at Vine Cottage, Feock, near Truro, Cornwall, Charles Ravenscroft Stewart, O.B.E., M.B., B.S., D.P.H.

Stockton.—On March 27, 1951, at 7, King's Road, Westcliff-on-Sea, Essex, Hubert Samuel Stockton, M.B., B.S., late of Bromley, Kent, and Peckham, London, S.E., aged 86.

Tracy.—On April 6, 1951, Horace Ernest Humphrey Tracy, M.R.C.S., L.R.C.P., aged 69.

Troup.—On March 30, 1951, at Harefield Sanatorium, Howard Branston Troup, M.R.C.S., L.R.C.P., Squadron Leader, R.A.F., retired, aged 55.

Whitehead.—On April 9, 1951, at Albert House, New Mills, near Stockport, Cheshire, Alfred Whitehead, L.R.C.P.&S.Ed., L.R.F.P.S., aged 78.

Any Questions?

Correspondents should give their names and addresses (not for publication) and include all relevant details in their questions, which should be typed. We publish here a selection of those questions and answers which seem to be of general interest.

Normal Range of Human Temperature

Q.—*What is the reason for the evening temperature usually being higher than the morning temperature? What size of "swing" may be regarded as normal? Do children have a larger or smaller "swing" than adults?*

A.—The inquirer does not specify to which temperature he is referring, oral, axillary, rectal, deep body, or even mean body temperature. There are daily swings in all of these, greater in the rectal and deep temperature, less in the axillary and oral temperatures. The mean body temperature, which is a physical rather than a physiological concept and can be deduced only from other measurements, probably shows the least swing. The two main factors concerned are activity and environment.

The more active an individual is the greater is the amount of metabolic heat produced, and unless this extra heat is lost storage will take place. As the rate of heat loss during activity never quite keeps pace with heat production there is always some rise in body temperature during activity. This rise in body temperature may be, according to Scandinavian workers, of actual advantage to the organism and so should be regarded as a physiological adaptation and not as a fault in control. Even a man resting in bed has a higher metabolic rate than a man asleep, because the former moves around the bed more. Eating also raises the metabolic rate, first because of the physical activity of chewing and swallowing, which, however, is almost too slight to be of significance, and then because of the stimulating effect of food itself, especially protein, on metabolism (specific dynamic action). In these cases also heat loss fails to keep pace with heat production, so there is storage and a rise in body temperature. These processes continuing throughout the waking day result in the slow rise in temperature, taking 10 to 12 hours from morning to night, seen in some individuals.

The rapid fall in temperature on going to bed at night, which is complete in about three hours or less, and the equally rapid rise shown by some individuals on starting the day, are conditioned by changes in the environment. Altering the environment alters the potential rate of heat loss from the body in a given physiological state. The actual rate of heat loss is kept approximately constant and equal to the heat production by changes in the thermal gradients within the body and in the distribution of heat. When comfortable in bed the skin is warm and well supplied with blood; there is only a slight temperature gradient between the centres of metabolism (the sole sources of heat in a resting man) and the skin and superficial tissues; skin temperature is relatively high and the deep body temperature is relatively low. But when the individual gets up, even though he may be fully clothed, his "personal climate" is cooler than when he was in bed, as the thermal insulation of clothes is less than that of the bedding; this, and the effect of cool outside air on exposed parts, causing reflex vasoconstriction elsewhere in the skin, result in a flow of blood away from the skin to the deeper tissues (the analogy might be made with a central heating system and re-routing the hot water from, say, the bedrooms to living-rooms). This redistribution of the blood gives rise to an increased temperature in the deeper tissues, and a decreased temperature in the skin and superficial tissues, as the re-routed warm blood no longer gets a chance to cool off in the skin. The reverse takes place on getting warm in bed at night. In both cases, the aim of these changes being to