dissociable metal—a group characterized by an easily ionizable mineral constituent which can be removed and, in some cases, replaced by another similar metal. In the iron-containing enzymes—e.g., peroxidase and catalase—the metal is firmly built into a "prosthetic group" of the same type as the haemin of red blood pigment, but there are many enzymes where the metal ion has the character of a coenzyme which can easily be removed by dialysis. In some cases the metal becomes dissociable only after treatment of the enzyme, and other enzymes can be reactivated by metal only when special organic coactivators are added.

Fromageot discusses certain aspects of sulphur metabolism, especially the experimental work on the formation of cystine from methionine and on the oxidation of the sulphur contained in the amino-acids cysteine, cystine, and methionine to inorganic sulphate. He suggests that the first step is the removal of the organically bound sulphur from cysteine and homocysteine as hydrogen sulphide, which is subsequently oxidized to sulphate. This suggestion is supported by experimental evidence published in France during the war. Roskam discusses experiments of his own and his colleagues on the effect of sympatheticomimetic substances on the bleeding time. The chief outcome of his work is the observation that adrenochrome, an oxidation product of adrenaline without sympatheticomimetic action, is as effective as adrenaline itself in reducing the bleeding time. Adrenochrome acts with a shorter latent period than adrenaline, and this is interpreted as indicating that adrenaline acts after being converted into adrenochrome.

The volume also contains a review by Boulanger on the role of sodium and potassium in the animal body and a short discussion by Courrier on functional correlations among steroids. A clearly written and useful article on spectrographic methods in biology is the posthumously published work of G. Florence, who lost his life in 1945 in German captivity.

ASPECTS OF PSYCHIATRY

Modern Attitudes in Psychiatry. The March of Time, 1945. (Pp. 154. 13s. 6d.) New York: Columbia University Press. London: Oxford University Press. 1946.

The New York Academy of Medicine sponsors certain lectures to the laity. The subject decided upon for 1945 was the use of psychiatry in medicine, and the present volume contains reprints of lectures by six distinguished American psychiatrists. In these the modern attitude is admirably set out for the intelligent layman. After a foreword by Dr. Rhoeds, the acting president of the Academy, and an introduction by Dr. Zabriskie, Dr. Galdston opens the series with a historical survey of psychiatry in which he points out that psychological medicine began with Hippocrates and that ancient and mediaeval treatment was indeed really more "psychic" that somatic. Dr. Wall deals in greater detail with the history of the subject since the days of Pinel. Then follows an admirable essay on the social aspects of medicine in which it is shown how illness, even if it is organic, can be modified by emotional stresses and strains, and how the patient can be properly treated only if his whole personality, mind, body, and environment are taken into account. In the fourth lecture Dr. Alexander discusses the future outlook for psychiatry from the psycho-analytic standpoint, but he stresses the need for shorter forms of treatment.

Col. Menninger describes the psychiatric arrangements in the Services and the advances in preventive diagnosis and treatment achieved, with the lessons for peacetime practice. Finally Dr. Weiss, discussing the role of the general physician in psychotherapy, points out that much "minor" psychotherapy can be carried out without specialist knowledge, though "major" psychotherapy must remain the province of the specialist. One of the worst features in the history of medicine according to Garrison and Allbutt was the divorce of medicine from surgery. As Dr. Weiss suggests, an-even more unhappy separation may have been the divorce of both from psychiatry.

These lectures are well worth perusal both for their own merits and because they illustrate how even difficult medical problems can usefully be brought before the lay public in an understandable form.

BOOKS RECEIVED

[Review is not precluded by notice here of books recently received]

Brompton Hospital Reports. Vol. XIV. 1945. (Pp. 175. 10s.) Aldershot: Research Department of the Hospital. 1947.

Includes articles on pleural and pulmonary suppuration treated with penicillin, prognosis of successful pneumonectomy, pulmonary hydatid disease, surgical treatment of carcinoma of the oesophagus, and a review of pulmonary tuberculosis.

Problems of Malnutrition and Starvation During the War. By Sir Jack Drummond, D.Sc., F.R.I.C., F.R.S. (Pp. 21. 1s. 6d.) Nottingham: University College. 1947.

A reprint of the author's Sir Jesse Boots foundation lecture, 1946.

Diseases of Children. Edited by D. Paterson, M.D., F.R.C.P., and A. Moncrieff, M.D., F.R.C.P. Fourth edition. Vol. 1. (Pp. 771. 30s.) London: Edward Arnold. 1947.

This well-known book includes new material on the surgery of congenital deformities, sulphonamides and penicillin for infants, acid-base regulation, anaesthetics for children, abdominal pain, pneumonia, and collapse of lung.

Poisons. By V. J. Brookes and H. N. Alyea. (Pp. 209. 16s. 6d.) New York: D. Van Nostrand. 1947.

A summary of the properties of poisons, and the symptoms and treatments of poisoning.

In Amintirea Profesorului Fr. J. Rainer. (Pp. 123.)

L'Oeuvre Scientifique de Fr. J. Rainer.—Vol. I: Neurologie Végétative. (Pp. 57.) Vol. II: Structure Fonctionnelle. (Pp. 154.) Vol. III: Anthropologie, Morphologie (Varia), Bibliographie. (Pp. 121.)

Le Métopisme Chez les Roumains et en Général. By Fr. J Rainer and Al. Tudor. (Pp. 35.) Bucharest: Impremeria Nationalā. 1946.

The first of these is a memorial volume to Prof. Rainer, of Bucharest, who died in 1944; in Rumanian. The other books are collections of papers by Prof. Rainer, some written in collaboration with other authors; illustrated; in French.

Les Etats Psychopathiques Infantiles d'Origine Syphilitique Héréditaire Larvée. By Henry Brantmay. (Pp. 73. No price.) Geneva: Georg. 1946.

A monograph on the aetiology and symptomology of congenital syphilis; in French.

Legislacion sobre Seguridad e Higiene del Trabajo. By the Ministry of Works. (Pp. 413. No price.) Madrid: Seccion de Prevencion de Accidentes e Higiene del Trabajo. 1947.

An account of industrial health regulations in Spain; in Spanish.

Lehrbuch der Hals-Nasen-Ohren- und Mundkrankheiten. By E. Schlittler et al. (Pp. 609. 60 Swiss francs.) Basle: S. Karger. 1947.

A textbook of diseases of the ear, nose, throat, and mouth; intended for students and general practitioners; in German.

Formen und Ursachen der Herzhybertrobhie bei Lungentuberkulose. By Prof. W. Berblinger. (Pp. 183. 10.20 Swiss francs.) Berne: Hans Huber. 1947.

A monograph on cardiac hypertrophy in pulmonary tuberculosis; illustrated; in German.

Functional Anatomy of the Mammal. By W. James Leach. (Pp. 231. 12s. 6d.) London: McGraw-Hill Book Company. 1946. An American guide to the dissection of the cat with an introduction to the structural and functional relationship between the cat and man. Intended as an introductory work for students of anatomy.

A List of Medical Libraries and Information Bureaux in the British Isles. By W. R. Le Fanu. (Pp. 28. 3s.) Oxford: University Press. 1947.

Includes addresses, telephone numbers, short notes on the history and present function of the medical libraries and information bureaux.

War Stress and Neurotic Illness. By A. Kardiner, M.D., and H. Spiegel, M.D. 2nd ed. (Pp. 428. \$4.50.) London: Paul B. Hoeber. 1947.

A monograph on war neuroses and the treatment of their acute and chronic phases.

He had been a member of the chemical warfare committee at the War Office and had been made a C.B.E. in 1918. He had honorary degrees from half a dozen universities, and he might well have rested on his undoubted laurels. Instead, he applied to animal biology all the vigour, skill, and enthusiasm which had formerly been directed to the problems of human physiology. Fundamental research on the large domesticated animals had been somewhat neglected in this country, and it was in 1941, at the age of 69, that he became Director of a new Unit of Animal Physiology for the Agricultural Research Council. He introduced new techniques for watching developing embryos, and he took up an old problem in a new guise—that of the oxygen supply to the foetus in utero. Soon a stream of interesting results and papers began to come from his unit. The first volume of his Researches on Pre-natal Life has only recently been published and is perhaps the first book of its kind. It deals with the development of function in the progress of foetal life and describes for the most part investigations made in the schools of physiology and agriculture in Cambridge, either by Barcroft or by his colleagues and pupils. Most of this work was done upon foetal sheep. There is a comparison between placental and foetal growth in the sheep. There are experiments showing the variation in fats and sugars as between the maternal and foetal blood. There are chapters on growth, and on the relation between maternal nutrition and foetal development. Numerous experiments are described on the transfer of blood from the placenta to the foetus at birth. Like his earlier books, this last contribution bears witness to the breadth of his interests and to his experimental ingenuity. In the midst of all this work he found time to test Anderson shelters on the range at Woolwich and to experiment with dehydrated meat.

Barcroft's teaching, like his research, made no parade of learning. In the physiological laboratory at Cambridge he was always ready to help an undergraduate with the most elementary experiment and with a simple friendliness that immediately put the student at his ease. In 1943 he received the Copley Medal, the highest award which the Royal Society can give. During his 74 years of active life there were few honours which had not come his way. But physiologists all over the world will remember him as "J.B.," a worthy successor to Michael Foster and Langley.

Prof. Thomas Nicol writes: Dr. R. J. GLADSTONE was a much-loved and respected member of the Anatomical Society and will be greatly missed by his many admirers and friends. Especially do we feel his passing a personal loss at King's College, London, where he had worked since 1912. Even during his retirement he remained attached to the anatomy department and produced a beautiful series of illustrated sections of embryos, which is of great value for teaching and research. This work was completed only just before his death. His wide knowledge of biology and comparative anatomy, his great artistic gifts, and his constant thirst for further information resulted in many contributions to anatomical knowledge; and these are especially valuable because of his critical judgment. He was always a champion of the young man, and there are many who will for ever owe him a great debt. His willingness to help others was one of his outstanding qualities. We extend to his widow and family our deepest sympathy in their irreparable loss.

Dr. RICHARD RICE died at his home in Harwell, Berkshire, on March 7, aged 88. He qualified at Charing Cross Hospital in 1879, and was in general practice until January, 1945. He married in 1885 Helen, daughter of the late Col. W. A. Ross of the Bengal Artillery, and is survived by four of his seven children. He had been a member of the British Medical

Association for over sixty years.

A. A. B. writes: Richard Rice possessed a radiantly healthy mind and body. For sixty-two years he practised at Harwell, giving unstinted service to the people in the surrounding countryside. His powerful personality, combined with a deep understanding of men and women, his industry and sustained professional skill, had made him loved and respected by thousands. For many years there was no other doctor within a radius of seven miles and see an emporative country limits. a radius of seven miles, and so an eminently sound clinician soon became an outstanding practitioner and obstetrician. During his whole career he seldom took a holiday. He was an energetic and faithful churchman and a churchwarden of the parish church for over half a century. He sang in the choir until he retired from practice, and for many years was

choirmaster. There were few positions of trust locally which he had not held at some time. For years he hunted twice a wesk during the season. An endearing side of his chambers was his championship of the young in any discussion, and his champions love for small children. To accompany him on a enduring love for small children. To accompany him on a long country round into the downland villages was an unforgettable experience. The bare bones of general practice became miraculously clothed as he recounted incidents of vivid

interest from the past.

Dr. Margaret L. Weir writes: It was with a feeling of great personal loss that I heard of the death of Dr. Richard Rice. had the privilege of being his first assistant and partner. Dr. Rice was a clinician of the highest order, and a man of unalterable integrity. He combined professional skill with a clear, sympathetic understanding of his patients, and gave himself unsparingly to the service of all classes of the community, self unsparingly to the service of all classes of the community, who in return gave him their deepest trust and love. As a family doctor he had an extensive maternity practice, and in this particular branch he will be long remembered for his high professional ability, kindliness, and infinite patience. During his few hours of leisure he read extensively, taking a keen interest in every new development of medical science. He was interest in every new development of medical science. a great lover of Nature, and got much happiness and peace in his garden among his roses.

Universities and Colleges

UNIVERSITY OF CAMBRIDGE

The following degrees were conferred on March 15:

M.D.—*F. S. Maclean, J. W. Crofton. M.Chir.—A. S. Till. M.B., B.Chir.—*W. B. Webb. * By proxy.

UNIVERSITY OF LONDON

Edward Tenney Casswell Spooner, M.D., has been appointed to the University Chair of Bacteriology and Immunology tenable at the London School of Hygiene and Tropical Medicine from Oct. 1.

Robert Henry Stewart Thompson, D.M., has been appointed to the University Chair of Chemical Pathology tenable at Guy's Hospital Medical School from Oct. 1.

Hans Grüneberg, M.D., has been appointed to the University Readership in Genetics tenable at University College from Oct. 1,

UNIVERSITY OF LONDON

Alan Kekwick, M.B., B.Chir., M.R.C.P., has been appointed to the Chair of Medicine tenable at the Middlesex Hospital and Medical School from Oct. 1, 1946.

UNIVERSITY OF LIVERPOOL

The following candidates have been approved at the examinations indicated:

indicated:

M.D.—Anne E. McCandless, H. Peaston, T. G. Richards, A. G. Rickards. M.B., Ch.B.—121, C. Davis, 12Janet H. Mountford, 12H. H. Whincup. Final M.B., Ch.B.—Part III: Olive M. Bell, J. H. Brenner, G. B. Brown, Mary E. Casper, Beryl G. Castell, J. B. Cowie, W. M. Edwards, Jeanne A. Elphick, D. W. A. Evans, A. J. Farmer, I. L. Francis, H. J. Gibride, T. H. H. Green, P. Hampson, M. F. Holt, Joan M. Hughes, E. Jones, Meira Jones, S. Kalinsky, H. Keidan, F. D. Kitchin, Edith G. Mercer, Alicia J. Middle, J. Moloney, Dorothy M. Morris-Jones, J. M. Old, W. L. Owen, Dorothy C. Peterson, Helen Poole, J. S. Porterfield, J. K. M. Rawlinson, Elizabeth Rhind, L. Robinson, D. L. Sharples, K. S. Shaw, W. B. Smellie, R. J. Smith, Elizabeth Taylor, W. A. L. Thompson, B. Towers, Pamela J. Tyson, D. G. Walker, Barbara M. Webber, D. J. West, D. P. C. Williams, Jessie I. Young. Medicine and Obstetrics and Gynaecology: F. G. Anderson, I. S. J. Crosbie, Elizabeth Howarth, J. E. Riding, Audrey A. Shone, M. H. Turner. Medicine and Surgery: E. Dewsbury, Nancy V. Dilling, Sheila K. Frazer, A. B. Jones, F. P. Lennon, G. C. Slee, L. C. Wolfman. Surgery and Obstetrics and Gynaecology: W. Ellenbogen, G. I. T. Griffiths, G. L. Levy, G. H. Lucas.

D.P.H.—Part I: A. R. Unsworth, P. Weyman.

CERTIFICATE IN PUBLIC HEALTH.—G. Davies, Barbara W. Gerrard.

1 With second-class honours. ² Distinction in surgery. ⁸ Distinction in obstetrics and gynaecology.

UNIVERSITY OF MANCHESTER

At a special meeting of the University Court held on March 21, authority was given for the conferment, on May 21, of the honorary degree of D.Sc. on Prof. Edgar Douglas Adrian, O.M., M.D., F.R.S., F.R.C.P., for contributions to the study of physiology. The following candidates have been approved at the examination indicated:

D.P.M.—Part I: G. Christie, A. Clark, H. A. Cole, R. Cotter, R. C. Cunningham, S. Falk, F. Howarth, I. McD. Kerr, M. G. McColl, R. S. Williams.

UNIVERSITY OF SHEFFIELD

The following appointments were made at a meeting of the University Council held on March 21: Honorary Lecturer in Venereal Diseases, Douglas Ogilvie Stevenson, M.B., Ch.B. Tutor in Child Health, Cynthia Mary Redhead, M.B., B.S. Assistant Tutor in Obstetrics, Samuel James Barr, M.B., Ch.B.

UNIVERSITY OF BIRMINGHAM

Lancelot Hogben, D.Sc., F.R.S., Mason professor of zoology, has been appointed to the Chair of Medical Statistics in the University.

UNIVERSITY OF EDINBURGH

The seventh Sharpey Schafer Memorial Lecture will be delivered by Dr. Charles H. Kellaway, M.D., F.R.S., F.R.C.P., F.R.A.C.P., director-in-chief, Wellcome Research Institution, London, on Tuesday, April 22, at 5 p.m., in the University New Buildings, Teviot Place, Edinburgh. His subject is "The Perfusion Experiment in the Study of Tissue Injury." All interested are invited to attend the lecture.

UNIVERSITY OF GLASGOW

A series of papers will be read in the Department of Ophthalmology of the University on Wednesdays, at 8 p.m., from April 9 to 30, both dates inclusive. The general arrangements will be similar to those in the series held last year, and the meetings will be open to all medical practitioners and senior students interested in ophthalmology. Details will be published in the diary column of the Supplement week by week.

CONJOINT BOARD IN SCOTLAND

The following candidates, having passed the final examination, have been admitted L.R.C.P.Ed., L.R.C.S.Ed., L.R.F.P.&S.Glas.:

J. D. Bowie, Audry G. Burdett, J. G. W. Cunningham, M. Devlin, Pearl I, Evans, W. Frame, J. M. Gillies, S. J. Glueck, A. J. Graham, F. H. Hamill. Winifred M. Hiscock, R. J. Kleinglass, G. Metz, W. C. Palmer, E. L. Peel, N. W. Preston, I. M. Ratner, J. M. Raynor, Eva Revesz, S. Rose, Georgina M. H. Smeaton, B. Taylor, W. B. Willder, R. Wolfson.

Medico-Legal

COCAINE IN MISTAKE FOR PROCAINE

The danger of prescribing by telephone was again grimly illustrated at a recent action in the High Court before Mr. Justice Hilbery. A patient undergoing a jaw operation at Wellhouse Hospital, Barnet, died after an injection of 80 ml. of 1% cocaine solution with 1/20,000 adrenaline. His widow sued the Hertfordshire County Council and Mr. Alan Henderson Hunt, the surgeon, for damages.

Mr. Hunt said in evidence that on the day before the operation he telephoned instructions to Dr. Eleanor Knight, who was not then qualified but was acting as student house-surgeon, to have ready 100 ml. of 1% procaine and 1/200,000 adrenaline, adding that the dose of the latter was about 5 minims (0.3 ml.). He always, he said, used the name procaine; "novocain" was a German trade name and since the war its use had been discouraged. No prescription was needed for the solution he had ordered, and Miss Knight ought to have known that the cocaine solution was lethal. He also maintained that the pharmacist should, before dispensing the solution, have obtained written instructions and the signature of a qualified person, or have queried the verbal instructions.

The learned judge, after a hearing lasting four and a half days, found that Mr. Hunt, Dr. Knight, and the pharmacist had been negligent. Although, he said, Mr. Hunt expected Dr. Knight to use her skill and reason and to bring her mind to bear on what he was saying, he was still under a duty to ensure that he was getting what he ordered. Dr. Knight was negligent because she knew the solution was lethal and required for an injection. The pharmacist was at fault for accepting an order by word of mouth for an unheard-of dosage for injection of cocaine and adrenaline, and for taking no steps whatever to insist upon a qualified person initialling the order. He had made no attempt to check with Mr. Hunt, and had disregarded every sort of ordinary safeguard in the making-up of dangerous drugs, together with the instruction in the British Pharmacopoeia that a pharmacist, when required to dispense an unusually large quantity of a dangerous drug, should take steps to verify. The hospital was responsible for the negligence of Dr. Knight (not then qualified) and of the pharmacist, but not for that of Mr. Hunt. In addition, it had permitted the use of a dangerous and negligent system under which a pharmacist was able on a verbal order to dispense a phenomenal amount of a dangerous drug without a qualified person's signature; and had failed to bring to Dr. Knight's attention the rules concerning dangerous He awarded £2,500 damages and costs, to be shared equally between Mr. Hunt and the hospital.

Medical News

Clinico-pathological demonstrations will be given in the Meyerstein Lecture Theatre of Westminster Hospital School of Medicine (Horseferry Road, S.W.) on Monday, April 14, at 5 p.m., when two cases of hypertension, (1) peri-arteritis nodosa and (2) tumour of adrenal, will be shown.

A meeting of the Eugenics Society will be held at the Royal Society's rooms (Burlington House, Piccadilly, W.) on Tuesday, April 15, at 5.30 p.m., when Dr. Linford Rees will speak on "The Physical Constitution in Mental Illness." All interested in the subject are invited to attend the meeting.

Lord Rothschild will deliver the annual oration on "The Problem of Fertilization" before the London Jewish Hospital Medical Society at the West London Synagogue, Seymour Place, W., on Thursday, April 17, at 8 p.m.

A general meeting of the Heberden Society will be held at 11, Chandos Street, London, W., on Friday, April 18, at 5 p.m., when Dr. Graham Weddell will deliver an address on "The Structure of Striate Muscle in Relation to its Function." A discussion will follow.

A two-day conference, intended mainly for teachers and welfare workers but open to the general public, on "Education for Family Life" will be held in Manchester on April 21-22 by the Extra-Mural Department of the University of Manchester assisted by the British Social Hygiene Council. Lectures will be given by Dr. Ethel Dukes, Mr. Cyril Bibby, Mr. R. Weatherall, and others. The fee for the course will be 5s. Particulars are obtainable from the Director of Extra-Mural Studies, the University, Manchester, 13, or from the Secretary, British Social Hygiene Council, Tavistock House North, Tavistock Square, London, W.C.1.

The Royal Free Hospital Old Students' Association reunion dinner will be held at the Café Royal, Regent Street, London, W., on Wednesday, April 30. Tickets 25s. (wines exclusive) may be had on application to either of the honorary secretaries of the association, Dr. Barbara Mitchell (6, Church Street, Epsom) or Miss Jocelyn Moore, F.R.C.S. (4, Devonshire Place, W.1).

The New York Academy of Medicine has attained its 100th anniversary and is celebrating the occasion with a series of lectures and discussions in March and April. It has also issued a small illustrated pamphlet outlining the history of the Academy. The Academy was founded on Jan. 6, 1847, "to foster the best ethical relation between the profession and the public and within the profession itself . . . for the continued education of the physician and for the encouragement and promotion of the advancement of the medical science in all its numerous parts and phases." Academy concerned itself with public health as early as the first year of its life—endorsing a proposed law for the registration of births, deaths, and marriages, demanding legislation to control the import of drugs, and urging action for the care of youthful idiots. In the same year, 1847, the Academy appointed a committee to investigate an outbreak of typhus fever and took the unusual step of ordering the report to be printed in the daily Press as well as in medical journals. Not until 30 years after the foundation of the Academy did the library reach any size, but from the small number of 400 volumes in 1875 it rapidly expanded to some 9,000 volumes in 1879, and by 1880 it had acquired 17,000; there are now over 248,000 volumes. The Academy was housed in its present home at 103rd Street and 5th Avenue in 1926.

The Dutch Society of Psychiatry and Neurology will hold an international meeting in Amsterdam from June 13 to 15 to celebrate the 75th anniversary of the Society, and several leading psychiatrists and neurologists of England, Switzerland, Belgium, and Holland have already promised to read papers. The Dutch hope that specialists from the United Kingdom, with their wives, will attend the meeting. Those wishing to be present should communicate with the secretary of the Royal Medico-Psychological Association, 11, Chandos Street, London, W.1, by April 15.

Dr. William Smith, of London, S.E.3, was elected to the Greenwich Borough Council, South-east Ward, at the by-election on March 20. The polling was as follows: Dr. Smith, Conservative, 2,233; Mr. T. Smith, Labour, 976; Mr. A. Purvis, Liberal, 140. Dr. Smith stressed in his election address that local government does not need political parties and that decisions should be reached free of political prejudice.

Under a recommendation of the Wheatley Committee, approved by the Secretary of State for Scotland, student nurses in general hospitals with a four-year training contract who become State registered nurses before the end of their contract will, after April 1, be graded and paid as staff nurses. They will receive a salary of £120 a year, with free board, lodging, and laundry.