

have included more about the child with juvenile rheumatism, with or without heart disease, and should have mentioned the pioneer "heart homes" such as West Wickham and the rheumatism supervisory scheme of the London County Council. This is, however, the only serious omission. Otherwise the author reviews most of the conditions with which the school doctor has to deal. It would have been interesting if he had included a chapter on the duties of a school nurse (though he mentions them in some sections) and his views on the part which the doctor can play in the individual school in conjunction with the teaching staff. "B.C.B. vaccination" on page 83 is an unfortunate misprint.

It is interesting to note the author's conclusion that the three biggest problems of the school health service are infestation, dental disease, and mental retardation, but he is perhaps pessimistic in stating that little can be done about the last. There is surely scope for a bold constructive policy of help for parents of such children. Students working for the D.C.H. or D.P.H. will find this a helpful volume.

ALAN MONCRIEFF.

BIOLOGY FOR THE CITIZEN

Biology: the Human Approach. By Claude A. Villee. (Pp. 580; 250 figures. £1 5s.) Philadelphia and London: W. B. Saunders Company. 1950.

In common with so many modern American textbooks intended to provide a general first-year university education in biology, that of Villee makes man the centre of interest. It is widely agreed that such human biology is the kind of biology which the enlightened citizen should know first and foremost, for it most easily captures and holds the ordinary student's interest and need not entail any sacrifice of basic scientific principles.

Villee has made the core of his book an account of human physiology. He has done this clearly and far from superficially. To this core he has attached a rather thin comparative treatment of plants and animals, linked to the human physiology mainly by the notion of an evolutionary scale of beings. Evolution is indeed, and rightly so, the guiding principle of the whole book, and the author concludes with a stiff section on formal genetics and an unusually full and well-balanced discussion of the theory of evolution and the evidence on which it is based. Such an evolutionary emphasis, admirable in itself, shows also considerable strength of purpose in an American author, since the American educational scene is not entirely favourable to the teaching of evolution.

The author's definite view of what human biology should be stimulates some questioning of its adequacy. In spite of the emphasis on physiology and evolution, it can be argued that the picture of the organic world that the author paints is not really a living one. The reason is that the dynamic relations of organisms to each other and to their physical environment appear little more than incidentally. Yet these relations are surely of vital importance to biological science, including evolutionary theory; and, since man is bound by them, they are no less important to the educated citizen, whose survival depends on them. The relevance to the practice of medicine of a public well grounded in human physiology can be granted. But the emphasis in this book is perhaps too much on the human body, for it

has meant neglect of other aspects of biology of equal importance to human beings and of considerably greater biological generality. After reading the section on human diet one might say, though unfairly, that the emphasis is too much on the American body, for this section is devoted almost exclusively to a warning against over-eating.

Such questions of content are too much a matter of opinion to be made a subject of criticism, though they are an important subject for discussion. But there is a real criticism to be made. The book suffers here and there from that curse of so much elementary biology—theoretical feebleness. It is high time that protest was made against such carelessness as the definition of the principle of organic evolution in such a way as to apply only to the lineages of present-day organisms and only to the transition from simple to complex. Then there is that inevitable list of characteristics all of which are supposed to be possessed by all known living things. There are said to be six of them, and to justify three of these—reproduction, movement, and growth—would strain ingenuity to breaking-point. Villee is of course doing no worse, and often a good deal better, than most textbook writers. These half-baked generalizations drift from one textbook to another. Could not the new human biology break this bad old tradition?

M. ABERCROMBIE.

BOOKS RECEIVED

Review is not precluded by notice here of books recently received

Genetics in Ophthalmology. By A. Sorsby, M.D., F.R.C.S. (Pp. 251. 42s.) London: Butterworth. 1951.

A Dictionary of Biology. By M. Abercrombie and others. (Pp. 246. 2s.) Harmondsworth: Penguin Books. 1951.

Science News 19. Edited by J. L. Crammer. (Pp. 142. 1s. 6d.) Harmondsworth: Penguin Books. 1951.

Malignant Disease of the Female Genital Tract. By S. Way, M.R.C.O.G. (Pp. 279. 24s.) London: J. and A. Churchill. 1951.

Recent Progress in Psychiatry. Edited by G. W. T. H. Fleming. Vol. 2. *The Journal of Mental Science.* (Pp. 711. 50s.) London: J. and A. Churchill. 1950.

Experimental Physiology for Medical Students. By D. T. Harris, M.D., D.Sc., F.Inst.P., and others. 5th ed. (Pp. 305. 21s.) London: J. and A. Churchill. 1951.

Stress. By H. Selye, M.D., Ph.D., D.Sc., F.R.S.(Can.). (Pp. 1,025. No price.) Montreal: Acta. 1950.

The Meaning and Practice of Psychotherapy. By V. E. Fisher, Ph.D. (Pp. 411. 37s. 6d.) New York: Macmillan Company. 1950.

Transactions of Conferences of the Josiah Macy, jun., Foundation. Renal Function. Edited by S. E. Bradley. (Pp. 172. \$2.50.) *Metabolic Interrelations.* Edited by E. C. Reifenshein, jun., M.D. (Pp. 279. \$3.95.) *Blood Clotting and Allied Problems.* Edited by J. E. Flynn. (Pp. 224. \$3.) *Biological Antioxidants.* Edited by C. G. Mackenzie. (Pp. 181. \$3.25.) *Cybernetics.* Edited by H. von Foerster. (Pp. 209. \$3.50.) *Liver Injury.* Edited by F. W. Hoffbauer, M.D. (Pp. 164. \$1.60.) *Problems of Aging.* Edited by N. W. Shock. (Pp. 258. \$3.75.) New York: Josiah Macy, jun., Foundation. 1950.

Techniques et Thérapeutiques en Pneumologie. Edited by P. Bourgeois. (Pp. 365. 1,000 francs.) Paris: L'Expansion Scientifique Française. 1950.

Studien über die Morphogenese des Plattenepithelkarzinoms der Portio Vaginalis Uteri. By E. Glatthaar. (Pp. 84. 8 Swiss francs.) Basle: S. Karger. 1950.

in the National Health Service is 20s. a day. The comparable allowance for members of Ministry of Labour and Ministry of National Insurance committees is 25s. a.

N.H.S. Administration.—The total numbers of officers in the higher clerical, clerical, and general divisions on the staffs of hospitals were 14,589 on December 31, 1948, and 17,373 on December 31, 1949, the only dates for which figures are available.

Cost of Day Nurseries.—Gross cost for the year 1947-8 has been estimated at £3.5m. and the sums recovered by charges at £0.7m. Estimated average gross cost per child per week for the year 1947-8 was £2 11s. 5d. in the London area and £2 2s. 7d. elsewhere in England and Wales. The estimated average weekly charge per child was 9s. 6d. in the London area and 8s. 9d. elsewhere.

Smallpox.—The numbers of deaths in the five years 1946-50 were respectively 14, 15, nil, 5, and 1. The numbers of these cases in which there was information that the person had been vaccinated in earlier life were respectively 3, 6, nil, 1, and 1.

Universities and Colleges

UNIVERSITY OF OXFORD

In Congregation on February 24 the degree of D.M. was conferred on R. W. Parnell and Sheila R. Tangye.

UNIVERSITY OF CAMBRIDGE

In Congregation on March 3 a bequest to the University by the late Dr. C. M. Stevenson of the sum of £2,000 for the provision of an annual postgraduate prize in economics was gratefully accepted.

Professor Henry Albert Harris will retire from the Professorship of Anatomy on October 1. A meeting of the Electors to the Professorship will be held on April 19. Applications for the post should reach the Registry, Old Schools, Cambridge, by April 5.

In Congregation on February 9 the following medical degrees were conferred:

M.D.—*J. A. R. Miles, *J. P. Bull, C. H. C. Upjohn, J. A. Cosh, J. Vallance-Owen, K. M. Hay, E. G. Sita-Lumsden, M. M. Bull, C. A. de Candole, R. Hodgkinson.

M.B., B.Chir.—*C. D. Lacey, *W. R. Jukes, *I. M. Guiver, *G. E. Sayce, *H. F. W. Pribram, *Vera Armett, *Rosemary A. Cooper, K. G. P. Mackenzie.

*By proxy.

UNIVERSITY OF LONDON

The King's College Hospital Medical School announces that the Sir Charlton Briscoe Research Prize and the John Everidge Research Fund in Urology were established last year. Sir Charlton Briscoe, who was honorary physician to King's College Hospital from 1908 until he retired from the active staff in June, 1935, is now consulting physician to the hospital and Emeritus Lecturer in Medicine to the medical school. Mr. John Everidge is a Fellow of King's College and consulting urological surgeon to King's College Hospital and a former lecturer in the medical school. He has been a member of the staff of King's College Hospital since 1919.

The Sir Charlton Briscoe Research Prize Fund consists of an investment of £1,000, the income from which is to be used for the encouragement of original research for the advancement of knowledge in any branch of medical science, and especially for work leading to the relief of pain and suffering in the sick. The income (approximately £30 per annum at the present time) is available for award to any member or members of the medical or dental staff of the hospital or medical school, or to any students or former students of the school. The object of the fund is to give some reward for research, interpreted in the widest sense, carried out or completed during the preceding year, which in the opinion of the committee is worthy of such recognition. The committee is appointed by the academic board of the medical school and consists of a senior physician, a senior surgeon, and a senior gynaecologist, with power to co-opt any individuals with special knowledge of the subject under consideration. The committee will not make any award unless it considers that work of a sufficiently high quality relative to the standing of the author is produced. In any year in which an award is not made the income for that year will be added to the capital fund.

The John Everidge Research Fund in Urology was established by Mr. John Everidge and is derived from the balance of the Window Bequest, some £2,050, which was left to the urological department of the hospital, and a personal gift of approximately £450 from Mr. Everidge. The object of the fund is to provide financial assistance for the advancement of knowledge in genito-urinary surgery and ancillary subjects, particularly research likely to enhance the diagnosis and therapy of diseases of this system. The conditions of the fund provide that an award may be made for an essay or lecture reporting the objects or outcome of the research. It is open to all workers in this field, whether medically qualified or not.

Full particulars of both the prize and the fund may be obtained from the Dean, King's College Hospital Medical School, Denmark Hill, London, S.E.5.

UNIVERSITY OF MANCHESTER

The celebration of the centenary of Owens College, the first college of the Victoria University, will take place during the week beginning May 28 and will include a service in the Cathedral on May 29, when the address will be given by the Archbishop of York, and a reception in the Town Hall by the Lord Mayor and Corporation on May 30. On May 31 the Queen will attend a Congregation to receive the honorary degree of LL.D. The same honorary degree will be conferred also on Sir John Stopford, M.D., F.R.C.P., F.R.S., Vice-chancellor of the University since 1934.

Morris Markowe, M.D., D.P.H., D.P.M., has been appointed Lecturer in Psychiatry.

UNIVERSITY OF LEEDS

The following appointments are announced: *Senior Lecturer in Preventive Medicine and Public Health*, Robert Sutherland, M.D., D.P.H.; *Lecturer in Paediatrics and Child Health*, M. F. G. Buchanan, M.B., Ch.B., M.R.C.P.Ed., D.C.H.; *Lecturer in Clinical Dental Surgery*, R. T. Heylings, M.B., Ch.B., B.Ch.D., L.D.S.

Vital Statistics

Deaths from Tetanus

Drs. Conybeare and Logan discuss at page 504 various statistics of deaths from tetanus in England and Wales. The seasonal incidence of deaths from tetanus in 1939-48 is shown for England and Wales in the Table below. The figures for deaths in each month are taken from the Registrar-General's *Annual Reviews* for the years in question.

Deaths from Tetanus by Months in 1939-48, England and Wales, Civilians Only

	Jan.	Feb.	March	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1939 ..	8	8	4	12	4	11	6	5	10	9	5	13	95
1940 ..	5	4	5	12	8	13	13	5	9	10	13	110	
1941 ..	4	3	11	11	9	12	11	5	4	4	6	96	
1942 ..	4	4	6	14	6	9	11	8	12	9	6	4	93
1943 ..	9	1	9	5	10	6	7	12	8	5	10	3	85
1944 ..	1	9	6	8	10	3	14	8	4	10	8	8	89
1945 ..	5	6	7	10	9	6	7	10	7	6	3	3	79
1946 ..	5	5	4	7	6	6	7	6	3	5	4	4	62
1947 ..	6	2	3	4	8	7	8	10	5	9	5	5	72
1948 ..	4	4	9	6	4	5	10	9	6	3	5	5	70
Total ..	51	46	64	89	74	78	99	92	65	69	60	64	851
Adjusted monthly totals ..	50	50	63	90	73	79	97	90	66	68	61	63	850
Adjusted monthly percentages ..	5.9	5.9	7.4	10.6	8.6	9.3	11.4	10.6	7.8	8.0	7.2	7.4	100.1

This Table excludes deaths of non-civilian males on and after September 3, 1939, and non-civilian females on and after June 1, 1941.

Below the figures for total number of deaths in each month during the 10 years are given adjusted monthly totals. The

INSTITUTE OF PHYSICS: INDUSTRIAL RADIOLOGY GROUP, 47, Belgrave Square, London, S.W.—March 16, 6.30 p.m., "The Physics of Radiography," by Mr. H. S. Peiser, A.Inst.P.

●ST. GEORGE'S HOSPITAL MEDICAL SCHOOL.—At St. George's Hospital (Board Room), Hyde Park Corner, London, S.W., March 16, 5.30 p.m., "Jenner's Cowpox Inoculation," Jenner Memorial Lecture by Professor A. W. Downie.

SOCIETY OF PUBLIC ANALYSTS.—(1) At Royal Society, Burlington House, Piccadilly, London, W., March 16, 3.15 p.m., annual general meeting. Address of Retiring President, Mr. George Taylor. (2) At Society of Apothecaries of London, Blackfriars Lane, London, E.C., March 16, 7 for 7.30 p.m., Biennial Dinner.

APPOINTMENTS

CRAWFORD, JAMES MACKAY, M.D., D.P.M., Consultant Psychiatrist and Physician-Superintendent, Botleys Park Hospital, Chertsey, Surrey.

CROWLEY, NORA VERONICA, M.B., B.Ch., D.C.H., Assistant Medical Officer for Maternity and Child Welfare and School Medical Inspection Northamptonshire County Council.

EAST ANGLIAN REGIONAL HOSPITAL BOARD.—The following appointments are announced: C. H. Budd, B.M., B.Ch., F.F.A., Part-time Consultant Anaesthetist, Saffron Walden General Hospital; E. L. Dutta, M.R.C.S., L.R.C.P., Resident Medical Officer, County Hospital, Dordington, Cambridgeshire; G. E. Flatman, M.B., B.S., Resident Surgical Officer, West Norfolk and King's Lynn Hospital; C. I. Cooling, M.B., B.S., Junior Resident Surgical Officer, East Suffolk and Ipswich Hospital and Ipswich Borough General Hospital.

EGERTON, B. H., M.B., B.S., Anaesthetic Registrar, Norfolk and Norwich Hospital, East Anglian Regional Hospital Board.

EVANS, W. E. F., M.R.C.S., L.R.C.P., D.A., Consultant Anaesthetist and Medical Director, Ashford Hospital, Middlesex.

HURLEY, JEREMIAH, M.Ch., F.R.C.S.Ed., Senior Surgeon, Meath Hospital, Dublin.

KILLOH, R. BRUCE, M.B., Ch.B., D.P.H., Medical Officer of Health, Melksham Urban and Bradford and Melksham Rural Districts, Wilts.

SOUTH-WESTERN REGIONAL HOSPITAL BOARD.—Consultant Ophthalmic Surgeon at Southmead Hospital, Bristol, P. Jardine, F.R.C.S.Ed., D.O.M.S. Consultant Orthopaedic Surgeons in Bristol Clinical Area, H. K. Lucas, M.Ch.Orth., F.R.C.S.Ed., M. P. McCormack, F.R.C.S.Ed. Deputy Resident Physician, Ham Green Hospital, Bristol, G. D. W. McKendrick, B.M., B.Ch., M.R.C.P. Senior Registrar in Plastic Surgery, Frenchay Hospital, Bristol, G. S. Gunter, M.S., F.R.C.S., F.R.A.C.S.

BIRTHS, MARRIAGES, AND DEATHS

BIRTHS

Borrie.—On March 4, 1951, at Newcastle-upon-Tyne, to Helen, wife of John Borrie, M.B.E., F.R.C.S., a son—Michael John.

Crawford.—On February 21, 1951, at the Edgbaston Maternity Nursing Home, Birmingham, to Mary Stewart, wife of Dr. W. Cowan Crawford, a daughter—Fiona Mary.

Hutton.—On March 2, 1951, at the Leeds Maternity Hospital, to Dorothy (formerly Cheshire), wife of Mr. Thomas B. Hutton, M.B., F.R.C.S.Ed., a sister for David and Christopher—Ann Dorothy Elizabeth.

Starks.—On February 23, 1951, to Dr. Isobel Starks (formerly Morrison), wife of Dr. J. M. Starks, of High Street, Wembourn, Staffs, a son.

DEATHS

Alton.—On March 2, 1951, at Rookery Dene, 1,856, Pershore Road, King's Norton, Birmingham, Edgar Hepworth Alton, L.R.C.P.&S.Ed., L.R.F.P.S., aged 81.

Anderson.—On February 16, 1951, at Seascale, Cumberland, Charles Madill Anderson, M.B., Ch.B., late of Sheffield, aged 75.

Arbuckle.—On February 17, 1951, at Durban, South Africa, Mary Scott Arbuckle (formerly Anderson), M.B., Ch.B.

Bradley.—On February 27, 1951, at 1a, Watling Street Road, Fulwood, Preston, Lancs, David Kelly Bradley, M.B., Ch.B.

Browne.—On February 27, 1951, at Rapallo, Italy, Cuthbert Garrard Browne, C.M.G., D.S.O., M.R.C.S., L.R.C.P., Lieutenant-Colonel, R.A.M.C., retired, of Lakers Farm, West Chilton, Sussex.

Davies.—On March 5, 1951, at a Manchester nursing-home, Evan Sherrah Davies, M.R.C.S., L.R.C.P., of Gaghills House, Waterfoot, Rossendale.

Dykes.—On February 24, 1951, at Hove, David Garfield Dykes, M.B., Ch.B., formerly of Great Witley and Kidderminster, Worcs, aged 69.

Eddlestone.—On February 16, 1951, Neville Avory Eddlestone, M.D., of 70, Marine Avenue, Monkseaton, Northumberland, aged 66.

Falconar.—On March 2, 1951, William Ernest Falconar, M.B., of Pictou Cottage, Twyford, Berks, aged 79.

Mauder.—On March 3, 1951, at Erith, Harold Arthur Mauder, D.S.O., M.B., B.S., of Ormiston, 68, Bexley Road, Erith, Kent.

Molesworth.—On February 27, 1951, at Cruickfield, Duns, Berwicks, William Molesworth, C.I.E., C.B.E., M.B., B.S., Colonel, I.M.S., retired, aged 85.

Montgomery.—On March 4, 1951, at St. Richard's Hospital, Chichester, Edwin Cecil Montgomery, M.R.C.S., L.R.C.P., of 32, Crescenta Walk, Bognor Regis, late of Maidenhead, aged 79.

Shaw.—On February 27, 1951, Kenneth Rodas Devaigues Shaw, L.R.C.P.&S.Ed., L.R.F.P.S., of 7, Harley Street, London, W.

Williams.—On February 25, 1951, at Milford House, Milford Haven, Pemb., Hugh Owen Williams, M.B., B.S., D.P.H., of Abersoch.

Williamson.—On February 23, 1951, at Grimsby General Hospital, Joshua Williamson, M.B., Ch.B., of 14, Lindum Road, Cleethorpes, Lincs.

Young.—On March 2, 1951, at Burnbank House, Kilsyth, near Glasgow, Watson Young, M.B., Ch.B., aged 71.

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.

Coronary Thrombosis

Q.—What is the first-aid and immediate medical treatment of a patient suspected of having sustained a coronary thrombosis?

A.—First-aid treatment usually consists in persuading the patient to sit quietly in a chair with his legs down, withholding all food, fluid (including alcohol), and stimulants, and giving a large dose of any analgesic that is handy, such as aspirin (15 to 20 gr.—1 to 1.3 g.). If there is much dyspnoea, venous tourniquets may be placed round the thighs. If there is syncope or faintness, the patient should be made to lie down with his head low, and venous tourniquets must not be applied.

Immediate medical treatment includes the giving of $\frac{1}{4}$ gr. (22 mg.) of morphine, and perhaps heparin 10,000 units intravenously. If the patient is known to be sensitive to morphine, 50–100 mg. of pethidine may be injected intramuscularly instead. Oxygen may help in some cases, but is not used routinely in this country. Aminophylline and papaverine also have their advocates. Quinidine (3 to 6 gr.—0.2 to 0.4 g.) three times a day helps to prevent paroxysmal changes in rhythm.

The patient should be nursed in bed, flat if shocked or faint, propped up if dyspnoeic. Semi-starvation for the first 48 hours is important, fruit drinks with sugar, tea with milk and sugar, and perhaps a little stewed or tinned fruit with milk and rice being all that are allowed. An enema may be given on the fourth or fifth day if necessary, but not before.

Aeroplane Dope

Q.—What is the composition of aeroplane dope? To what toxic symptoms may it give rise, and what is the treatment in such cases?

A.—The term "aeroplane dope" survives from the 1914–18 war, when cellulose acetate was dissolved in tetrachlorethane to make a waterproof coating for aeroplane wings. Seventy cases of toxic jaundice, with 12 deaths, had occurred up to 1917 among workers exposed to this substance, and the workers themselves called it "dope" because it made them ill. Attempts to solve the problem by reducing the quantity of tetrachlorethane in the dope failed, for even as little as 10% proved dangerous (Hunter, 1944). In July, 1917, the War Office and the Admiralty were able to announce that no dope containing tetrachlorethane was being made or used.

In the 1939–45 war, coal-tar benzene was used as a solvent in aeroplane dope. The amount of benzene depended upon the availability of other solvents such as xylene and toluene, but did not exceed 15%. Modern formulations have not altered greatly. The risk of poisoning depends upon the exposure to benzene. Toluene and the higher homologues of benzene have no long-term toxic action, but commercial toluol and xylol may contain benzene as an impurity.

Acute poisoning is not likely to occur in workers engaged on aeroplane "doping." Chronic benzene poisoning may occur, and no satisfactory method has been devised to detect it in its earliest stage. Repeated exposure to benzene may cause severe and often fatal anaemia from its toxic effect upon the bone marrow. Early workers considered that a diagnosis of benzene poisoning was not justified unless there was an aplastic anaemia associated with granulocytopenia.