

deliberate avoidance of any children; indulgence which is one-sided; over-indulgence and lack of any system of control; to such major causes might be attached many important, though in a sense, minor matters. I do not mean that these difficulties and failures should be treated negatively, as things against which cautions should be given; they are to be avoided by quite simple positive information before marriage. It may be urged, of course, especially against such preparation for marriage, but also against the whole idea of the need of education in questions of sex, that any such education is highly artificial; that sex is natural in man and woman, and should function spontaneously. It is perhaps hardly necessary to take such an argument very seriously before a medical audience. The history of civilization at its best is the history of an increasing understanding and control of natural forces that they be directed towards the noblest ends; from that progress we cannot now step back. The choice is quite clear; either back to the jungle from which long ages ago we emerged; or on to the City of God.

Memoranda

MEDICAL, SURGICAL, OBSTETRICAL

CALCIUM LEVULINATE FOR INTRAVENOUS AND SUBCUTANEOUS INJECTION*

In recent years it has become obvious that in certain cases calcium must be administered more rapidly and efficiently than is possible by the oral route. Thus, in the case of tetany following thyroid operations, in the vomiting of intestinal obstruction, and also in some recently discussed conditions such as osteitis fibrosa cystica and coeliac rickets, the tetany has been relieved by the intravenous and subcutaneous administration of calcium salts. Again, the use of calcium salts intravenously has been recommended for pre-operative treatment in various surgical conditions, especially in jaundiced patients.

The use of the simple inorganic salts (for example, calcium chloride) for intravenous injection is undesirable, as ulceration usually follows if extravasation occurs. For this reason various organic salts of calcium have been tried, but these have all suffered from the disadvantage of their relative insolubility. With some, however, the desired concentration can be attained by using a supersaturated solution, as is done, for example, with calcium gluconate; but since this method is rather limited, it was felt that a more soluble calcium salt suitable for injection should be sought. It was found that the calcium salt of levulinic acid possesses the desired properties. This salt, which has the composition expressed by the formula $(\text{CH}_3\text{CO}\cdot\text{CH}_2\cdot\text{CH}_2\cdot\text{CO}_2)_2\text{Ca}\cdot 2\text{H}_2\text{O}$, contains 13.1 per cent. of calcium. It is very soluble in water, stable 25 per cent. solutions being obtainable with ease. Stronger solutions are syrupy. The solutions are stable at 100° C. The reaction of a 10 per cent. solution lies between pH 7 and pH 8.

In case the levulinate ion should prove to be strongly toxic, the effect on the blood pressure of an anaesthetized cat of a solution of calcium levulinate was compared with that of a supersaturated calcium gluconate solution of the same calcium content. The depressor effects of the two solutions were approximately the same. A dose of 33 mg. of calcium per kg. as 25 per cent. calcium levulinate was also given intravenously to each of three rabbits without any mishap.

The effect of injecting 20 c.cm. of 10 per cent. calcium levulinate intravenously into a normal person was investi-

gated. No unpleasant result ensued. A similar solution was given intravenously in four cases of tetany, and for the pre-operative treatment of five jaundiced patients. There were no reactions whatsoever; and, further, ulceration does not seem to follow extravasation, for in one case where the latter accidentally occurred no sloughing resulted, although there was a fairly severe haematoma. We would point out that owing to its great solubility calcium levulinate is particularly suitable for subcutaneous injection.

We have to thank the Crookes Laboratories for preparing for us the pure calcium levulinate referred to above.

G. D. GREVILLE.

E. C. DODDS.

CAESAREAN TWINS

I wish to place on record the following case of Caesarean twins on account of the extreme physical deformity of the mother, her ante-natal care, her rapid post-operative convalescence, and the extremely healthy condition of her children.

Mrs. X was born in 1897, and at the age of 4 was treated in Edinburgh for "curvature" of the spine. For three years she was kept in bed, and occasionally in plasters, till the hump became established and the pain from movement less acute. Her deformity became permanent in time. She first consulted me in August, 1925, on account of severe pain in her spine. I then made the following entry on her case sheet. "Marked kyphosis and scoliosis, large permanent hump on right side, pain on left side, due to pleurisy, enlarged glands in the right iliac fossa, and enlarged septic tonsils." She was treated medically, with slight improvement in her general condition, but she always remained a chronic suffering invalid. A spinal support was ordered for her, and she was instructed to wear it during the daytime only when she was on her feet. In March, 1928, I enucleated her tonsils under a general anaesthetic. Her health subsequently improved to a great extent, and she became pregnant in spite of the fact that she was still a virgo intacta, there having been on no occasion any penetration during sexual intercourse. Even digital examination was impossible. She was admitted to Nell Lane Auxiliary Hospital and x-rayed there. The pelvis was found to be flat, the outlet was very narrowed, and the promontory was bulging forward. The uterus was lying high up, and the cervix could hardly be touched by the finger. It was decided not to interfere with her condition, and she was allowed to carry on to full term.

She had no morning sickness, no albuminuria, and her chief complaint was backache. As there was no space in the right hypochondrium, where the ribs rested on the iliac crest, the uterine body at first occupied the left half of the abdominal cavity, later it became anteverted and almost fell out of the abdomen. From the fifth month onwards the patient lay in bed day and night; her uterus was placed on special pillows beside her. There was complete atony of the muscles of the abdominal wall, and special care had to be taken to carry the uterus when the patient left the bed.

On November 25th, 1928, when she was 8½ months pregnant, labour pains started at 4 p.m. I was sent for at 11 p.m., and at 1 a.m. I performed Caesarean section at Nell Lane Hospital and delivered her of twins. There was no difficulty in removing the two placentae, which were joined. There was no undue haemorrhage, the contraction of the uterine muscle being remarkably good in spite of its distension. She made an uninterrupted recovery, and was discharged from the hospital in three weeks' time. The babies weighed 3 lb. 10 oz. and 3 lb. 12 oz., which is very remarkable in view of the fact that the mother weighed only 5 st. before she became pregnant, and her height was 4 ft. 5 in.

To-day the children are remarkably healthy. They weigh 1 st. 13 lb. and 1 st. 11 lb., and have suffered from no illness except a mild attack of bronchitis. They have been brought up on a patent food.

M. R. SONI, B.A., M.B., Ch.B.Ed.

Withington, Manchester.

* From the Courtauld Institute of Biochemistry, Middlesex Hospital, London, W.1.

consequence of the actuarial investigation into the superannuation of asylum officers. The investigation was on the point of completion.

Transfer of Poor Law Institutions.—Mr. GREENWOOD told Mr. Somerville Hastings, on July 23rd, that appropriation of transferred Poor Law institutions for the purposes of the Public Health Acts had been effected by the London County Council and by the county borough councils of Birmingham, Bradford, Bristol, Cardiff, Coventry, Derby, Halifax, Leicester, Manchester, Middlesbrough, Newcastle-on-Tyne, Oldham, Plymouth, Reading, Rochdale, Southend-on-Sea, Sheffield, Southampton, Sunderland, Warrington, and West Bromwich. Applications for consent to such appropriation were under consideration from the county councils of Glamorgan and the North Riding of Yorkshire, and from the county borough councils of Burnley and Preston.

Milk for School Children.—Two education authorities in Scotland—West Lothian and Selkirk—have adopted schemes for the supply of milk to school children under the provisions of the Education (Scotland) Act, 1930.

Notes in Brief

Replying to Mr. Sorensen, on July 16th, Mr. Greenwood stated that admission hospitals had been provided, or were under construction, at about a quarter of the public mental hospitals.

The conveyance by road of dangerous substances, including vitriol, is receiving the attention of the Home Secretary.

The Home Secretary has recently circulated for purposes of discussion draft regulations dealing with head-lights on motors.

Universities and Colleges

UNIVERSITY OF CAMBRIDGE

The following candidates have been approved at the examination indicated:

DIPLOMA IN MEDICAL RADIOLOGY AND ELECTROLOGY.—*Part II:* W. Addey, W. Ahern, G. S. Bhargava, H. W. Davies, G. C. Fairchild, C. P. Goswami, J. J. O'Grady, T. Simpson.

UNIVERSITY OF LONDON

On the occasion of the centenary meeting of the British Association, to be held in London in September next, the Senate has decided to confer the degree of Doctor of Science *honoris causa* on the President of the British Association, General the Right Hon. J. C. Smuts, C.H., F.R.S., on Sir Frederick Gowland Hopkins, D.Sc., M.B., President of the Royal Society, and on Lord Rutherford of Nelson, O.M., Sir Charles Scott Sherrington, O.M., G.B.E., M.D., and Sir Joseph J. Thomson, O.M., Master of Trinity College, Cambridge, Past Presidents of the Royal Society.

At the June matriculation examination there were 197 successful candidates in the first division, and 1,007 in the second division; in addition, 41 took the supplementary certificate in Latin.

LONDON HOSPITAL MEDICAL COLLEGE

The following University entrance scholarships, open to students of Oxford and Cambridge, have been awarded:

Price Scholarship in Anatomy and Physiology (value £100): T. L. H. Shore (St. John's College, Cambridge). Freedom Research Fund Scholarship in Pathology (value £100): A. M. Barrett (Pembroke College, Cambridge).

KING'S COLLEGE HOSPITAL MEDICAL SCHOOL

The following scholarships, etc., have been awarded:

Burney Yeo Scholarship: H. H. Bayley. Burney Yeo Exhibitions: A. M. Lester, J. H. Walters, C. E. Greenwood, W. H. A. Picton. Raymond Gooch Scholarships: R. H. Gardiner, G. B. Davis, W. L. Kerr. Epsom College Scholarship: G. D. Pirrie. Seaman Scholarship: E. A. Evans. Senior Scholarship and Special Prize for Surgical Pathology: G. H. Newns. Jelf Medal, Burridge Prize for Forensic Medicine, and Class Prizes for Medicine, Surgery, and Pathology: J. W. Summerhayes. Class Prizes: Obstetric Medicine and Forensic Medicine, Muriel Long; Forensic Medicine and Hygiene, G. T. Cook; Psychological Medicine, L. S. Everett.

UNIVERSITY COLLEGE

The following awards have been made in the Faculty of Medical Sciences:

Entrance Scholarship: F. A. Chrenko (Chelsea Polytechnic Secondary School). Bayliss-Starling Memorial Scholarship (Physiology and Biochemistry): E. G. Murphy. Cluff Memorial Prize (Anatomy, Physiology, Pharmacology, and Chemistry): K. C. Eden and G. Qvist (equal). Anatomy and Embryology: Senior Class—Gold Medal, J. H. Kellgren; Junior Class—Silver Medal, H. H. F. Barns. Histology and Embryology: Silver Medal, H. H. F. Barns.

Physiology: Senior Class—Gold Medal, W. R. Merrington; Junior Class—Silver Medal, J. H. Cobb. Pharmacology: Senior Class—Silver Medal, P. B. Fernando. Organic and Applied Chemistry: Silver Medal, H. Nicholson.

UNIVERSITY COLLEGE HOSPITAL MEDICAL SCHOOL

The following scholarships and exhibitions have been awarded:

Goldsmid Entrance Scholarships: E. E. Pochin (St. John's College, Cambridge, and W. R. Merrington (University College, London). Goldsmid Entrance Exhibition: Miss M. D. Baber (Welsh National School of Medicine). Filliter Entrance Scholarship in Pathology: N. Whittaker (Trinity Hall, Cambridge).

UNIVERSITY OF EDINBURGH

A graduation ceremony was held in the McEwan Hall on July 22nd. The following medical degrees and diplomas were conferred:

M.D.—R. S. Begbie, Major W. Bird, R.A.M.C., †A. Bloom, M.C., E. M. R. Frazer, H. H. C. Fuller, Major A. Hood, R.A.M.C., Lieutenant F. M. Khan, I.M.S., D. T. Mackie, †J. Macqueen, †P. V. Pritchard, J. O. Reid.

D.Sc.—D. Mainland.

D.Ph.—J. C. David, R. Gaddie.

M.B., B.Ch.—N. S. Alcock, D. M. Anderson, †W. M. Arnott, J. B. Arthur, C. E. S. Bailey, G. M. Balfour, J. Barnetson, J. C. Barnetson, I. M. Bell, C. H. Bentley, J. A. Berry, B. S. Bindra, W. G. Bisset, A. D. Broatch, †J. J. M. Brown, D. G. Brownlie, A. A. Buxton, A. J. Campbell, J. R. Candy, †G. Carpenter, J. K. Chappell, R. T. Cooke, A. M. Cooper, W. J. Cowan, P. N. Cutner, C. G. Cutting, J. Davidson, J. L. Dobbie, I. I. Felner, P. J. K. Ferguson, H. H. Fernando, I. Feffer, F. S. Fiddes, T. M. S. Findlater, W. H. Fost, F. A. Franklin, G. A. Fraser, N. S. Fraser, M. Gaffney, E. J. D. Gillespie, G. C. Gillison, G. A. D. Gordon, I. Gordon, A. R. Graham, E. R. Gunson, E. Gunstensen, †J. G. M. Hamilton, J. S. Hamilton, M. L. Hart, W. D. Henderson, A. Van Hoesen, R. G. Hood, A. W. Hopkins, R. S. Howard, A. M. Hunter, Janet C. Hyslop, Miriam Jansen van Vuuren, A. Jeffrey, R. G. Johnson, M. S. Jones, P. Kansadalya, R. J. Kellar, Isobel O. Kennedy, A. J. Kotzé, A. Kramer, R. A. H. Krynauf, F. Lederfeld, A. Lees-Low, W. M. Leslie, M. J. Liebenberg, R. S. Lind, D. C. Logan, E. W. Low, R. M. S. McConaghey, W. G. M'David, P. C. M'Kinlay, Flora S. MacNaughtan, A. R. M'Pherson, C. J. Massey, G. H. Meiring, S. Melmed, H. O. Merewether, H. Meyer, R. L. H. Minchin, J. C. G. Mitchell, P. K. Morrison, Rosa Morrison, C. S. Morrow, M. T. Murchison, S. Nechemias, J. Neill, M. E. Neuman, M. M. Parker, A. R. Parkes, J. W. R. Paton, D. Pecker, Margaret I. Porteous, F. P. Reid, F. M. Rifkin, A. A. Robertson, J. H. G. Robertson, R. Ropner, Alice M. Ross, Frances E. T. Ross, T. F. Ross, B. Rubin, E. J. Samuel, S. S. Sawaf, H. H. Sawicky, J. A. Scott, H. Shaffer, A. F. A. F. Shahin, E. H. G. Shepherd, J. L. Skeffe, Ruby J. B. Slater, I. S. Smillie, J. Spark-Silverton, Dorothy M. Stuart, D. B. Swart, Grace H. Thomson, Helen Turner, C. Evelyn van Rooyen, J. Y. Walker, H. Waters, R. E. Waterston, G. W. Watson, A. Watt, A. M. Watt, I. I. Weiss, Barbara C. Welsh, J. H. Wilson, R. B. Wilson, R. Woodrow.

DIPLOMA IN TROPICAL MEDICINE AND HYGIENE.—A. A. F. Brown, W. R. Duff.

DIPLOMA IN RADIOLOGY.—A. Campbell, R. J. W. Charlton, A. J. Groenewald, D. G. Maitland, W. S. Shearer.

* Highly commended for thesis. † Commended for thesis.

‡ Passed with honours.

The following prizes were presented:

Cameron Prize in Practical Therapeutics: Madame Marie Curie. Syme Surgical Fellowship: J. Bruce. Gunning Victoria Jubilee Prize in Surgery: I. G. W. Hill. Lauder Brunton Prize in Pharmacology and Therapeutics: C. M. Scott. Ettles Scholarship and Leslie Gold Medal, and Allan Fellowship in Clinical Medicine and Clinical Surgery, J. G. M. Hamilton. Murchison Memorial Scholarship in Clinical Medicine: W. M. Arnott and R. J. Kellar (equal). M'Cosh Graduate's and Medical Bursaries: H. A. Raeburn. Mouat Scholarship in the Practice of Physic: P. C. M'Kinlay. Buchanan Scholarship in Midwifery and Gynaecology, Annandale Gold Medal in Clinical Surgery, and Wightman Prize in Clinical Medicine: R. J. Kellar. James Scott Scholarship in Midwifery: A. Lees-Low and J. A. Scott (equal). Beaney Prize in Anatomy and Surgery: G. Carpenter. Conan Doyle Prize: I. Gordon. Murdoch Brown Silver Medal in Clinical Medicine: W. M. Arnott. Royal Victoria Hospital Tuberculosis Trust Gold Medal: J. H. Wilson. Thomson Memorial Medal in Diseases of Children: W. S. M'R. Craig. Scottish Association for Medical Education of Women Prize: Jean W. R. Paton. Dorothy Gilgillan Memorial Prize: Isobel O. Kennedy and Jean W. R. Paton (equal). Pattison Prize in Clinical Surgery, J. J. M. Brown. Wellcome Medals and Prizes in the History of Medicine: Gold Medal, J. M'Whan; Silver Medal, H. W. Dryerre. Cunningham Memorial Medal and Prize in Anatomy, R. W. Armour. Whiteside Bruce Bursary: A. G. Proverbs.

NATIONAL UNIVERSITY OF IRELAND

At a meeting of the Senate on July 16th, the reports of the examiners on the results of the summer examinations, 1931, were considered, and passes, honours, etc., were awarded in connexion therewith.

The following appointment was made: Lectureship in Clinical Pathology in University College, Cork, William J. O'Donovan, M.B., B.Ch., B.Sc., D.P.H.

The following representatives of the University were appointed to the 250th anniversary celebrations of the Royal College of Physicians of Edinburgh: Professor Henry F. Moore, M.D., D.Sc., Professor P. T. O'Sullivan, M.D., and Professor Thomas Walsh, M.A., M.D.

ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH

A quarterly meeting of the Royal College of Physicians of Edinburgh was held on July 21st, with the President (Sir Norman Walker) in the chair.

Dr. George Hector Percival, Dr. David Lees, D.S.O., Miss Margaret Black Martin, and Dr. Joseph Ryland Whitaker, M.C., all of Edinburgh, were introduced and took their seats as Fellows of the College.

Dr. Thomas Douglas Inch, O.B.E., M.C. (Gorebridge), Dr. Walter John May (Durban), Dr. Edward Robert Charles Walker (Aberdeen), and Dr. David Taylor Mackie (Exeter) were elected Fellows of the College.

Dr. James Collier, F.R.C.P.Lond., was appointed Morison Lecturer for 1932.

Kirk Duncanson Fellowship for Medical Research

In accordance with the bequest by Mrs. Isabella Kirk Duncanson to commemorate the late Dr. J. J. Kirk Duncanson, the Council of the Royal College of Physicians of Edinburgh will award the Kirk Duncanson Research Fellowship in October, 1931. The Fellowship will be awarded annually for a period of one year. It may be renewed to the same beneficiary for two additional periods of one year each. The emolument will be upwards of £150 for the first year, about £250 for the second year, and about £350 for the third year. In recognition of Dr. Kirk Duncanson's interest in diseases of the ear, nose, and throat, in making this first award special consideration will be given to the claims of candidates who propose to devote themselves to that branch of medicine. Applications and recommendations, with particulars of the special line of research contemplated, and of the place where the investigations are to be conducted, should be in the hands of the secretary of the College by October 15th, 1931.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH

At a meeting of the Royal College of Surgeons of Edinburgh held on July 23rd, Dr. James Haig Ferguson (President) in the chair, the following twenty-six successful candidates out of ninety-six entered, who passed the requisite examinations, were admitted Fellows.

G. G. Ambegaokar, D. W. Bawtree, A. J. Brown, J. R. J. Cameron, C. N. L. Cantor, H. Carter, J. J. Coulthard, D. S. Davies, J. B. Dewar, D. I. C. Finlayson, H. P. Forster, N. G. C. Gane, R. G. Hutchison, J. G. Kingsbury, L. E. Lane, J. C. Mayo, J. H. Otty, L. B. Patrick, R. G. Paul, T. M. Reid, E. M. Robertson, E. H. T. Rutherford, R. Sampson, W. N. Searle, B. C. Smeaton, D. Wardrop, Miss Rebecca E. Roulston.

The Ivon Macadam Memorial Prize, consisting of a bronze medal and a set of books, was, after a competitive examination in organic and inorganic chemistry, awarded to Miss Marjorie B. Morton, who was also awarded the Henry Arthur Dalziel Ferns Bursary.

Medical News

Lord Moynihan, President of the Royal College of Surgeons of England, sailed for South America on July 24th, to take part in the forthcoming medical conference at Buenos Ayres.

The Fellowship of Medicine and Post-Graduate Medical Association announces that, from August 4th, continuing through the month, a course in urology will be held at the All Saints' Hospital; fee, £2 12s. 6d. The Queen's Hospital for Children will undertake an all-day course from August 17th to 29th, instruction being entirely by demonstration of cases, medical as well as surgical; lunch and tea are provided by the hospital authorities; fee, £2 2s. The Brompton Hospital will hold a course from September 7th for one week, the Bethlem Royal Hospital from September 8th to October 3rd, the Infants Hospital from September 14th to 26th, the Central London Ophthalmic Hospital from September 14th to October 10th, the Westminster Hospital from September 14th to 26th, and the Metropolitan Hospital from September 28th to October 10th. Detailed syllabuses may be obtained from the Fellowship, 1, Wimpole Street, W.1. (Langham 4266).

The Medical Research Council announces the following awards of Dorothy Temple Cross Fellowships for 1931-32, under the terms of the benefaction in that name for research fellowships in tuberculosis: Charles Allan Birch, M.D., M.R.C.P., senior medical registrar and tutor, Royal Infirmary, Liverpool; Roy Lars Vollum, M.A., D.Phil., demonstrator in pathology, University of Oxford. Dr. Birch has received a Fellowship for the study of problems of tuberculosis at industrial centres in the United States. Dr. Vollum will study recent developments in methods for the investigation of tuberculosis in Germany and Austria. The Fellowship awarded last year to Lieutenant S. M. Burrows, R.A.M.C., late clinical assistant, tuberculosis department, St. Thomas's Hospital, has been renewed for a further year.

For the second year in succession a group of American medical men are about to pay a visit to the principal thermal stations of France. The party, led by Dr. Charles Gordon Heyd, president of the Medical Society of the State of New York, are due at Havre on August 7th, and will be given an official reception by French Government authorities. In Paris they will be received at the Colonial Exhibition by Marshal Lyautey, the General Commissioner, and four days will be spent at Vichy.

We are asked to announce that the out-patient department of the National Hospital, Queen Square, will be closed on all out-patient days during the first three weeks in August.

Lord Balfour of Burleigh has been elected President of the Royal Sanitary Institute, in succession to the late Duke of Northumberland.

The forty-second international post-graduate course at the Vienna University Faculty of Medicine will be held from September 28th to October 10th, the subject being recent therapeutic advances in all branches of medicine. The fee for the course is 50 Austrian shillings, and further information may be obtained from the secretary, Dr. A. Kronfeld, Porzellangasse 22, Vienna, IX.

An interesting microphone and loud-speaker installation has recently been carried out in the surgical clinic of the University of Milan. The apparatus is intended for the use of the professional staff when performing or directing operations, to describe the surgical manipulation to the students who sit in a gallery surrounding the operating theatre, but separated by glass from it. The installation consists of a bar microphone, a 1½ W. mains amplifier, and a protos loud speaker.

The Kerckhoff Institute for the study of affections of the heart, built from a donation of a million dollars by Mrs. Louise E. Kerckhoff of Los Angeles as a memorial to her husband, has been opened at Bad Nauheim. The building, in classic style, consists of two main cubicle structures with a connecting wing. It contains an auditorium seating 600 persons and intended for congresses, and a smaller lecture room. A medical library and a museum with representations of methods of treating circulatory disturbances, physical diagnosis and therapy, balneological collections, etc., are at the disposal of investigators. The institute will conduct special continuation courses open also to foreign physicians. It is divided into five main departments: one for patients sent to Bad Nauheim under the German social insurance system; a statistical department devoted to research into the causes of cardiac diseases; a department for educating the public as to causes and treatment of such diseases; another for their study and treatment; and a department covering treatment by physical methods, especially baths. Professor Groedel is at the head of the institute, for the maintenance of which Mrs. Kerckhoff has provided a fund of one million marks.

Messrs. Baillière, Tindall and Cox (7 and 8, Henrietta Street, London, W.C.2) have issued a revised edition of the catalogue of their publications on medical and scientific subjects.

The issue of *Annales de Médecine* for May is a special number devoted to diphtheria. It contains thirteen articles by members of eight different countries, with an introduction by Dr. Émile Roux.