

of serums of undoubted cases of tubercle has yielded a definite positive result, although this is feeble as compared with the Wassermann test, and the material may be considered as feebly antigenic. The serums of guinea-pigs treated to weekly doses of 0.5 mg. have also yielded a definite positive complement fixation. These treated guinea-pigs stand the doses well, and when infected with live virulent tubercle bacilli show also a definite immunity—in some complete while in others partial, as the infection limits itself here to the proximal chain of lymphatic glands; in one instance even after eleven weeks when this mass was incised the animal recovered and put on weight, showed no trace of tuberculous lesion, while the controls died of generalized tuberculosis in three weeks to three months.

The curative value of this product was then tested in guinea-pigs, allowing a definite period for the infection to be well established. Since then this antigen has been extended to man both in glandular and pulmonary infection. The glandular cases show definite improvement, as the glands shrink to mere hard nodules, felt more than seen, provided caseation and softening have not already started. The general improvement in these cases is seen by the increase of weight and a feeling of well-being, with an accompanying improvement in digestion.

The local effect of subcutaneous injection of this material depends on the dose, as anything over 0.025 mg. produces in some a distinct local swelling and pain which takes over two weeks to subside, and even then leaves a hard nodule and discoloration of the area which may even break down with a serous discharge. A dose, however, of 0.01 to even 0.025 mg. is well tolerated. It produces occasionally a mere oedematous swelling which subsides in two or three days. The general reaction consists of a rise of temperature  $1^{\circ}$  to  $2^{\circ}$  above the usual during the first twenty-four hours. This drops to normal in two or three days. A course of at least twelve injections given weekly seems to be requisite for a definite improvement.

## Memoranda :

### MEDICAL, SURGICAL, OBSTETRICAL.

#### FATAL SPLENOMEGALIC ANAEMIA IN A YOUNG CHILD.

THE following notes on an unclassified case of fatal splenomegalic anaemia in a girl aged 3 seem worthy of record in view of the rarity of the condition.

The girl was said to have been perfectly well until the previous day, when it was noticed that the skin was yellow and she was thought to have jaundice. Her appearance was that of an advanced case of pernicious anaemia. The skin was lemon-yellow, the lips and nails nearly colourless, and the sclerotics pearly white. There was no purpura and the child looked well nourished. Marked dyspnoea was caused by movement, and the alae nasi were working. No palpable glands could be found, and the tongue and throat were quite clean. Some dark red urine had been passed, and a small amount of bile-stained fluid vomited. The bowels had acted normally the day before, and the stools were of normal appearance. The temperature was  $101^{\circ}$ , and the pulse 120, but its volume was quite good. No physical signs of disease were detected. Dr. G. F. Still saw the case for me in the afternoon. Late in the evening there was no change in the patient's condition, but she died in coma during the night. No blood examination was possible under the conditions. The urine was highly acid, and contained a few red and white blood cells and a few casts. There was more albumin present than could be accounted for by the blood, and the colour appeared to be due to a haemoglobinuria.

A limited *post-mortem* examination was done and revealed no abnormality other than moderate wasting, severe anaemia, an enlarged spleen, and blood-stained urine in the bladder. The spleen appeared to be about four times the normal size. Its capsule was smooth, and its consistency firm, but not tough; its cut surface displayed an abundant purplish-red pulp which somewhat obscured the Malpighian bodies and trabeculae. The kidneys were not altered in size; the pattern of their cortex was somewhat blurred; their cut surface had a faint brownish tint, but a portion treated with potassium ferro-cyanide and hydrochloric acid did not give the reaction for free iron. The liver was also negative to Perles's test: it was moderately enlarged and its cut surface was pinkish-grey and clouded. The bladder contained several ounces of dusky blood-stained urine, and its mucosa, like that of

the renal pelves, was smooth and white. The myocardium was pinkish-grey with a clay-like appearance, and on the endocardial aspect the stippling characteristic of fatty degeneration was very faintly seen. There was no enlargement of any lymphatic glands. The lungs were aerated throughout, but somewhat oedematous in their posterior parts. The stomach and intestines were distended by gas. The bone marrow, brain, and cervical organs were not examined.

Microscopic sections were made of spleen, kidney, and liver. In the spleen there were collections of large mononuclear endothelioid cells, chiefly in the periphery of the Malpighian bodies; most of them were in advanced *post-mortem* disintegration. Many showed a swollen cytoplasm containing brown pigment, which was very abundant throughout the section, and was probably a *post-mortem* phenomenon; it did not contain iron (Turnbull's blue stain). In the remainder of the pulp cells were sparse, and there was no increase in fibrous tissue (van Gieson's stain). The blood everywhere was completely laked. In the liver there was a considerable degree of fatty degeneration, affecting chiefly the central and intermediate zones of the lobules; here and there cell necrosis was seen. There was no iron-containing pigment. The blood in many capillaries was moderately well preserved and contained no abnormal constituents. In the kidney there was advanced *post-mortem* disintegration of the cells of the convoluted tubules, but fat droplets were only present in the cells lining some of the collecting and discharging tubules. Turnbull's blue stain revealed no iron-containing pigment.

London, E.12.

A. CAMPBELL STARK, M.B., B.S.

#### THE ELECTRICAL REACTIONS IN FACIAL PALSY AFTER SUPPURATION IN THE MIDDLE EAR.

IN the ordinary method of testing the function of the facial nerve by means of electric currents, the button electrode is placed over the trunk of the nerve and contraction from the facial muscles obtained by closing the current. This method, however, yields no indication as to the cause of the facial paralysis, but yields similar results whether the condition has originated as the result of suppurative disease within the middle ear, or as the result of the condition known clinically as "Bell's palsy." In certain cases of facial paralysis, it is important to be able to determine whether the condition has arisen as the result of a necrosis of the bony wall of the canal of the facial nerve, or whether the paralysis is due to other conditions. These points can be readily determined in such cases as can be examined within ten days of the onset of the paralysis. The test depends upon the fact that, if the necrosis of the bony wall of the canal of the facial nerve is present in sufficient amount to allow the toxic products to reach the facial nerve, the electric current will reach the facial nerve very much more easily than if the bony wall of the facial canal is complete.

In practice the test is applied as follows:

The external auditory meatus of the affected side is filled with warm saline, and an intrameatal electrode, composed of a central metal core covered in insulating material, such as rubber, of such a size that it exactly fills the meatus, is placed in the external ear and connected to a suitable source of electricity. The indifferent electrode having been placed upon the opposite arm, the current is alternately closed and broken, and at the same time gradually increased until a cathodal closing contraction of the facial muscles has been obtained, and a note is made of the number of milliamperes which are required to cause this contraction. The electrode is now removed from the affected ear, and placed in the normal ear, which has previously been filled with saline, and the test is repeated.

It is found that the reaction is obtained in the normal ear with about 5 milliamperes of current, but in "Bell's palsy" of recent origin from 6 to 7 milliamperes are required, and that in cases of suppurative otitis media with facial paralysis of recent origin due to perforation in the facial canal the cathodal closing contraction is obtained with  $1\frac{1}{2}$  to  $2\frac{1}{2}$  milliamperes of current, while in cases of suppurative otitis media without facial paralysis 5 milliamperes are required.

From such cases as I have been able to examine it appears that facial paralysis does not occur as the result of suppurative otitis media unless the bony necrosis has allowed the pus to reach the facial nerve. Unfortunately it is not possible to make any very definite statement on this point, as in the last two and a half years I have only been able to examine five cases of facial paralysis due to suppurative otitis media and about thirty of "Bell's palsy," but in these cases the difference in the amount of current required for stimulation showed the above marked differences.

A. LOWNDES YATES, M.D. Lond.,  
Birmingham. F.R.C.S. Ed.

## Universities and Colleges.

UNIVERSITY OF CAMBRIDGE.  
*Diploma in Psychological Medicine.*

A COURSE of instruction covering the material necessary for the psychiatric portion of the examinations in Part II of the Diploma in Psychological Medicine will be held in the Psychological Laboratory, Cambridge, and in the Fulbourn Mental Hospital on Tuesdays and Fridays of the Lent Term, 1925, from January 16th to March 10th inclusive. The fee for the entire course will be 8 guineas. The course will include sixteen lectures on psychopathological theory and sixteen lectures on clinical psychiatry by Dr. MacCurdy; clinical demonstrations by Drs. Reardon and MacCurdy; and instruction in forensic psychiatry, treatment, and hospital management by Dr. Reardon. Those wishing to take this course should communicate not later than December 31st with the Secretary, Committee in Psychological Medicine, Psychological Laboratory, Cambridge.

At a congregation held on December 5th the following medical degrees were conferred:

M.B., B.Chir.—G. G. Penman, F. B. Sudbury, F. H. Mather.

## UNIVERSITY OF LONDON.

It has been decided to institute, in accordance with the regulations on university titles, a university chair of pathology, tenable at the London School of Medicine for Women, at a salary of £800 per annum. Applications to be sent to the Academic Registrar at the University by January 29th, 1925.

Dr. Joseph Bamforth and Mr. Alexander L. Urquhart have been recognized as teachers of bacteriology and morbid anatomy respectively at St. Thomas's Hospital Medical School.

Mr. S. J. Worsley has been appointed secretary to the Board of the Faculty of Medicine for 1924-25.

The following have been constituted the boards of examiners for the first and second examinations for medical degrees in 1925, the chairman of each board being indicated by an asterisk:

*Inorganic Chemistry.*—\*Mr. J. A. Gardner (St. George's Hospital Medical School and London School of Medicine for Women) and Professor C. S. Gibson (Guy's Hospital Medical School), together with the external examiners.

*General Biology.*—Dr. Doris L. MacKinnon (King's College) and Dr. E. J. Salisbury (University College), together with the external examiners.

*Physics.*—\*Mr. J. H. Brinkworth (St. Thomas's Hospital Medical School) and Mr. B. L. Worsnop (King's College), together with the external examiners.

*Organic Chemistry.*—\*Mr. J. A. Gardner (St. George's Hospital Medical School and London School of Medicine for Women) and Professor J. C. Drummond (University College), together with the external examiners.

*Anatomy.*—\*Professor E. Barclay-Smith (King's College) and Professor F. G. Parsons (St. Thomas's Hospital Medical School), together with the external examiners.

*Physiology.*—\*Professor H. E. Roaf (London Hospital Medical College) and Professor Swale Vincent (Middlesex Hospital Medical School), together with the external examiners.

*Pharmacology.*—Dr. O. F. F. Leyton (London Hospital Medical College) and Dr. O. Inchley (King's College), together with the external examiners (\*Professor A. J. Clark).

The following have been appointed associate examiners for M.B., B.S. examinations in 1925:

*Medicine.*—Professor F. R. Fraser, Professor F. S. Langmead, Professor H. MacLean, and Dr. Gordon M. Holmes.

*Surgery.*—Mr. H. S. Souttar, Mr. C. H. S. Frankau, Mr. E. D. Telford, and Professor C. A. Pannett.

*Obstetric Medicine.*—Mr. M. H. Phillips and Professor Louise McIlroy.

*Pathology.*—Dr. S. MacDonald and Dr. E. H. Kettle.

## NATIONAL UNIVERSITY OF IRELAND.

DR. DENIS J. COFFEY, LL.D., President of University College, Dublin, has been elected Vice-Chancellor of the University for two years from December 31st, 1924.

The degree of M.D. has been conferred on Michael J. Horgan.

Mr. Joseph Reilly, M.A., D.Sc., F.I.C., has been appointed Professor of Chemistry at University College, Cork.

ROYAL FACULTY OF PHYSICIANS AND SURGEONS  
OF GLASGOW.

THE following have been admitted Fellows: H. R. Sloan, G. P. Mann.

## ROYAL COLLEGE OF PHYSICIANS OF IRELAND.

At the monthly business meeting of the President and Fellows, held on December 5th, Sir Humphry Rolleston, Bt., M.D., President of the Royal College of Physicians of London, was unanimously elected an Honorary Fellow of the College.

The following successful candidates at the winter Conjoint Final Examination of the Royal Colleges of Physicians and Surgeons, Ireland, were duly admitted licentiates in medicine and midwifery of the College:

J. J. Bourke, A. F. Cook, T. F. Crean, T. A. Cronhelm, J. Dalrymple, E. J. A. Dougan, Mary J. Fagan, E. M. Finegan, E. C. Grey, T. T. Joyce, C. Keating, M. G. Kelly, A. B. Kennedy, Wilhelmina C. McGuire, J. C. Murphy, Mary J. McDermott, Mary E. Nelson, T. J. O'Connor, C. R. A. O'Riordan, A. Owen-Flood, J. H. Owen-Flood, P. C. Raftery, T. C. Studer, R. Taylor, T. W. Wilson.

## Medical News.

A CONFERENCE will be held in the New Year, at the Royal Colonial Institute, to inaugurate an Empire Food Council organized to encourage the consumption in these islands of the food products of the overseas empire and of Great Britain; to spread general information about food; and to arrange a campaign to popularize bread made from wheat grown in Great Britain and the Dominions and ground in Great Britain and Ireland. The chair will be taken by Professor H. R. Kenwood, who will be supported by, among others, Sir Harry Baldwin, Sir Arthur Mayo-Robson, Sir Frederick Mott, Dr. J. E. Molson, Dr. Nathan Raw, and Dr. C. W. Saleeby. Further information can be obtained from the Honorary Secretary, Bread and Food Reform League, 37, Essex Street, London, W.C.2.

THE Lord Mayor of London presided at the annual meeting of the Royal Surgical Aid Society held at the Mansion House on December 9th. He expressed his gratification that the society at the close of fifty-two years' work was able to present so satisfactory and encouraging a report of work accomplished and public support received. The society, he said, enjoyed the continued support of the City Guilds, and its provincial branches were growing rapidly, and by the reconstruction of its premises it was able to provide improved facilities at the head office for the relief of patients. The annual report stated that during its existence the society had supplied 1,171,871 surgical appliances to 770,177 patients, of which 30,642 had been provided during the past year.

THE third annual report of the Tropical Diseases Library for the year ending July 31st, 1924, contains the announcement that the library, together with the London School of Tropical Medicine, passed on August 1st under the control of the newly constituted London School of Hygiene and Tropical Medicine (University of London). The volumes of periodicals belonging to the Tropical Diseases Bureau will remain as before on permanent loan in the library. During the past year 261 bound volumes have been added to the library, and, in addition, thirty-two old books (mostly published before 1800) on tropical diseases and naval and military hygiene have been acquired in order to form the nucleus of an historical collection. The number of those who make use of the library shows a gradual, but steady, increase.

ON his retirement from the staff of the Middlesex Hospital Dr. H. Campbell Thomson's colleagues and old fellow students entertained him to dinner at Oddenino's Restaurant on December 3rd. Eighty-nine sat down to dinner, and Dr. Campbell Thomson was presented with a pair of prismatic field-glasses and a George III silver tankard on a base suitably inscribed, as a memento of the occasion and a mark of affection and appreciation.

THE late Dr. Henry Gervis of Bath, and formerly of London, an ex-president of the Obstetrical Society and of the Hunterian Society, has left estate of the gross value of £100,457, with net personalty of £97,233. He bequeathed to the Royal College of Physicians of London the miniature of Dr. William Hunter on ivory by Cosway, and to the St. Thomas's Hospital Medical School the engraving by Simon of the portrait by Kneller of Sir Samuel Garth, a former physician of St. Thomas's Hospital. The Royal Hospital for Incurables, Putney, receives £100, and the Bath Nurses' Home £50.

AT the meeting of the West Kent Medico-Chirurgical Society to be held at the Miller General Hospital, Greenwich Road, S.E., to-day (Friday, December 12th), at 8.45 p.m., the Purvis Oration will be given by Mr. G. Bellingham Smith, F.R.C.S., on the importance of the ante-natal clinic. This will be followed by a demonstration of the super-microscope by Mr. F. Davidson, F.R.M.S., illustrated by lantern slides. Afterwards a conversation will be held.

DR. J. DUVERGEY has been nominated professor of diseases of the genito-urinary organs at the Bordeaux Faculty of Medicine.

A NEW in-patient block has been opened in connexion with the Church Missionary Society Hospital in Yunnanfu, China. Accommodation is provided for fifty patients, and the building includes a maternity department, an operation theatre, and a second x-ray plant, in addition to the one already in the out-patient department. A training class for nurses has been started, and one for midwives is planned.

A POST-GRADUATE course on diseases of the nervous system will be held at the National Hospital for the Paralysed and Epileptic, Queen Square, W.C.1, from February 2nd to March 27th, 1925. The fee for the general course, which will consist of clinical lectures and demonstrations, teaching in the out-patient department and pathological lectures and demonstrations, will be £5 5s.

THE house and library of the Royal Society of Medicine will be closed from the evening of Tuesday, December 23rd, until Monday morning, December 29th.

SIX Christmas lectures for young people will be given at the Royal Institution from December 27th to January 8th, at 3 p.m. Mr. Frank Balfour Browne, M.A., lecturer in zoology at the University of Cambridge, will deal with the habits of insects, and in the concluding lecture indicate the value of entomology to humanity, with special reference to malaria and other diseases. The programme of lectures at the Institution before Easter includes evening discourses (at 9 o'clock) by Professor T. H. Pear of Manchester on "Acquiring muscular skill" (February 20th), and by Professor Sir Ernest Rutherford on "Studies of atomic nuclei" (March 27th). Dr. Leonard Hill will give two lectures on the biological action of light on the afternoons of March 12th and 19th.

THE Fellowship of Medicine programme of special courses for January contains a two weeks' intensive course from January 12th to 24th at the London Temperance Hospital. This course will cover the whole day, and will include all the general and special departments of the hospital, in addition to a special lecture at 4.30 p.m. to which members of the medical profession are invited. Bethlehem Royal Hospital, the Royal Westminster Ophthalmic Hospital, and the North-Western Fever Hospital will co-operate with the London Temperance Hospital. An intensive course will also be held in cardiology, at the National Hospital for Diseases of the Heart, from January 12th to 23rd; a series of lecture demonstrations on the treatment of common nervous diseases will be given at the West End Hospital for Nervous Diseases from January 5th to 31st. Other plans include a two weeks' course in ophthalmology at the Royal Eye Hospital from January 5th to 17th, comprising clinical work followed by lectures on the more important diseases of the eye; eight lecture demonstrations in psychological medicine at the Bethlehem Royal Hospital; and a four weeks' course in urology at St. Peter's Hospital from January 12th to February 7th. The syllabus of each of the above-mentioned courses, together with the list of special courses arranged up to June, 1925, may be obtained on application to the Secretary to the Fellowship of Medicine, 1, Wimpole Street, W.1.

AN intensive course of instruction in mental disorders and mental deficiency was recently held at the Maudsley Hospital, lasting one week. It was organized by the Central Association for Mental Welfare, and was attended by over fifty social workers from all parts of the country, including the county secretaries of the Central Association for Mental Welfare, representatives of the Board of Control, lay officials in charge of institutions, representatives of county councils, of Poor Law guardians, and of the Charity Organization Society, and the almoners of several London hospitals. Lectures were given on the nature and institutional treatment of mental disorders, the methods of procedure in cases of mental deficiency, and the duties of the social worker in these connexions.

THE sixteenth international post-graduate course at Vienna, from February 9th to 21st, 1925, will deal with the diseases of the digestive organs, with special reference to treatment, and will be followed by clinical work from February 23rd to March 7th; this will include endocrine diseases and pathological conditions of the heart, blood, and lungs. The seventeenth international course on modern forms of treatment will be held from June 15th to 27th. Further particulars about these courses can be obtained from Professor Dr. Richard Wasicky, Büro der Wiener Ärztekurse, Schlüsselgasse 22, Wien (VIII).

At the next meeting of the Society for the Study of Inebriety in the Rooms of the Medical Society of London, 11, Chandos Street, Cavendish Square, W., on Tuesday, January 13th, 1925, at 4 p.m., Sir James Purves-Stewart, K.C.M.G., C.B., M.D., will open a discussion on "Drunkennes: Its Tests and Medico-Legal Aspects." Each member and associate is at liberty to introduce visitors.

At a ceremony to be held in the Town Hall, Leeds, on Tuesday next, December 16th, during the University jubilee celebrations, the honorary degree of Doctor of Laws will be conferred upon Sir Berkeley Moynihan, Bt., Professor of Surgery, and that of Doctor of Science upon Emeritus Professor John E. Eddison, formerly Professor of Medicine.

THE late Mrs. Hulke, widow of Mr. John W. Hulke, an ex-president of the Royal College of Surgeons of England, left unsettled property of the value of £18,922. After providing for certain bequests she has given the residue of her property to the governors of Middlesex Hospital, for their convalescent home at Clacton-on-Sea, on condition that it be called the Hulke Endowed Convalescent Home. Otherwise, the residue is to go towards founding and maintaining a home for incurables.

## Letters, Notes, and Answers.

ORIGINAL ARTICLES and LETTERS forwarded for publication are understood to be offered to the BRITISH MEDICAL JOURNAL alone unless the contrary be stated. Authors desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate with the Financial Secretary and Business Manager, 429, Strand, W.C.2, on receipt of proof.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—not necessarily for publication.

ALL communications with reference to advertisements as well as orders for copies of the JOURNAL should be addressed to the Financial Secretary and Business Manager, 429, Strand, London, W.C.2. Attention to this request will avoid delay. Communications with reference to editorial business should be addressed to the Editor, BRITISH MEDICAL JOURNAL, 429, Strand, W.C.2.

Communications intended for the current issue should be posted so as to arrive by the first post on Monday or at latest be received not later than Tuesday morning.

THE telephone number of the BRITISH MEDICAL ASSOCIATION and BRITISH MEDICAL JOURNAL is Gerrard 2630 (Internal Exchange). The telegraphic addresses are:

EDITOR of the BRITISH MEDICAL JOURNAL, Aitiology Westrand, London.

FINANCIAL SECRETARY AND BUSINESS MANAGER (Advertisements, etc.), Articulate Westrand, London.

MEDICAL SECRETARY, Medisecra Westrand, London.

The address of the Irish Office of the British Medical Association is 16, South Frederick Street, Dublin (telegrams: *Bacillus, Dublin*; telephone: 4737, Dublin), and of the Scottish Office, 6, Rutland Square, Edinburgh (telegrams: *Associate, Edinburgh*; telephone: 4361, Central).

## QUERIES AND ANSWERS.

### INCOME TAX.

#### *Late Assessments: Travelling Expenses.*

"JORE's" 1922-23 return was sent in late, the delay not being entirely on his part. Is it in order to make an additional assessment now for that year? His work is away from his home, to which he returns each week; can he claim an allowance for the expense of travelling?

\* \* The revenue authorities can, at the present time, raise first or additional assessments for 1920-21 and subsequent years. Travelling expenses are allowable if incurred wholly, exclusively, and necessarily in the performance of the duties of the office, but not where they are incurred apart from and preliminary to their performance. If, for instance, "Jore" has an appointment at N which necessitates his travelling in and around that town, then those expenses are allowable, but not the additional expenses which he incurs in travelling because he has a residence in A and travels for personal reasons between N and A.

#### *Locumtenent's Expenses.*

"PERPLEXED" states that his total earnings were £412 as locumtenent and assistant, out of which he paid £15 15s. as agents' fees, £18 as interest on loan, and £46 13s. 4d. as a life insurance premium. What should the assessment be? Is a fee of £20 for membership in the R.A.F. Reserve assessable?

\* \* In our view the income should be divided between locumtenent earnings, which are assessable under Schedule D, and earnings from the assistantship, which fall for assessment under Schedule E; the point is not important, except for the fact that the agency fees are deductible from miscellaneous professional receipts, but not from the earnings of "employment." Assuming that on this basis, however, no portion of the agency fees is deductible, the liability would work out as follows:

Gross earnings	£412
Deduct 10 per cent. allowance for "earned" income	41
Assessable income	£371
Less personal allowance	£225
	£146
Of this £18 is chargeable at 4s. 6d., duty	£4 1s.
And £128 .. 2s. 3d., ..	£14 8s.
Total duty	£18 9 0
Life assurance allowance £46 13s. 4d. at 2s. 3d. ..	5 2 9
Net duty payable	£13 6 3

The reason why £18 is chargeable at 4s. 6d. is that from that amount—that is, the loan interest paid—"Perplexed" is entitled to deduct or retain tax at 4s. 6d. in the £; in other words, he need not pay £18 actually to the lender—all he is required by law to do is to pay £18 less £4 1s. = £13 19s., so that in the end, out of the £13 6s. 3d., he bears himself only £9 5s. 3d. With regard to the R.A.F. retaining fee, we understand that the amount received is assessable less an allowance for uniform, which is usually regarded as £7 10s.