

Memoranda: MEDICAL, SURGICAL, OBSTETRICAL.

ACIDOSIS.

"Acidosis" has generally been looked upon as a symptom. From the many cases I have treated in this hospital simulating pulmonary and cerebral complaints, I have come to the conclusion that acetone intoxication is a cause, producing symptoms in some cases of pneumonia, in others of meningitis, etc. How acetone is produced I will not discuss. My reason for writing is to put the general practitioner on his guard, as recently we have had several cases sent in during this epidemic as influenza pneumonia which on examination I have found to be acidosis. The following cases, related as short as possible from the history sheets, will show the importance of the subject. All have been treated with sodium bicarbonate and glucose. As soon as the acetone cleared up all the other symptoms disappeared.

Case 1.—Child, aged 6½; admitted April 8th, 1918. Temperature 98°, pulse 120; quite comatose. History of one week's illness, with vomiting, cough, and abdominal pains. Acetone cleared on the ninth day; discharged on the seventeenth day after admission.

Case 2.—Child, aged 6½. Ill two days with abdominal pains, sore throat, and some vomiting. Was comatose when admitted on May 23rd as a case of meningitis. 7 p.m., temperature 101°, pulse 110; 11 p.m., temperature 104°, pulse 130. The acetone cleared in seven days; discharged June 3rd.

Case 3.—Child, aged 6; sent in as a case of pneumonia on June 14th. Temperature 102°, pulse 140. History of two days' illness with vomiting, cough, headache, and dyspnoea. The acetone cleared on the seventh day; discharged July 1st.

Case 4.—Child, aged 6½; sent in as a case of meningitis on June 14th. Temperature 101°, pulse 135. Had slight convulsions which continued till 9.30 the next morning. Acetone cleared in seven days; discharged July 1st.

Case 5.—Child, aged 6; sent in as a case of pneumonia on July 7th. Temperature 100.3°, pulse 140. Two days before admission was taken with acute headache, vomiting, and abdominal pains. Acetone cleared on the sixth day; discharged July 25th.

Case 6.—Boy, aged 5; sent in as a case of meningitis on September 17th. Temperature 100.2°, pulse 116. Had convulsions on the 16th, and on the morning of the 17th was found in bed quite comatose. Had slight convulsions after admission. Acetone cleared on the ninth day; discharged October 17th.

Case 7.—Child, aged 7; admitted on September 23rd as a case of meningitis. Temperature 105°, pulse 124. Acetone cleared on October 1st; discharged.

Case 8.—Boy, aged 12; sent in on October 1st as a case of bronchopneumonia. Temperature 101.2°, pulse 103. Ill seven days before admission. Acetone cleared on October 9th; discharged.

Case 9.—Man, aged 28; sent in as a case of meningitis on October 9th; quite comatose and difficult to rouse. Temperature 101°, pulse 56. History: On October 4th, on returning from work, he complained of pain in his head; vomited a good deal of yellow fluid. Next day he became comatose. Acetone cleared on October 24th; discharged October 28th.

The following were sent in as influenza pneumonia cases:

Case 10.—Female, aged 19; admitted October 26th. Temperature 102°, pulse 120. Acetone cleared November 3rd; convalescent.

Case 11.—Aged 19; admitted October 26th. Temperature 100°, pulse 120. Acetone cleared on November 4th; convalescent.

Case 12.—Aged 17½; admitted October 27th. Temperature 102.4°, pulse 156. Acetone cleared on November 1st; convalescent.

Case 13.—Female, aged 25; admitted October 28th. Temperature 99.4°, pulse 112. Acetone cleared on November 3rd; convalescent.

Case 14.—Female, aged 31; admitted October 28th. Temperature 103°, pulse 144. Acetone cleared on November 3rd; convalescent.

No case took more than nine days to clear up. None of the supposed meningitis cases showed Kernig's sign. The breath in several cases pointed to acetone.

K. J. DOUGALL,

Prince of Wales's General Hospital,
Tottenham, N.

Resident Physician.

IMPLANTATION OF THE NEWLY FERTILIZED OVUM IN THE UTERUS.

CASES of full-time extrauterine pregnancy and of advanced ectopic gestation like that recorded by Dr. Nash in the JOURNAL of October 12th raise grave doubts regarding two prevalent beliefs concerning the part which it is alleged

the corpus luteum plays in preparing the endometrium for the reception of the newly fertilized ovum and the way in which the fecundated ovum perforates and lodges itself in the substance of the uterus. If there is at any time a justifiable reason for the fertilized ovum in man assuming the attitude of a parasite towards the tissues of its own mother it most assuredly would be manifested when the fecundated ovum finds itself located disadvantageously in some alien quarter.

When the embryo completes its development and arrives at maturity in some location outside the uterus the placenta is as perfect structurally and functionally as when it develops in the uterus itself. In such circumstances the belief cannot be entertained that the corpus luteum plays any part in preparing and favouring the maternal tissues for the implantation of the fertilized ovum, nor yet for the assumption that the ovum through the agency of the cells of the syncytium eats its way into the maternal tissues. By chemiotaxis the fertilized ovum, both inside the uterus and in any other location in which it chances to be advantageously circumstanced, can accomplish everything. We have, moreover, from comparative anatomy and clinical human facts the strongest evidence for refusing to accept the tenet that the fertilized ovum in the uterus gets covered over either by a decidua capsularis or a decidua reflexa. Take the case of the whale, where the placenta is constituted from first to last of the entire chorion, or the case of the horned ruminants, where we have a multicotyledonous placenta, the cotyledons being distributed over the whole surface of the chorion. Or take, again, those cases of uterine pregnancy in which a more or less extensive external haemorrhage from the uterine placental site takes place fourteen days after the first suspended menstrual period and in which the haemorrhage may persist for many weeks without the embryo losing its power to complete its development and maintain its existence after birth. In the latter cases the blood must have escaped by bursting the decidual capsule, if there be such a thing.

London, W.

JAMES OLIVER, M.D., F.R.S. Edin.

Reports of Societies.

PATHOLOGY OF GAS GANGRENE.

At a meeting of the Pathological Section of the Royal Society of Medicine, held on December 3rd, with Professor W. BULLOCK, F.R.S., President, in the chair, Dr. J. McINTOSH, in opening a discussion on the pathology of gas gangrene, observed that gas gangrene did not appear to have been described before the Crimean war. In the British army in the present war the cases amounted to 1 per cent. during its most active phases, and half of these died. The infection was due to anaerobic bacilli, chiefly *Bacillus aerogenes* (*B. welchii*) and that of malignant oedema (*Vibrio septique*), both of which it was difficult to separate from the saprophytic forms, and obtain pure cultures. At the outset *B. aerogenes* had been thought responsible for all; this had proved erroneous. The speaker's results gave: *B. aerogenes* 43 per cent., *B. sporogenes* 27 per cent., *B. oedematis maligni* 19 per cent., with a few cases due to *B. oedemaciens*—all being anaerobic.

Major J. W. McNEE drew attention to the observations made by himself and Major-General Cuthbert Wallace, which showed that gas gangrene was essentially a muscular disease, extending rapidly in the course of their length; it might be confined to a single muscle. If a large vessel were severed and blocked, the infection involved all the muscles so deprived of blood. The advancing edge of the disease appeared as a paler zone than the normal structure, more translucent and firmer; these effects were due to the action of toxins passing upwards in advance of the bacilli. The good results following early partial or complete excision of the infected muscle had now for some while been established. This treatment had reduced the mortality to 2 per cent. *B. aerogenes* was the chief agent in the earlier part of the war apparently; the *B. oedematis maligni* was of later appearance, this, unlike the former, being found in the blood. Infection with *B. oedemaciens* was uncommon. The earlier use of a single serum (*B. aerogenes*) did not prove so satisfactory as that of the three organisms combined.

Obituary.

ALFRED ELLINGTON STANSFELD, M.A., M.D. CANTAB.,
F.R.C.P. LOND.

Physician to the Metropolitan Hospital, and Demonstrator of
Pathology, St. Bartholomew's Hospital.

WE have to record with great regret the death at the early age of 35, of Dr. Alfred Ellington Stansfeld, which took place on November 25th from pneumonia following influenza. Entering St. John's College, Cambridge, with a major scholarship in 1902, he gained first class honours in both parts of the natural sciences tripos, and graduated B.C. in 1909, proceeding to the M.D. degree in 1915. At St. Bartholomew's Hospital his career was exceptionally brilliant. He won there an entrance scholarship, the Kirkes scholarship and gold medal, the Burrows prize, the Brackenbury medical scholarship, and the Lawrence scholarship and gold medal. After holding the post of house-physician he was appointed casualty physician, and assistant demonstrator of pathology in the medical school; and at the date of his untimely death he was senior demonstrator of pathology at St. Bartholomew's, and physician to the Metropolitan Hospital. He also carried out the pathological work of the venereal disease centre for pregnant women at Thavies Inn, which has been referred to on several occasions in these columns. In 1911 he obtained the membership of the Royal College of Physicians and was elected to the Fellowship this year.

Stansfeld's death almost at the outset of a distinguished professional career is a great loss to St. Bartholomew's Hospital, where his high attainments and his loyalty and devotion to duty were fully appreciated by colleagues and students alike. In him was recognized that rare combination of clinical taste and aptitude, scientific ability, and skill in teaching, which marks a man down for the highest honours in our profession.

The following words which we quote from the current number of *St. Bartholomew's Hospital Journal* convey something of the sense of loss felt by those who knew and worked with him: "In his day one of our most brilliant and popular students, his later work had more than fulfilled the promise of his earlier years. The tremendous amount of work always so willingly undertaken by him in this and other hospitals had brought him a reputation unique for a man of his years. There can be little doubt, indeed, that the result of overwork lessened his chances of recovery. The hospital, and indeed the medical profession as a whole, has lost one of its most promising members."

DR. FREDERICK LUMSDEN MACKENZIE died very suddenly at Lockwood, Huddersfield, on November 24th, aged 62. Six years ago he had a serious illness due to overwork, and he never recovered his normal state of health. He was educated at the Madras College, St. Andrew's, and graduated at Edinburgh University, taking the M.B. and C.M. degrees in 1885, and the M.D. in 1898. Dr. Mackenzie was a man of gracious personality, always courteous, and full of kindly feeling. His patients loved him as a friend—their troubles he took upon himself, and nothing was too much to do if he could help them. He avoided all inducements to enter into public life, for his happiness lay in his own work, and the opportunities it offered for service. He was a keen golfer, and when captain of the Fisby Golf Club, Huddersfield, in 1893, was largely the means of founding the Yorkshire Union of Golf Clubs, of which he was the first president. He was laid to rest at Woodfield Cemetery with every evidence of affectionate regard, many of the Huddersfield doctors and other friends being present. He leaves a widow and two sons—the elder, Captain Melville Douglas Mackenzie, R.A.M.C., now serving at Bazra; the younger, Captain Kenneth Mackenzie, M.C., in France.

DR. THOMAS RICHARD BEALE-BROWNE, who was drowned at sea on October 3rd, was educated at Dean Close School, Cheltenham, and Guy's Hospital, and obtained the M.R.C.S. and L.R.C.P. diplomas in 1901. He was always keen on sports and distinguished himself in rifle shooting both at home and in Nigeria. After a few years spent in lunacy work he entered the West African Medical Service, and on his first tour, 1907-8, accompanied the Anglo-German Boundary Commission, and afterwards did good

work as medical officer in various districts of West Africa. He was greatly interested in microscopical work, and while stationed at Yaba, near Lagos, made some most helpful investigations along with his friend Dr. Connal, Director of the Research Institute. His chief work in Yaba was in connexion with leprosy, when, after months of special treatment, he had the satisfaction of noting improvement in several cases and in one an apparent cure, which lasted for at least two years, but, unfortunately, this patient was lost sight of after that time. Since January, 1917, he was stationed at Victoria in the Cameroons, and after a prolonged and strenuous tour was on his way home for leave. When within a few hours of the English coast his boat, the ss. *Burutu*, owing to storm and the war conditions of no lights under which they were sailing, collided with the ss. *City of Calcutta*, and he, with many other passengers, was drowned. One of his colleagues writes: "Dr. Beale-Browne was so genuine and straightforward that he at once commanded respect from all who came in contact with him." He had in a marked degree the confidence of the native population and was popular with all Europeans who knew him. He was in his 41st year and is survived by his widow.

Universities and Colleges.

UNIVERSITY OF CAMBRIDGE.

THE Raymond Horton-Smith prize for the best M.D. thesis presented during the academical year has been awarded to H. Hartridge, M.D., and H. F. Marris, M.D., who are declared equal.

The following medical degrees have been conferred:

M.B., B.Ch.—A. R. Hargreaves, J. D. Jones.

UNIVERSITY OF LONDON.

THE Senate has called the attention of the Controller-General of the Civil Department of Demobilization to the necessity for releasing at the earliest possible date students whose university studies had been either interrupted or prevented by service in H.M. Forces.

Sir David Ferrier, M.D., F.R.S., has been appointed chairman of the Physiological Laboratory Committee, and Professor G. A. Buckmaster, M.D., Chairman of the Brown Animal Sanatory Institution Committee.

ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH.

AT a meeting of the Royal College of Physicians of Edinburgh on December 5th Sir Robert Philip was elected President of the College, and the following Fellows were appointed to form, along with the President, the Council of the College for the ensuing year: Dr. A. H. Freeland Barbour (Vice-President), Dr. T. J. Thyne, Dr. Francis D. Boyd, Dr. G. M. Robertson, Dr. Harry Rainy, Dr. J. Lorrain Smith.

Medical News.

THE inaugural address of the Listerian Society of King's College Hospital was given on Wednesday by Sir St. Clair Thomson, who described the advent of Lord Lister to King's College Hospital in 1877.

THE house of the Royal Society of Medicine (1, Wimpole Street) will be closed from Monday, December 23rd, to Saturday, December 28th, inclusive. The library, however, will be open to military medical officers except on December 25th and 26th.

A WARNING poster with regard to Christmas entertainments in hospitals, camps, billets, and private houses, has been issued by the British Fire Prevention Committee (8, Waterloo Place, Pall Mall, S.W.1) and copies will be supplied on receipt of the necessary postage.

A SCHEME for the creation of clinical professorships of tuberculosis in the medical faculties of France is now before the Chamber. It has the support of a large number of deputies. In addition to clinical teaching, instruction will be given in the working of the laws relating to tuberculosis and of the institutions of social hygiene.

AT the fifty-sixth annual meeting of the Royal Surgical Aid Society, held at the Mansion House on December 9th, it was reported that during the past year 30,000 surgical appliances had been supplied, and that since its foundation in 1862 the society had assisted 649,183 patients and supplied 995,000 appliances. The Lord Mayor was elected a vice-president.

DR. JAMIESON HURRY has presented to the Art Gallery, Reading, another historical picture. It is painted by Mr. Harry Morley, A.R.C.A., and represents the "Trial by Combat" of Henry of Essex and Robert of Montfort, which took place at Reading Abbey in 1163. The combat is mentioned by Carlyle in his *Past and Present*. The picture has been given as a thankoffering for armistice day, November 11th, 1918.

At a meeting of the Académie des Sciences, Paris, on November 11th, Marshal Foch was unanimously elected a member in the room of the distinguished surgeon, M. Léon Labbé. On December 3rd M. Clemenceau was elected by acclamation a member of the Académie de Médecine. He was begged to accept the seat in order that the Academy might have the advantage of his great experience in framing a scheme of social hygiene.

The first Indian Science Congress founded on the lines of the British Association was held at Calcutta in January, 1914; it held its second meeting at Madras in 1915, under the presidency of Surgeon-General Bannerman. The third congress was held at Lucknow (1916), the fourth at Bangalore (1917), and the fifth at Lahore (1918). The sixth meeting is to take place in Bombay early next month under the presidency of Sir Leonard Rogers, F.R.S., I.M.S. Lord Willingdon is patron of the congress, and Sir Dorab Tata chairman of the local committee.

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.

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

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate with the Office, 429, Strand, W.C.2, on receipt of proof.

In order to avoid delay, it is particularly requested that ALL letters on the editorial business of the JOURNAL be addressed to the Editor at the Office of the JOURNAL.

The postal address of the BRITISH MEDICAL ASSOCIATION and BRITISH MEDICAL JOURNAL is 429, Strand, London, W.C.2. The telegraphic addresses are:

1. EDITOR of the BRITISH MEDICAL JOURNAL, *Attitology, Westrand, London*; telephone, 2631, Gerrard.
 2. FINANCIAL SECRETARY AND BUSINESS MANAGER (Advertisements, etc.), *Articulate, Westrand, London*; telephone, 2630, Gerrard.
 3. MEDICAL SECRETARY, *Medisecra, Westrand, London*; telephone, 2634, Gerrard. The address of the Irish Office of the British Medical Association is 16, South Frederick Street, Dublin.
- The address of the Central Medical War Committee for England and Wales is 429, Strand, London, W.C.2; that of the Reference Committee of the Royal Colleges in London is the Examination Hall, 8, Queen Square, Bloomsbury, W.C.1; and that of the Scottish Medical Service Emergency Committee is Royal College of Physicians, Edinburgh.

QUERIES AND ANSWERS.

PROLONGED GESTATION.

C. B. G. states that the husband of a primipara left his wife for the army on January 5th. Her baby was born fifty days after the 280 days usually assigned for the period of gestation. It weighed 8 lb. The labour was a very severe instrumental one, owing to the hardness and roundness of the baby's head.

* * According to a statement in Mann and Brend's *Forensic Medicine* (1914) the longest gestation yet allowed in an English law court was 301 days, but in America a period of 317 days has been allowed. In Dr. F. J. Smith's edition of Taylor's *Medical Jurisprudence* it is stated that Murphy has allowed 324 days and that Meigs considers that gestation might be continued for twelve months. Dr. Thurstan Holland read a note at the meeting of the Liverpool Medical Institution on February 27th, 1902 (BRITISH MEDICAL JOURNAL, March 15th, 1902, p. 659), on the duration of pregnancy based on the case of a young primipara; dating from the last date of normal menstruation to the birth of the child, the duration was 340 days; from the date of the last coitus to the birth was 323 days; from the date of the menstruation following the coitus (an abnormal period only lasting two days) the duration was 316 days.

INCOME TAX.

C. D. S. has been acting as medical officer in charge of troops stationed in his neighbourhood, receiving payment at the rate of £1 a day. Is the full "earned" rate of income tax payable?

* * From the particulars furnished we understand that our correspondent is not in the army and is probably not amenable to full military discipline, consequently he falls within the

category of a temporary civilian employee and is not entitled to the special "service" rate of income tax and is assessable at the "earned" rate.

LETTERS, NOTES, ETC.

THE ORGANIZATION OF AMBULANCE WORK.

THE EARL OF RANFURLY (Director of the Ambulance Department of the St. John Ambulance Association) writes: I was very glad to see in your issue of December 7th a letter from Sir James Cantlie, a Knight of Grace of the Order of St. John, referring to the organization of ambulance work. As Sir James points out, the first Voluntary Aid Detachment formed in London was about the year 1908, and it will be interesting to those of your readers who may be ignorant of the fact to know that the St. John Ambulance Brigade is the pioneer of voluntary ambulance work. This work has been one of the most important duties of the Order of St. John under its Charter since 1877, being carried out by the St. John Ambulance Association so far as teaching is concerned, and by the St. John Ambulance Brigade in keeping up and putting to practical effect the knowledge so gained. So long ago as 1878 there was in existence a body of workers, formed by one of the centres of the St. John Ambulance Association, and consisting of duly qualified first-aiders. This might also be called the first Voluntary Aid Detachment; at any rate, it was the origin of the St. John Ambulance Brigade, of which the membership is now over 66,000, and which maintains the Royal Naval Auxiliary Sick Berth Reserve and Military Home Hospitals Reserve, and which, during the South African war, supplied the R.A.M.C. with 2,000 fully trained men, and during the present war supplied the naval and military authorities with over 22,000. The St. John Ambulance Association and Brigade have now established centres and divisions not only at home but also throughout almost the whole world.

DR. JOHN WISHART (Newcastle-upon-Tyne) writes: The paragraph in your issue of December 7th (p. 644) contains a small error in claiming that the London College of Ambulance is "the only school of the kind in the kingdom." The Newcastle and Northumberland College of Ambulance was organized on October 1st, 1912, and became the North of England College of Nursing and Ambulance on January 1st, 1914. It was established in order to put ambulance and nursing work on a higher plane, and has conducted, in addition to the ordinary courses, a course of training in midwifery.

BACTERIAL DIAGNOSIS OF DIPHTHERIA.

LIEUT.-COLONEL J. S. WARRACK (London) writes: With reference to Dr. A. Lyster's letter on the bacterial diagnosis of diphtheria and his comments on my article on differential diagnosis in your issue of November 23rd, I would reply that I was dealing with diphtheria as a mixed infection and not with morbid conditions of the throat generally. Does Dr. Lyster seriously suggest that swabs are to be taken from the throats of all cases of scarlet fever and measles?

CALOMEL IN PRURITUS ANI.

A FEW months ago that admirable weekly *Ugeskrift*, the journal of the Danish Medical Association, contained a short note on the remarkable effect of calomel on even old-standing obstinate cases of pruritus ani. The note evoked a chorus of approval from other writers whose contributions on this subject to later numbers of *Ugeskrift* have often been illumined by the whimsical wit of the Dane. Some of these writers could claim many years' experience of calomel in pruritus, and others expressed the enthusiasm of the newly converted. One writer drew a picture of the local magnate and profiteer, scorned the local practitioner, journeying to some famous German spa to rid himself of his anal itch and returning unrelieved, while his poor and humble compatriot stayed at home and was cured in a trice of the same ailment by a doctor drawing his inspiration from *Ugeskrift*. The only discordant note was as to whether calomel should be used in powder or in an ointment. Dusted on as a powder, calomel, it is stated, will stick like a white lacquer for twenty-four hours. Applied as an ointment it is apt to soil the linen and to be less effective.

SCALE OF CHARGES FOR ADVERTISEMENTS IN THE BRITISH MEDICAL JOURNAL.

	£	s.	d.
Seven lines and under	0 6 0
Each additional line	0 0 9
Whole single column	4 0 0
Whole page	12 0 0

An average line contains six words.

All remittances by Post Office Orders must be made payable to the British Medical Association at the General Post Office, London. No responsibility will be accepted for any such remittance not so safeguarded.

Advertisements should be delivered, addressed to the Manager, 429, Strand, London, not later than the first post on Wednesday morning preceding publication, and, if not paid for at the time, should be accompanied by a reference.

NOTE.—It is against the rules of the Post Office to receive *postes restant* letters addressed either in initials or numbers.