pulse and the injection of adrenalin. The anaesthetist's estimate is considerably greater. The child was seen at intervals for three or four weeks; not the slightest ill consequence was detected.

CASE III.

A woman of 30, with empyema, had just had an exploring needle passed into an intercostal space. Suddenly she became limp and pale, she murmured a word or two, but the sound diminished into silence. She dropped back apparently dead. The muscles were quite flaccid and motionless, no pulse could be felt nor heart movement heard; jaw and eyes were in the cadaveric position. Artificial respiration was commenced, and adrenalin was sent for. Suddenly the pulse returned, beating strongly under the fingers, the patient flushed, and a few minutes later she was sitting up and talking. She had passed through a Stokes-Adams attack, subsequently repeated. Possibly more detached observation would have detected an auricular pulsation in the jugular veins. Had the adrenalin arrived half a minute sooner a striking success might erroneously have been ascribed to it.

Although Case III shows the need for caution in interpreting results, Case II suggests that injection of adrenalin into the heart muscle may restart it when other means fail.

Conceivably the needle might be pushed on into the cavity of the left ventricle and Ringer's solution containing adrenalin might be run in under pressure through a tube and funnel; on passing through the coronary arteries the adrenalin would be brought much more intimately into contact with the heart muscle, and would reach the more excitable sinus node and auriculo-ventricular bundle. The flow of Ringer's solution, preferably oxygenated, would also supply a temporary artificial circulation. Reports on wounds of the heart suggest that the risks of passing a fine needle through the apex of the heart are small compared with those of the desperate condition in which such means would be used. The method seems sufficiently promising to invite preliminary experiments on animals.

REFERENCE.

[1] BRITISH MEDICAL JOURNAL, November 6th, 1920, p. 698.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

COMPLEMENT FIXATION TESTS IN THE DIAGNOSIS OF TUBERCULOUS INFECTIONS.

(A Preliminary Note.)

ONE of the writers began to study complement fixation tests in the diagnosis of tuberculous infections in the autumn of 1919. He was joined by his colleague later in the year. Our work is not yet finished, but it is hoped that the results will be advanced sufficiently for publication within a few months.

Complement fixation tests in tuberculosis have been studied by numerous workers since 1901. Varying results have been obtained, attributable to differences in technique and the characters of the antigens used.

We have attempted (1) to test the relative value of types of some of the chief antigens which have been used in the past; (2) to devise a reliable technique. We have tested four antigens up to the present time:

(*a*) A saline emulsion of living tubercle bacilli.
(*b*) An alcoholic extract as proposed by Craig.
(*c*) An alcoholic extract as used by Dudgeon.
(*d*) An antigen prepared by Wang and Crockett's method.

We find, on the whole, that the antigen of Wang and Crockett is reliable, and probably the best one that has been used to any extent up to the present time. With this antigen, and using a technique modelled on the ordinary Wassermann methods, we have tested cerebro-spinal fluid and serum from cases of tuberculosis, and from non-tuberculous cases, including normal serums and serums from patients suffering from various diseases. We obtained 61 positive results in 85 cases of definite active tuberculosis, and negative results in 50 non-tuberculous cases. We also obtained some positive reactions with serums giving a strongly positive Wassermann reaction, as previously found by Wang and Crockett. Our work is now being applied mainly to the investigation of tuberculous disease in children.

ARTHUR SELLERS, M.D.
E. N. RAMSBOTTOM, M.D.

The Public Health Laboratory, Manchester University.

LETHARGIC ENCEPHALITIS.

As it has been my fortune to see no less than seven cases of this disease in the past fortnight, though previously for some months I had met with no fresh case, it would appear that a temporary recrudescence of intensity of the epidemic is occurring. The virulence of infection also has not notably lessened, two of these cases having already died.

As with all diseases named after a prominent symptom, lethargy is not an invariable occurrence in this form of encephalitis, and one feature that has been prominent in at least two of my recent cases, namely, quiet delirium and delusions, may lead to a mistaken diagnosis of insanity; indeed, one of my patients was brought to me by his friends from a distant suburb because the doctor in attendance said it was a mental case and should be sent to an institution. Another I have just seen has been treated for nine weeks for nervous breakdown, as he complains that his brain is not right. He has been observed frequently talking to himself about business troubles, worried much about his bladder, unnecessarily so according to his wife, and one day said to his doctor that he had 37s. 6d. in his bladder which he wanted to pass! He showed no drowsiness and was allowed to go about as usual, but the clue to recognition of the encephalitis lay in his mask-like facies resembling paralysis agitans, with marked tremor of one hand, small irregular pupils reacting poorly to light, and a pulse of 90.

Many patients complain early of blurring of vision, scarcely diplopia, and then nystagmus is usually present, perhaps most intense on looking downwards. Pyrexia of 101° F. or more and a rapid pulse are bad signs, the prognosis as regards life being almost in proportion to the degree of tachycardia. Quite a number of cases show no ptosis or drowsiness, and with the absence of ocular symptoms the recognition of this disease may be overlooked unless its present prevalence be constantly kept in mind. In others muscular twitchings are prominent, and sometimes headache, though usually no pain in the head is complained of.

It is important that cases of this disease should be kept at rest and free from worry, using sedatives and hypnotics, such as ammonium bromide and chloralamide if required, in order to limit the liability of permanent cerebral lesions occurring, which have been only too frequent. Many such cannot be avoided, one of the commonest being a permanent mask-like rigidity and perhaps tremor, resembling paralysis agitans closely, and due to lesions in the lenticular nucleus, as in that disease.

London, W. WILFRED HARRIS, M.D., F.R.C.P.

A CASE OF CARDIAC MASSAGE.

AFTER reading Mr. Fisher's article on resuscitation in death under anaesthesia in the JOURNAL of November 6th, 1920, I think it may be interesting to publish notes on the following case; though the treatment was not finally successful, yet the response was so marked as to emphasize the importance of the method.

The patient was a weak thin man of 45 to 50. On August 21st, 1920, the operation of gastro-enterostomy was being performed by Mr. F. O. Lasbrey for continual pain and vomiting. It was largely completed when the patient stopped breathing. Artificial respiration was performed and breathing very soon started again, but the pulse was very weak. The operation was continued, but in a few minutes breathing stopped again, and the pulse could not be felt. Artificial respiration, strychnine, ether under the skin, hot cloths to the epigastrium were all tried without avail. The gloved hand was inserted in the abdomen through the operation incision and an attempt made to massage the heart through the diaphragm, but the heart could not be felt at all. Finally, after half an hour, during which time there had been no voluntary breathing and no pulse or audible heart sounds, the case appeared quite hopeless. Then direct massage of the heart was tried. I cut through the anterior left fibres of the diaphragm and passed my gloved hand, by means of the abdominal incision, through into the chest cavity. I found the heart small, flabby, and empty, and quite without movement. I grasped and squeezed it, and kept up continued massage on it, artificial respiration being continued meanwhile. After some considerable time, at least five minutes, the heart began to respond, inasmuch as it became firmer and larger, and on squeezing it empty it automatically filled again. Massage was continued. Shortly after, on ceasing the massage for a brief period, a very small beat, feeling almost like a tremor, continued, but only for a very short time. Pituitrin extract, 1 c.cm., was given, and soon after, on ceasing the artificial respiration, the patient took one respiration himself,

but did not continue. Again later the heart continued to go for a brief time alone and the patient breathed again. Then he breathed twice in succession, later three times, and so on till he twice breathed automatically nine times consecutively, but did not continue. Also the heart would not keep going for long if the massage were suspended. About a pint and a half of normal saline was injected into a vein in the arm and more pituitrin extract given, but the breathing would not start again. The heart gradually got weaker. It still responded to massage, but would only give one or two beats when left alone, till finally, nearly two hours after breathing first stopped, response failed and the case was given up.

We may note that the heart had given no sign of beating for about half an hour when direct massage was tried. It could not be grasped or moved at all through the diaphragm because it was small, empty, and flabby, and lying against the back of the chest wall. Massage was continued for over an hour, and up to nearly an hour after commencing direct massage there was irregular and non-continuous automatic heart-beating and unaided respiration. This case might have been hopeful had direct massage been employed earlier. It would appear wise in every case of collapse under anaesthesia to employ cardiac massage as soon as it is ascertained that the heart has ceased to beat.

ROBERT B. COLEMAN, M.B., Ch.B.Birm.,
Church Missionary Society's Hospital,
Old Cairo, Egypt.

Reports of Societies.

SURGERY OF THE ELBOW.

AT a meeting, held on November 26th, 1920, of the Surgical Section of the Royal Academy of Medicine in Ireland, with Sir W. I. DE C. WHEELER in the chair, Mr. R. ATKINSON STONEY read a paper on modern surgery of the elbow, and showed three cases of excision of the elbow operated on from ten months to ten weeks previously for ankylosis following gunshot wound. A fourth case was shown of operation for flail elbow, also succeeding gunshot wound. In all cases the result was an arm with good movement of the elbow and fair stability. Owing to the short interval which had elapsed since some of the operations, further considerable improvement might confidently be expected. As a result of the Great War, the speaker said, the surgery of the elbow had retrogressed by forty years. Before the war an ankylosed elbow was looked upon as a success, and excision for it was banned. The change of surgical teaching was largely caused by the bad results obtained by excision of the elbow in the early stages of the war, and this again was the result of the employment by unsuitable men and in unsuitable cases of the operation of primary excision—an operation which was probably never justifiable except as a life-saving or arm-saving device employed by the inexperienced. The teaching was now becoming crystallized that excision was unsuitable for gunshot wounds of the elbow, and that the ideal result was an ankylosed joint. This it appeared was largely due to the application of the principle of reducing the standard to the lowest capacity—an attempt to make rules to fit all cases. A good elbow with free movement and moderate stability was possible of attainment in most cases of ankylosed joint, and in some cases of flail elbow. Each case of ankylosed or flail elbow should be carefully considered with regard to (1) the present condition, and the handicap caused to the patient's work; (2) the result that might be expected from operation, especially with regard to the relative movement and stability of the new joint; (3) the consequent increase in the man's capacity or usefulness at his old or some new occupation. The position should then be fairly explained to the patient, and he should be allowed to decide for or against operation.

The main points in excision were: Vertical division of the triceps and its insertion into the periosteum and deep fascia of the forearm; limited removal of bone in the forearm; careful suture of the wound in layers; drainage; early electrical treatment and massage. The main points in operating for flail elbow were: Division of tissues between bones in a vertical direction from behind until the fibres of the brachialis anticus were reached; adjustment of bone ends, which should be united, preferably by several strands of silkworm gut; suture in layers of the tissues behind the bones; no drainage; avoidance of early weight or strain on arm.

Sir WILLIAM WHEELER said that while individual cases should be treated on their merits, it was his general practice to mobilize ankylosed elbows in officers, and in men to secure fixation at an open angle, especially in the left elbow-joint. A certain degree of lateral mobility was inevitable after resection, and, as a rule, the security of a fixed joint was better for manual work. Mr. H. STOKES spoke in favour of fixation, and described the originally desperate condition of one of Mr. Stoney's patients whom he had seen in France with streptococcal septicaemia. Mr. ADAMS A. MCCONNELL maintained that the question of fixation or mobilization should be decided by the employment which the patient wished to follow. Mr. DOOLIN referred to the dangers of lighting up latent infection in wounded joints, particularly in the case of tetanus. He had been accustomed to use the Kocher incision instead of the vertical.

Mr. STONEY, in reply, said that no rule could be framed for treating lesions of the elbow. Each case should be given the opportunity of the treatment best suited to its requirements. He had never had a case of gunshot injury where tetanus had been lighted up by operation; he used a dilute bipp as a prophylactic against latent sepsis.

PATHOLOGY OF INFLUENZA.

AT a meeting, held on December 2nd, 1920, of the Pathological Section of the Liverpool Medical Institution, the President, Dr. J. E. GEMMELL, being in the chair, Dr. J. G. ADAMI, Vice-Chancellor of Liverpool University, read a paper entitled "The pathology of influenza: an attempt to find a common lesion for the successive stages of pre-pandemic purulent bronchitis, pandemic pneumonia, and the haemorrhagic pulmonary oedema characteristic of the late pandemic of influenza, and to distinguish those lesions due to the primary causative agent from those due to the secondary invaders."

Dr. Adami first referred to the generally accepted view that the influenza epidemic started in May of 1918, and was followed by a much more serious epidemic in the autumn of that year. He did not, however, think that this view was correct, for early in 1916 and the spring of 1917 Hammond, Rolland, and Shaw had described a series of cases of purulent bronchitis in what was now known to have been the Etaples area. These cases were characterized by a peribronchitis, a destruction of the lining bronchial epithelium, and a bronchitic and bronchiolitic purulent discharge, all of which were associated with the presence of both the influenza organism and the pneumococcus. It was curious to note that in the same year (1917) an exactly similar epidemic was noted in the Aldershot area by Abrahams. Further, in that year American bacteriologists noted a very fatal form of pneumonia following measles. MacCallum showed that the morbid anatomy of the respiratory tract was that of an interstitial pneumonia, an exudate that was not excessively cellular, a destruction of the epithelium of the bronchi, and a microscopic appearance of the bronchioles extremely suggestive of that found in the French and English epidemics. This investigator found, however, that the chief organisms in this series were a haemolytic streptococcus and the pneumococcus; the influenza organism was only noted a few times. Then came the great epidemics of 1918. Dr. Adami showed that in the reports from France, Macedonia, Italy, India, and America, it was possible to trace a morbid histology and bacteriology common to all. In all areas the disease was ushered in with congestion and suppuration of the upper nasal respiratory tract, and in those regions where those parts had been bacteriologically examined reports invariably showed that the influenza organism had been recovered. Further, a tracheitis limited to the lower third of the trachea was perhaps the greatest common histological factor. The speaker felt sure that whatever might have been the changes due to other bacteria, the influenza organism of Pfeiffer, if not the *causa causans*, was always associated with the disease. In the autumn, however, it was obvious that the virulence of the organism had been raised to an inordinate degree, and Dr. Adami suggested that the absence of pus, the haemorrhagic oedema, and the marked lymphatic dilatation

NEW YEAR HONOURS.

THE New Year Honours announced on January 1st include awards to the following members of the medical profession:

Knighthood.

DAWSON WILLIAMS, C.B.E., M.D., D.Sc., F.R.C.P., Editor of the *British Medical Journal.*

S. SQUIRE SPRIGGE, M.A., M.D., Editor of the *Lancet.*

CHARLES RYALL, C.B.E., F.R.C.S., Senior Surgeon to the Cancer Hospital and to the Bolingbroke Hospital.

WILLIAM HODGSON, L.R.C.P.I., L.R.F.P.S.Glasg. For public services in Crewe.

EDWARD COEY BIGGER, M.D., M.Ch., Chairman of the Irish Public Health Council and Medical Member of Local Government Board, Ireland.

ALEXANDER JARVIE HOOD, M.B., C.M., Senior Honorary Physician, Prince of Wales's (Military) Hospital, Randwick, New South Wales.

K.C.B. (Military Division).

MAJOR-GENERAL ROBERT PORTER, C.B., C.M.G., M.B., Army Medical Service (ret. pay).

K.C.V.O.

FREDERICK STANLEY HEWETT, M.V.O., M.D., Surgeon-Apothecary to the King and His Majesty's Household; and to Queen Alexandra and Her Majesty's Household.

C.V.O.

WILLIAM FAIRBANK, M.V.O., O.B.E., Surgeon in Ordinary to His Majesty's Household, Windsor Castle.

C.M.G.

EDWARD CHARLES LONG, Principal Medical Officer, Basutoland.

THOMAS EDMUND RICE, Director of the Medical and Sanitary Services, Nigeria, formerly P.M.O. Sierra Leone and the Gold Coast.

C.I.E.

LIEUT.-COLCNEL DAVID MACDONALD DAVIDSON, I.M.S., Civil Surgeon, Lahore, Punjab.

LIEUT.-COLONEL FREDERICK O'KINEALY, I.M.S., Surgeon Superintendent, Presidency General Hospital, Calcutta, Bengal.

LIEUT.-COLONEL WILLIAM FREDERICK HARVEY, I.M.S., Director, Central Research Institute, Kasauli, Punjab.

LIEUT.-COLONEL JOHN LAWRENCE VAN GEYZEL, late I.M.S., Examiner of Medical Stores, India Store Dépôt.

Kaisar-i-Hind Medal.

A Kaisar-i-Hind Medal, for public services in India of the first class, has been awarded to Miss Annette Matilda Benson, M.D., B.Sc., formerly senior physician, Cama and Albless Hospitals, Bombay.

Surgeon Commander Christopher L. W. Bunton, R.N., has been promoted to the rank of Surgeon Captain.

A *Knighthood* has been conferred on Mr. P. J. Michelli, C.M.G., Secretary to the London School of Tropical Medicine, and the *C.I.E.* on Dr. Edwin John Butler, Imperial Mycologist, Pusa.

THE Lettsomian Lectures before the Medical Society of London will be delivered at 9 p.m. on February 7th, February 21st, and March 7th, by Mr. G. E. Gask; their subject this year is "Surgery of the lung and pleura." On Monday next, January 10th, there will be a pathological meeting; on January 24th papers will be read by Dr. Anthony Feiling and Dr. F. J. Crookshank. On February 14th a discussion on skin disease and its relation to internal disorder will be introduced by Sir James Galloway. On February 28th Dr. J. H. Ryffel will open a discussion on "The chemical estimation of gastric function," and on March 14th Sir Henry Gauvain will open a discussion on the "Non-operative treatment of surgical tuberculosis." The annual dinner is fixed for March 8th at the Wharncliffe Rooms, Hotel Great Central. The second general meeting of the session will be held at 8 p.m. on May 23rd; at 9 o'clock the annual oration will be delivered by Lord Dawson of Penn, and this will be followed by a conversazione.

Medical Notes in Parliament.

Vaccination.

IN reply to Mr. Swan, who asked whether there was anything in the Vaccination Acts or Orders issued thereunder to prevent the performance of the operation of vaccination by registered medical practitioners, other than public vaccinators, with humanized lymph, and the performance of the operation by unregistered persons, Dr. Addison said that the answer was in the negative, but the Acts provided that the certificate of successful vaccination could only be given by a registered medical practitioner. In answer to a question by Mr. Tyas Wilson as to the supply of vaccine, Dr. Addison said that in addition to the Government lymph establishment, which manufactured vaccine lymph for the supply only to public vaccinators and medical officers of health, there were four private firms in England and Wales which manufactured lymph for sale. He had no jurisdiction over the private manufacture of vaccine lymph, but as regards the Government lymph establishment, all possible precautions were adopted to secure that the lymph was produced under the best conditions and was free from contamination.

In reply to Mr. Kenyon, on December 21st, Dr. Addison gave the following statement as to public vaccinations carried out in England and Wales during the past ten years and the expenditure involved:

Year.	No. of Successful Vaccinations and Revaccinations Performed by Public Vaccinators at the Cost of the Rates.	Approximate Expenditure incurred in respect of Public Vaccination.	
		Expenditure out of Local Rates.	Expenditure out of Exchequer Funds.
		£	£
1909–1910 ...	415,718	183,000	25,000
1910–1911 ...	394,338	174,000	30,000
1911–1912 ...	362,757	165,000	23,000
1912–1913 ...	334,530	158,000	19,000
1913–1914 ...	315,067	152,000	16,000
1914–1915 ...	—	144,000	26,000
1915–1916 ...	—	138,000	12,000
1916–1917 ...	—	129,000	16,000
1917–1918 ...	232,648	116,000	21,000
1918–1919 ...	202,913	110,000	20,000

Ex-Service Men in Asylums.—In answer to Mr. Lyle, on December 21st, 1920, Mr. Macpherson said that ex-service men confined in asylums and suffering from certifiable insanity due to war service were by special arrangements treated as Service patients with all the privileges of private patients. Their number on December 9th, 1920, was 5,634. The entire cost of their maintenance and treatment was borne by the Pensions Department, and treatment allowances were made on substantially the same basis as in other cases of in-patient treatment.

Lunacy Certificates.—Mr. F. Roberts asked, on December 23rd, 1920, what became of the original reception order and accompanying medical certificate of inmates of asylums who were dead or who had been discharged; and whether, as some issue might turn upon the integrity and security of the original document, he would take steps to secure that the originals should remain henceforth in the custody of the Lunacy Board, and be free from the interference with their contents. Dr. Addison replied that the original admission papers relating to dead or discharged patients were retained by the authorities of institutions for as long as, in their discretion, they thought necessary.

Divisional and Full-time Health Insurance Officers.—Sir A. Holbrook, on December 23rd, asked the salaries to be paid to the four divisional medical officers and the thirty-three whole-time outdoor medical officers recently appointed by the Minister of Health, and what he estimated would be their travelling expenses; what expenditure would be incurred for the clerical and nursing staffs to these officers; what payment had been sanctioned for rent and care of regional offices throughout the country; whether the Minister was aware that the appointment of these officers to supervise and direct panel doctors throughout the country was strongly resented by the medical profession; and whether in view of the expense he would reconsider his decision. Dr. Addison replied that the salary to be paid to the four divisional medical officers was at the rate of £1,600 a year, and for the thirty-three whole-time medical officers the salaries ranged from £1,000 to £1,400 a year, in all cases inclusive, and providing that no additional payment was to be paid in the shape of war bonus. The total travelling expenses of this staff for a full year was estimated at £8,000. In addition a clerk had been assigned in certain areas, and the cost of clerical assistance under this head was estimated at £2,700 a year. Where necessary nurses were employed to assist these medical officers at a fee of half a guinea a session. Where it had been necessary to rent premises for this work the arrangements had been made by the Office of Works. He was certainly not aware that the policy adopted was strongly resented by the medical profession. This policy, which was approved by Parliament in 1914, had been continuously supported by medical men and by the approved societies; it was sound in itself and would produce results abundantly justifying the expenditure, in the saving of health, and of the amounts paid in sickness benefit.

In any case I think that this controversy has lasted long enough. I suggest that we let theorizing alone, and that Dr. Mackay let us have his results. If they show an improvement as compared with the correctly applied genuine Swedish methods I shall be delighted to acknowledge the fact to Dr. Mackay. If they do not, doubtless he will be equally pleased to do so to me.—I am, etc.,

London, W., Dec. 18th, 1920. EDGAR F. CYRIAX.

ANGIO-NEUROTIC OEDEMA TREATED BY INJECTIONS OF HORSE SERUM.

SIR,—Dr. T. Wood Locket's letter in your issue of December 18th, 1920, on the therapeutics of normal horse serum, prompts me to send you a note of the results of its exhibition in a case of angio-neurotic oedema which lately came under my care.

The patient, a coal-dealer, had previously been seen by my partner and also by a neighbouring practitioner, and had had, I believe, six attacks. One of these was so severe, and the tongue and neck so greatly swollen, that, as he appeared to be in danger of asphyxiation, my partner sent him to St. Bartholomew's Hospital, where he was admitted and kept under observation for several days.

I was called to his house on September 6th, and found him in bed with greatly swollen face, neck, tongue and lips. The lower lip was fully one and a half inches thick, and the features almost unrecognizable. Previous treatment having proved futile, and, influenced by a consideration of its antitoxic and thrombin-producing properties, I decided to try hypodermic injections of normal horse serum. I gave 5 c.cm. that evening, and at intervals of forty-eight hours 5 c.cm. and 10 c.cm. The swelling subsided rather more slowly than usual, and the patient was about at the week end and went to the seaside on Sunday. There he developed a profuse erythematous rash covering the body and limbs, and came home three days later. The rash soon disappeared, except over the sites of inoculation on the arms, where it became eczematous and persisted for several weeks.

This patient remained under my care for nine weeks, during which time he had one slight recurrence of the oedema, involving the eyelids and subocular tissue. Up to the present he has had no further attacks and remains quite well. In view of the fact that prior to receiving the horse serum injections he had seven severe attacks occurring at almost regular weekly intervals, I think I can fairly claim that this treatment has proved definitely curative in the case described.—I am, etc.,

London, E.C., Dec. 19th, 1920. W. A. M. SWAN.

Universities and Colleges.

UNIVERSITY OF LONDON.

THE title of professor of pharmacology has been conferred upon Dr. F. Ransom (London School of Medicine for Women).

Mr. F. F. Burghard, C.B., has been appointed the representative on the Senate of the Royal College of Surgeons of England for the remainder of the period 1919-23, in succession to Sir Charles Ballance, K.C.M.G., C.B., M.V.O., resigned.

The first lecture arranged under a scheme for the exchange of lecturers in medicine between England and Holland will be given at the rooms of the Royal Society of Medicine (1, Wimpole Street, W.1) by Dr. J. K. A. Wertheim Salomonson (Professor of Neurology in the University of Amsterdam) on "Some Considerations on Tonus and Reflexes" at 5 p.m. on Monday, January 17th. The chair will be taken by the Vice-Chancellor of the University, Dr. S. Russell Wells. Five other Dutch lecturers will also give one lecture each, particulars of which will be announced later. The lectures, which will be delivered in English, are addressed to advanced students of the University and to others interested in the subject. Admission is free, without ticket.

A course of eight lectures on the Physiology of the Embryo, Foetus, and Newly-born will be given by Professor M. S. Pembrey, M.D., in the Physiological Theatre, Guy's Hospital, at 4.30 p.m. on Thursdays, January 13th, 20th, 27th, February 3rd, 10th, 17th, 24th, and March 3rd. The lectures are addressed to advanced students of the University and to others interested in the subject. Admission is free, without ticket. [The course of lectures arranged to be given by Mr. J. A. Gardner has been postponed.]

Applications for the post of Professor of Obstetrics and Gynaecology and Director of the Obstetrical and Gynaecological Unit at the London (Royal Free Hospital) School of Medicine for Women (salary £2,000 a year) must be received by the Academic Registrar at the University by January 15th.

Applications for the Graham scholarship in pathology, value £400 per annum for two years, founded by the will of the late Dr. Charles Graham to enable a "young man to continue his pathological researches, and at the same time to secure his services to the School of Advanced Medical Studies connected with University College Hospital as a teacher under the Professor of Pathology," must be received by the Principal Officer at the University by January 17th, 1921.

UNIVERSITY OF ST. ANDREWS.

AT a meeting of the University Court on December 18th, the Very Reverend Principal Galloway, who presided, congratulated Professor Irvine on his appointment as Principal of the University.

Mr. D. M. Grieg's resignation of the post of lecturer in clinical surgery was accepted, and an expression of recognition of his services as a surgeon was adopted.

The following appointments were made: *Lecturers in Clinical Surgery*, Mr. John Anderson, D.S.O., and Mr. W. L. Robertson, M.C.; *Clinical Surgical Tutors*, Mr. John Taylor and Mr. F. A. Brown; *Clinical Tutor in Gynaecology*, Miss Margaret Fairlie; *Lecturer in Pathology*, Mr. G. R. Tudhope; *Honorary Demonstrator in the Department of Anatomy*, Miss Edith D. Dobbie; *Assistant to the Professor of Surgery*, Mr. F. A. Brown.

The following candidates have been approved at the examinations indicated:

THIRD M.B., CH.B. (*Forensic Medicine and Public Health*).—D. A. K. Cassells, G. R. M. Cordiner, W. A. Steel.

FINAL M.B., CH.B.—Margaret J. M. Cuthbert, Jean H. D. Fleming, Mabel Hodgson, Frances L. Knipe, Margherita M. Lilley, Christian E. Little, J. B. Macdonald.

LONDON SCHOOL OF TROPICAL MEDICINE.

THE following candidates have passed the examination of this school at the termination of the sixty-fourth session, October-December, 1920:

*P. A. Buxton ("Duncan Medal"), *Surgeon Lieut.-Commander H. R. Parker, R.N., *H. G. Wiltshire, *L. C. D. Hermitte, *Major W. B. Cullen, I.M.S., *Captain C. Heppenstall, I.M.S., *R. H. Liscombe, *Captain R. E. Flowerdew, I.M.S., S. C. Bose, E. R. Kellersberger, G. V. Allen, A. A. Denham, Captain H. S. Haji, I.M.S., A. S. Paranjpe, A. D. Gupta, C. J. Caddick, Z. Khaled, P. T. Liang, A. H. Patel, W. R. Taylor, D. F. Maya, S. Somasundram, W. E. de Silva, F. V. Jacques, Miss E. B. Salter, A. M. Kirdany, A. W. Hooker, Miss E. Lombard, A. K. Moilliet, Miss M. Gore, A. R. Mehta, O. van Stenis, Miss A. Gore, J. M. McCleery, Miss D. G. D'Abreu, A. F. Abbassi, E. S. Palmer, K. Ponniah, L. M. S. Parmanand, A. S. Westmorland, E. T. Saravanamuttu.

* With distinction.

Obituary.

THOMAS H. LIVINGSTONE, M.D., F.R.C.S.EDIN.,

Newcastle-on-Tyne.

THE death occurred on Christmas morning, at 38, Jesmond Road, Newcastle-on-Tyne, of Dr. Thomas Hillhouse Livingstone. He was the second son of the late Dr. Thomas Livingstone of Stanhope in Weardale, who was for over thirty years in practice at Stanhope, and who occupied a very prominent position in the public and social life of the dale. Dr. T. H. Livingstone was educated at Wolsingham Grammar School and Uppingham. He then proceeded to Edinburgh University, where he graduated M.B., Ch.B. in 1899. He filled the post of house-surgeon at Rochdale Infirmary, and later carried on his father's practice at Stanhope with much acceptance till 1903. He then returned to Edinburgh for a period, and took the M.D. degree and F.R.C.S.Edin. diploma, afterwards settling in practice in Newcastle. He became an honorary surgeon to the Hospital for Sick Children, and retired from this position in 1912. He was then appointed surgeon to the Throat, Nose, and Ear Hospital, Newcastle. During later years he confined his work entirely to this special branch, to which he had always had a leaning, and in it he had the satisfaction of being able to do much good work. He held a commission in the Territorial Force, and was mobilized at the outbreak of the war. He was under orders to proceed to France when he became seriously ill, and was admitted to the 1st Northern General Hospital with the malady which eventually proved fatal. Partially recovering from this illness, he was attached to the ear and throat department of the 1st Northern General Hospital. In 1914 he was made a vice-president of the Ear, Nose, and Throat Section at the annual meeting of the British Medical Association at Aberdeen. By nature he was of a most refined and gentle disposition, a gentleman in the truest sense of the word. He was possessed in a marked degree of that innate courtesy and kindness to others which one likes to associate with the profession. He was greatly attached to his native dale, and occasional visits from Newcastle to his old home in the country always gave him the utmost pleasure. To his many friends both in Weardale and Newcastle his death at the early age of 43 has come as a great grief. His remains were interred in the old churchyard of Stanhope.

The Services.

TERRITORIAL DECORATION.

THE King has conferred the Territorial Decoration upon the following medical officers of the Territorial Force:

Lieutenant-Colonels A. W. Mackintosh, 1st Scottish General Hospital, and (Brevet Colonel) Alexander Napier, V.D., Honorary Surgeon-Colonel (Honorary Surgeon-Colonel retd. Vols.) 4th Scottish General Hospital (retired).

Majors J. F. Christie, attached 4th Battalion, Gordon Highlanders, A. C. Turner, D.S.O., attached 49th West Riding Divisional Engineers, E. L. Anderson, 2nd West Lancashire Field Ambulance, J. W. Mackenzie, O.B.E., 1st Highland Mounted Brigade Field Ambulance, A. H. Horsfall, D.S.O., attached Royal Herbert Hospital, Woolwich, and J. M. Bowie, attached 9th Battalion, Royal Scots.

Surgeon-Captain Shepherd McC. Boyd, 2nd Home Counties Brigade, R.F.A. (ret.).

DEATHS IN THE SERVICES.

Lieut.-Colonel Richard Henderson Castor, Madras Medical Service (ret.), died of pneumonia at Croydon on December 30th, 1920, aged 59. He was born on May 12th, 1861, the son of Captain John Castor, master mariner, of Cochin, took the M.R.C.S. and L.R.C.P.Lond. in 1884, and entered the I.M.S. as surgeon on September 30th, 1886. He served in the Burmah campaigns of 1887-89, receiving the frontier medal with a clasp, and in May, 1890, went into civil employ in Burmah, in which province he spent the remainder of his service (thirty years). He became lieutenant-colonel on September 30th, 1906, received extension of service for four years during the war, and retired on November 9th, 1920, only six weeks before his death. He received the Kaisar-i-Hind medal (1st class) on June 3rd, 1919.

Medical News.

THE Earl of Radnor has accepted the office of President of the Thirty-second Congress of the Royal Sanitary Institute, to be held at Folkestone from June 20th to 25th, 1921.

SIR JAMES KINGSTON FOWLER will deliver an address entitled "The Colonial Medical Service" at the Middlesex Hospital Medical School on Thursday, January 20th, at 3 p.m., when the Earl of Athlone will preside.

THE Medical Branch of the Board of Education has been transferred from Cleveland House, St. James's Square, S.W.1, to Bridgewater House, Cleveland Square, S.W.1 (telephone 3410 Gerrard).

WE have received from Dr. Ernest W. Jones, the Honorary Secretary, a copy of the programme of the newly formed Birmingham Medico-Psychological Society. The President is Lieut.-Colonel A. W. Moore. Meetings for the discussion of papers are held monthly on Wednesday afternoons.

DR. OLIVER K. WILLIAMSON, physician to the City of London Hospital for Diseases of the Chest, has been appointed Professor of Medicine in the Medical School of the University College, Johannesburg.

A PROPOSAL has been made to install new *x*-ray apparatus and equipment at the Bolingbroke Hospital, Wandsworth, as a memorial to the late Dr. Cecil Lister, whose early experiments with *x* rays were carried out in that institution.

CAPTAIN W. E. ELLIOT, M.P., Dr. A. Mearns Fraser, Dr. Jane Lorimer Hawthorne, Surgeon Vice Admiral Sir James Porter, K.C.B., K.C.M.G., and Mr. A. H. Tubby, C.B., C.M.G., F.R.C.S., have recently joined the Executive Committee of the Society for the Prevention of Venereal Disease.

AT the meeting of the Medico-Legal Society to be held at 11, Chandos Street, W.1, on Tuesday, January 18th, at 8.30 p.m., Dr. H. Gibson Sutherland will read a paper on "Medical evidence in the Stanton murder trial."

A SPECIAL general meeting of the West London Medico-Chirurgical Society will take place in the society's rooms at the West London Hospital on Friday, January 14th, at 8.30 p.m., in order to discuss the Medical Consultative Council's interim report on the future provision of medical and allied services. Medical practitioners are cordially invited to attend and take part in the discussion.

COURSES of lectures on infant care, to be held in London and at Worcester, have been arranged by the National Association for the Prevention of Infant Mortality and for the Welfare of Infancy; an elementary course in London has been arranged by the association in conjunction with the National Society of Day Nurseries. Particulars may be obtained from Miss Halford, Secretary of the National Association for the Prevention of Infant Mortality, 4 and 5, Tavistock Square, London, W.C.1.

IN the Psychological Department, University of London, King's College, Strand, W.C.2, Dr. William Brown will give a course of ten lectures on psychopathology on Tuesdays, at 5.30 p.m., during the Lent term, commencing on Tuesday, January 18th. These lectures are open to medical students and medical practitioners without fee or ticket.

Letters, Notes, and Answers.

As, owing to printing difficulties, the JOURNAL *must be sent to press earlier than hitherto, it is essential that communications intended for the current issue should be received by the first post on Tuesday, and lengthy documents on Monday.*

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, *Aitiology, Westrand, London;* telephone, 2630, Gerrard.
2. FINANCIAL SECRETARY AND BUSINESS MANAGER (Advertisements, etc.), *Articulate, Westrand, London;* telephone, 2630, Gerrard.
3. MEDICAL SECRETARY, *Medisecra, Westrand, London;* telephone, 2630, Gerrard. 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.

"PUZZLED" asks: "Should dividends from war loan, which are income tax free, be included as assessable income or not?"

*** Our correspondent presumably refers to the tax-compounded 4 per cent. war loan issue. Interest thereon should not be "returned for assessment" on page 2 of the ordinary form of declaration, but should be included in any statement of total income at the gross equivalent of the net amount received—that is, at £*x plus* three-sevenths of £*x*. It will not be assessed to income tax if its precise nature is shown, and is not exempt from super-tax.

"R. P. R." has been applied to for payment of income tax assessed on him for the year 1915. Can he now claim to have the assessment adjusted?

*** The legal position is that the claim should have been made by April 5th, 1917, but we anticipate that objection would not be raised by the authorities to the claim being put forward now in view of our correspondent's absence on military service and of his statement of the actual income of the year made through Holt's Agency, which might reasonably be regarded as an intimation of claim. We suggest that he might write in this sense to the local inspector of taxes. As regards the annuity, a claim can be put in by the recipient on or before April 5th, 1921, in respect of the three years ending April 5th, 1920, but not as regards earlier periods.

LETTERS, NOTES, ETC.

ARTIFICIAL LIMBS.

CAPTAIN H. H. C. BAIRD, D.S.O., in the course of a letter which we have not space to print in full, writes:

Whilst welcoming your leading article on artificial limbs as a means of keeping this vital problem before the public eye, I regret that you should have thought it either desirable or necessary to have introduced the personal factor in your reply. To say that we, who are interesting ourselves in the welfare of the limbless, are the dissatisfied, is absurd, if for no other reason than that we happen to be the highly satisfied who have tasted the joys of wearing an artificial limb worth having, and our only desire is that the same joys may be brought within the reach of each and all of the thousands of others who have suffered a similar affliction. Then, again, you represent that we hold a brief for one particular make of limb, as if we had some axe to grind. This is not only absurd, but a most unfortunate misrepresentation of our case. What we have asked for is an impartial committee, on which