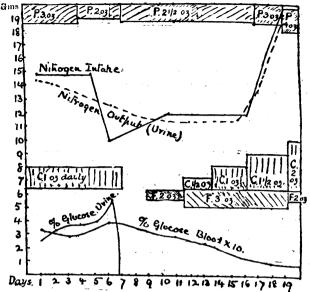
was estimated four hours after a meal, and nitrogen intake calculated as 16.5 per cent. of the protein intake; total nitrogen (T.N.) was determined by a modification of the Kieldahl method.



C = Carbohydrate. F = Fat. P = Protein. Example: On the seventh day on a diet of 1 cs. of carbohydrate and 2 oz. of protein, glucose in urine stood at 6 per cent, in blood at 0.4 per cent, and the nitregen output in the urine stood at 12.6 grams per diem.

The last section of the diet scale shows the calorie requirement of the particular patient per diem; it is made up according to age, occupation, or severity of disease, and is subject to revision as tolerance varies.

One ounce of carbohydrate or protein yields 120 calories. One ounce of fat yields 270 calories.

One ounce of carbohydrate is contained in—
1½ oz. dry oatmeal (contain 1/3 oz. protein, 1/10 oz. fat).
1½ oz. shredded wheat biscuits (contain 1/2 oz. protein).
12 Kalari biscuits (Callard).
1 pint of milk (contains 2/3 oz. fat, 2/3 oz. protein).
1½ pints cream (contain 1 oz. protein, 6 oz. fat; rich cream contain 12 cz. fat).
5 oz. potatoes (contain 1/5 oz. protein).
5 oz. baked beans (contain 1/3 oz. protein, 1/10 oz. fat).
5 oz. boiled rice or macaroni.
12 oz. bread or toast (contain 1/6 oz. protein).

5 oz. solied rice or macaron.
13 oz. bread or toast (contain 1/6 oz. protein).
10 oz. strawberries, lemons, or oranges.
10 oz. Braz l nuts (contain 1 oz. protein, 7 oz. fat).
10 oz. filbert nuts (contain 1 oz. protein, 7 oz. fat).

20 oz. grape fruit.
20 oz. ripe olives (contain 1/2 oz. protein, 5 oz. fat).
6 oz. apples, currants, pears, cherries, grapes.
5 cz. plums, bananas, or prunes.
20 oz. tomatoes or radishes.
20 oz. lettuce (contain 1/2 oz. protein).

1 pint beer.
1/2 pint stout.
1/2 pint pcrt wine.

Thrice-cooked spinach, celery, or cabbage contains no carbo-hydrates; the carbohydrate in soy bean or mushrooms is not assimilated.

One ounce of protein is contained in-

e ounce of protein is contained in—

10 oz. smoked uncooked bacon (contain 6 oz. fat).

6 oz. ordinary uncooked bacon (contain 3 oz. fat).

5 oz. lean smoked ham (contain 1 oz. fat).

5 oz. lean uncooked beef or mutton (contain 1/2 oz. fat).

4 oz. roasted lean beef or mutton (contain 1 oz. fat).

6 oz. corned beef (contain 2 oz. fat).

5 oz. fresh fowl (contain 1 oz. fat).

5 oz. boiled cod, haddock, sole, or whiting.

7 average sardines (contain 1 oz. fat).

2 large or 3 small hen's eggs (contain 1 oz. fat).

4 oz. cheese (contain 1 oz. fat) (American, Cheddar, Cheshire).

2 ounce of fat is contained in—

One ounce of fat is contained in—
1½ oz. fresh butter.
1 oz. oleo margarine.
1 oz. lard, cod-liver oil, olive oil.

One ounce of whisky, brandy, rum, or gin yields 105 calories.

Requirements: Calories per day in the form of—oz. carbohydrates.

oz. proteins. oz. fat.

REFFRENCES
1 E. P. Joslin: Diabetic Manual, 1919. <sup>2</sup> P. Cammidge: Glycosuria and Allied Conditions, 1913.

## Memoranda:

## MEDICAL, SURGICAL, OBSTETRICAL.

ADENO-CARCINOMA OF THE APPENDIX.

THE following report is of interest, as the case is probably the youngest of the kind to be recorded.

A boy, aged 14, was admitted to hospital complaining of abdominal pain, which had come on suddenly the previous night. It was at first referred to the umbilicus, and later to the right iliac region, and was unaccompanied by vomiting or constipation. He had had no similar attacks, and no other important illnesses. Tuberculosis had occurred in several members of the family (including a sister with peritonitis), but there was no family history of malignant disease.

On admission the temperature was 100.2° the pulse 108 and the

history of malignant disease.

On admission the temperature was 100.2°, the pulse 108, and the respirations 28. The tongue was furred, and the breath foul. The abdomen moved well with respiration; there was slight distension in the right iliac region, and tenderness over McBurney's point, just below which a cord-like thickening about 2 inches long was palpable. The rectus reflex was less marked on the right than on the left. The examination per rectum was negative.

The patient appeared fairly comfortable, and next morning presented ne symptoms, though the tenderness and thickened cord in the right iliac fossa persisted; the tongue was cleaner, the bowels regular, and there was no vomiting. The patient was kept in bed on an ordinary light diet and watched for a week, but beyond an evening rise of temperature to 100°, the daily range being about 1.5°, there were no abnormal signs. A diagnosis of tuberculous appendix was made.

At operation the appendix was found to be 5 inches long, kinked,

tuberculous appendix was made.

At operation the appendix was found to be 5 inches long, kinked, lying in the "4 o'clock" position, and bound down by adhesions. It showed signs of recent inflammation. On being removed and slit up along the lumen, which was patent, it was found to coutain two small faecal concretions at the tip, and in the wall at the point where the kinking occurred were two small yellow masses, very hard, and cutting like an unripe pear.

The report received from Dr. Walker Hall of Bristol on the microscopical examination of the specimen is as follows:

"The condition present is an adeno-carcinoma. several small adjacent nodules, each of which represents the same structure. One of them, however, has extended more rapidly than the others, and has reached the peritoneal lymphatics."

The patient made an uneventful recovery, the wound healing by first intention; and when last seen (six weeks after operation) appeared very well. There is a clean, smooth scar, and

nothing abnormal palpable per abdomen.

I am indebted to Dr. W. Thompson for permission to publish

these notes.

The Hospital, Bridgwater. .

A. O'DWYER THOMAS.

#### EBONITE POISONING.

In view of the great vogue of amateur "wireless" building and entertaining, the following case may be interesting. So far I have not seen any reports of cases due to work on making "wireless" receiving sets, though it would seem that such cases may shortly become more numerous. The disease referred to is simple ebonite poisoning, and occurred in one of

my panel patients a short time ago.

The patient is employed in the room of a factory where the ebonite plates are cut, ground, and bored for holding the parts of amateurs' receiving sets. After a week's work in this room, although he did very little ebonite grinding himself, symptoms of an irritant enteritis occurred-namely, namen, symptoms of an irritant electrics occurred—namely, nausea, womiting, giddiness, headache, diarrhoea, and abdominal cramps. The attack was not very severe and once the patient left work yielded in a few days to treatment by copious drinks of lemonade, milk, or barley water, stimulants in moderation, and light (milk) diet, with saline aperient thrice daily.

My patient stated that three other men employed in the same room had had similar, but more severe, symptoms, and had had to be absent from work a few days before he himself was attacked. His employers appear to have agreed that the source of the trouble was ebonite dust, as he understood that they had already made arrangements for hoods and suction-ventilating fans to be fixed on the grinding benches. The workers are also encouraged to drink large quantities of milk, and to be scrupulous in washing their hands. These measures, and prevention of eating in workrooms, should prove sufficient to prevent further trouble in these factories.

M. W. GEFFEN, M.R.C.S., L.R.C.P., D.P.H.

#### RUPTURE OF THE SPLEEN.

RUPTURE of the spleen is not very common, and in public school boys must be a very rare event. The following case is of interest, in that the original injury damaged the spleen, but rupture did not take place till eight days later, following on slight exertion.

A boy, aged 15½, was kneed in the abdomen at football on February 8th. He was able to walk back to the school sickhouse, when he vomited freely (dark-brown matter) and became collapsed. There was considerable tenderness in the epigastrium, just to the left of the middle line; his condition steadily improved from hour to hour; there was no blood in the urine or stools, and I came to the conclusion that probably no abdominal organ was injured but that the solar plexus had been affected. Beyond slight epigastric tenderness for a couple of days he had no further symptoms, and was discharged on the evening of February 13th to school with leave off all exercise.

On the morning of February 16th, instead of reporting to me, he played squash rackets after breakfast, and in a few minutes felt acute pain, vomited, and had to be carried into the sickhouse in a state of collapse, with acute abdominal pain and slight muscular rigidity on the left side. In consultation with Dr. Lawson Smith we agreed that there was probably some internal haemorrhage; Mr. H. W. Carson came down at once and the patient was operated on within three and a half hours.

The Operation: Note by Mr. Carson.

The Operation: Note by Mr. Carson.

I agreed with Dr. Lempriere and Dr. Lawson Smith that the patient was suffering from internal haemorrhage, and I operated at once, opening the abdomen through the left upper rectus sheath, displacing the muscle inwards. This did not give good exposure, and was supplemented by a transverse incision backwards into the loin from the middle of the vertical incision. There was a quantity of blood and clots in the abdomen. The spleen was found to be torn on its inner surface, but the bleeding was coming from within the hilum. A nodule was felt in the pedicle just at its attachment to the spleen, which may have been a haematoma from the first injury. There was no old blood clot, which confirmed the opinion that internal haemorrhage had not occurred as the result of the first injury. Removal of the spleen was decided upon, but it was made difficult by the shortness of its ligaments. The pedicle, too, was short and contained the tail of the pancreas.

Bevond troublesome post-anaesthetic vomiting (he was

Beyond troublesome post-anaesthetic vomiting (he was two and a half hours on the table) there was no drawback, and he went home to convalesce on March 14th.

A specimen of his blood was sent a fortnight after the injury to Dr. C. H. Andrewes of St. Bartholomew's Hospital, who reported that there were no changes from the normal.

L. R. LEMPRIERE. Medical Officer, Haileybury College.

# Reports of Societies.

### RADIOLOGY IN THE DIAGNOSIS OF PULMONARY TUBERCULOSIS.

A MEETING of the Royal Medico-Chirurgical Society of Glasgow was held on April 6th, when a number of communications were made on the diagnosis of pulmonary tuberculosis, with

special reference to radiology.

Dr. LEONARD FINDLAY, whose remarks referred particularly to the disease in the young, said that his conclusions were based upon clinical, radiological, and pathological examina-tions, and that meticulous care had been taken in the matter of diagnosis. He believed that in the period of life before puberty tuberculosis of the lung was a disease of infancy and early childhood, and that it ran an acute or subacute course. In an older child a pulmonary lesion, and especially a chronic pulmonary lesion, should be diagnosed as of a tuberculous nature only with the greatest hesitation and in the presence of the utmost proof. Charts were shown in support of this opinion. Dr. Findlay also pointed out that pulmonary tuberculosis, unless in the very young infant, was seldom, if ever,

limited to one lung or one lobe of the lung.

Dr. D. CAMPBELL SUTTIE showed radiograms of cases of pulmonary tuberculosis, and said that admittedly recognizable eray appearances had a definite value in the face of negative clinical findings, and negative x-ray appearances had no claim for consideration when clinical signs were undoubtedly present; there were pathological conditions which in their early stage were undetectable by either—for example, miliary tuberculosis. Certain pathological conditions were shown, he said, by radiograms, before clinical signs or symptoms appeared, and also after clinical signs and symptoms had disappeared. Certain pathological conditions, on the other hand, were detected by the clinician before x-ray appearances were present.

Dr. A. S. M. MACGREGOR introduced the subject from the public health point of view, and referred to the work done by Drs. Wilson, Henderson, and himself in correlating clinical and radiological features in special groups of cases. Some of the earlier ideas as to the nature of apparent abnormalities in radiograms had had to be discarded, and he pointed out that radiographic appearances varied within wide limits in normal chests. In regard to the routine diagnosis of lung conditions, perhaps the most important aspect of radiology was the aid it gave in a negative sense in doubtful cases; in this respect the right apex was a constant stumbling block. Pediclorum and the characteristics are reconstant at the constant stumbling block. constant stumbling-block. Radiology was also of value in many cases of chronic bronchitis where the symptoms suggested a coexistent tuberculosis. X rays often detected

hidden, unsuspected, and otherwise undiagnosable lesions.
Dr. J. A. Wilson said that if the cases notified as pulmonary tuberculosis in a district of Glasgow were analysed it would be found that the error in diagnosis, in the best year, was about 33 per cent. For the past three years efforts had been made to evolve a scheme to deal with the increasing number of notifications of cases which were doubtfully tuberculous. While it was too early to dogmatize, the conclusions arrived at, as a result of the combination of careful x-ray and clinical work, were that (1) cases of tuberculosis of the lung had a definite radiological picture; (2) hilus tuberculosis was an uncommon disease; (3) basal lesions were, as a rule, non-tuberculous, the exceptions being those secondary to a chronic tuberculous infection of the abdomen; (4) there might be physical signs of moderately extensive infection of the respiratory tract with no radiological counterpart—such infections were non-tuberculous.

Dr. Feegus L. Henderson gave a demonstration of radiograms illustrating points in diagnosis.

#### PROLAPSE OF THE UTERUS.

AT a meeting of the Aberdeen Medico-Chirurgical Society held on April 5th, with the President, Dr. ALEXANDER OGSTON, in the chair, a lantern demonstration on pelvic hernia (prolapsus uteri) was given by Mr. ALEXANDER and Mr. VICTOR DON. The anatomy of the pelvic floor was demonstrated, and the authors pointed out that the real support was formed by the levators, cocygei, etc., and their coverings, the true fascia of the muscles. Sections of the pelvis showed the subperitoneal tissues impregnated with fat, with no definite ligamentous bands. The physiology affecting the abdominopelvic pressure was explained, showing that gravity had little to do with prelarge or the so called ligaments with relative to do with prolapse, or the so-called ligaments with retention of organs, the onus being entirely on the pelvic muscles and their fascial coverings. A new operation, founded on the methods which had proved successful in dealing with herniae elsewhere, was demonstrated, the edges of the levators being brought together and their fascial coverings overlapped, or, if these were found much scarred or thinned, a piece of fascia lata from the thigh was introduced to strengthen the support. Operations which depended on the suturing of connective tissues only were condemned as unreliable. The authors said that they had not yet had sufficient experience of the results, but the operation was stated to be comparatively simple and safe, and healing was ensured by gentle handling of the tissues. The demonstration was followed by a discussion.

MEETING of the London Association of the Medical Women's Federation was held at the Elizabeth Garrett Anderson Hospital on April 10th, with Dr. Louisa Martin-Dale in the chair. Miss IDA C. MANN read a paper on some DALE in the chair. Miss IDA C. MANN read a paper on some congenital defects of the eye and their confusion with acquired conditions. She described many congenital defects of the fundus, of the iris, the cornea, and the lids, but confined her attention to those defects which had to be diagnosed from acquired pathological conditions presenting very similar appearances. Her paper was illustrated by a series of drawings in colour. Miss ROSA FORD read a paper on a case of intracranial tumour, diagnosed by the visual defects produced. The diagnosis both of the presence and the site of the tumour in this case rested mainly on the detection produced. The diagnosis both of the presence and the site of the tumour in this case rested mainly on the detection of an increasing contraction of the visual fields, especially with regard to colour vision, and associated with papilloedema. The tumour was located in the occipital region. Mr. Percy Sargent operated on the case at the National Hospital, Queen Square, and successfully removed an endothelioma from the occipital lobe.

days of his receiving my scheme for the amalgamation, and it would be impossible to exaggerate the enthusiasm with which Dr. Latham and his colleagues threw themselves into the work; but neither they, nor even myself, had any idea of the amount of work and worry that this labour would entail—endless committees and innumerable reports occupied over two years of devoted work. They never spared themselves, and I fear often neglected their own professional interests for the sake of the great idea which possessed them. I vividly remember one night (or was it morning?) I had to see them at a critical moment, and, late as it was, found them hard at work on their knees dealing with a mass of papers and reports spread on the floor for easier comparison, as no table was large enough to hold them. Much of the work must have been a tremendous tax on Latham's temper, for points that seemed to be settled were continually being re-raised, until at last he had the satisfaction of having the scheme practically unanimously adopted by the large meeting convened by Sir William Church, Chlairman of the Organizing Committee, held in the Royal College of Physicians. But even that did not end his work for the Society. Under its new conditions, when it received the recognition of the late King Edward VII in the form of a supplementary charter, it had to be guided into its new ways; and when the new council, very shrewdly, decided that Dr. Latham and Mr. Pendlebury should be the first honorary secretaries they loyally accepted the duty. Latham's keen brain and zeal proved invaluable, and he stuck to his new post for five years. His tragic and un-expected death makes now impossible what was intended, that he should have received the highest honors within that he should have received the highest honour within the girt of the Society—namely, to be enrolled as an honorary Fellow of the Society.

#### JOHN CAMPBELL MACLEAN, M.B., C.M., Surgeon, Victoria Hospital, Swindon,

THE death of Dr. J. Campbell Maclean removes one of the most outstanding practitioners of the West of England. Dr. Maclean was born at Tobermory in the Island of Mull in 1846, and was the son of the Rev. Peter Maclean. He graduated M.B., C.M. at Edinburgh in 1868, and began practice at Swindon in 1869. For forty years he was medical officer for the Swindon and Highworth Union. His sympathy and help were always at the dispessed of the present the second of the second of the present the second of the and help were always at the disposal of the poor, and the writer recalls many instances of his gratuitous attention to his old Poor Law patients right up to the end of his career. Of striking and handsome personality, he was to be seen commencing his rounds in an extensive country practice every morning punctually at 9 o'clock, winter and summer alike, and in the London season he journeyed up to town one day every week for the convenience of his county patients. Vigorous in mind and body despite his 77 years, he worked with the spirit of a boy right up to the last, and, although suffering some optical disability after removal of cataract, he availed himself of every opportunity to extend his know-ledge and keep himself abreast with the modern developments and technique of clinical medicine. During the pandemic of influenza in 1918, when the medical resources of the town were strained to their uttermost capacity, he cheerfully offcred his services to the Great Western Medical Fund Society, and took over a share of their work gratuitously. In recognition of these services he was afterwards presented with a gold watch and chain.

In his younger days Dr. Maclean was an excellent shot, a splendid horseman, and was instrumental in establishing one of the first polo clubs outside Hurlingham. He was a good cricketer, a fisherman, a swimmer, and a yachtsman, but in later years boxing appealed to him most, and he did much locally by his patronage to encourage and foster every form of clean and honest sport. He was singularly modest and unassuming. A charming host and a pleasant companion, he will be remembered by all who enjoyed the privilege of his friendship. A very eminent Freemason, he held Grand Lodge honours in the craft and corresponding rank in the Royal Arch Chapter and Mark Masonry, and in his earlier days he was much in demand at installation ceremonies owing to his knowledge of the work.

Within a week of his death he gave evidence at an inquest and in the evening attended the annual boxing show. On the following day he was suffering from a cold, pneumonia supervened, and, despite the unremitting attention of his colleagues, he passed peacefully away. The funeral took place on April 6th, in the presence of an immense con-

Dr. Maclean celebrated his golden wedding on July 4th, 1921. He is survived by his wife and a daughter.

W. F. J. W.

## Aniversities and Colleges.

UNIVERSITY OF CAMBRIDGE.

DR. G. S. GRAHAM SMITH, F.R.S., has been appointed Reader in Preventive Medicine for a period of four years.

The plan for the next final examinations for medical and surgical The plan for the next final examinations for medical and surgical degrees has now been issued. Part I of the third M.B. examination (surgery, midwifery) begins on June 12th, and ends on June 16th; Part II (principles and practice of physic, pathology and pharmacology) begins on June 13th, and ends on June 20th. The M.Ch. examination will be held on June 12th, 15th, and 16th. The certificates and examination fees of candidates, accompanied by their postal addresses, must reach the Registrary by Saturday, May 12th.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

A QUARTERLY Council was held on April 12th, when Sir Anthony

Bowlby, President, was in the chair.

The President reported that the vacancy in the Court of Examiners would be filled at the next meeting of the Council

Examiners would be filled at the next meeting of the Council on May 10th.

Jacksonian Prize.—This prize for 1922 was awarded to Mr. Sidney Forsdike, F.R.C.S., B.S., M.D., the subject being "The effects produced by radium on living tissues, with special reference to its use in the treatment of malganant disease." The following subject was selected for the Jacksonian Prize for 1924: "The pathology, diagnosis, and treatment of oesophageal obstruction."

Mr. Douglas Gabell was elected a Member of the Board of Examiners in Dental Surgery.

The following Members of twenty years' standing were elected to the Fellowship: John Howard Mummery, Surgeon Vice-Admiral Sir Robert Hill.

Sir Robert Hill.

Sir Arthur Keith was elected Vicary Lecturer for the ensuing occasion.

CONJOINT BOARD IN SCOTLAND.

THE following candidates have been approved at the examination

FINAL EXAMINATION.—Medicine: H. P. Sen, Wilhelmina C. Storrie, Buby S. Beveridge, Eliazar Gelfer, D. G. Coutts, Martha D. Devon, M. N. Gelb. G. A. P. McConey, D. R. Nicol. Surgery: C. A. Paulusz, M. N. Gelb. Midwifery: T. F. Kelly, Ruby S. Beveridge, C. A. Paulusz, W. E. Haydon, Martha D. Devon, G. A. P. McConey, T. J. Muir. Medical Jurisprudence: J. A. McCann, J. S. Whiteside, J. McAu'ey, Anna G. Laubscher, D. M. Safwat, Eliazar Gelfer, H. V. R. McKinlay, A. W. H. Noble, J. Ryan, L. McLean, Mary C. Serville.

The following candidates, having passed the Final Examination, have been admitted L.R.C.P.E., L.R.C.S.E., L.R.F.P. and S.G.:

J. M. McLintock, Minnie E. McMurray, J. M. Cockburn, B. Lal Chopra, N. J. Laubscher, W. N. Stirling, G. A. W. Wickramasuriya, D. Maximos, D. J. Dubash, E. R. C. Walker, P. G. Bainbridge, W. Paris, J. J. du Pre le Roux, J. H. Murrell, S. J. Reich, D. K. Sabhesan, E. Levine, L. Jaffit, J. J. Mann, D. V. Walpola, J. S. Bizzett.

CONJOINT BOARD IN IRELAND. THE following candidates have been approved at the examination indicated:

FINAL PROFESSIONAL.—T. A. Austin, A. P. Brown, Josephine A. Carson, M. Cremin, Victoria E. Davidson, Evelyn S. Delany, J. F. Devlin, D. A. T. Eaton, I. J. Eppel, T. V. Fitspatrick, S. G. Gilmore, A. J. Harte, M. J. O'Riordan, R. D. Scale, V. F. Walsh.

## The Services.

R.A.M.C.—EXAMINATION FOR COMMISSIONS.

R.A.M.C.—EXAMINATION FOR COMMISSIONS.

THE War Office announces that an examination for not less than twenty commissions in the Royal Army Medical Corps will be held on August 1st, 1923. Applications to compete should be made to the Secretary, War Office, not later than July 20th. The presence of candidates will be required in London from July 30th. Prospective candidates can obtain a full statement of the duties and emoluments of the service on written application to the Secretary (A.M.D.I.), War Office, Whitehall, S.W.I.

AUXILIARY R.A.M C. FUNDS.
THE annual general meeting of the subscribers to the Auxiliary Royal Army Medical Corps Funds will be held at 11, Chandos Street, W.1, on Friday, April 27th, at 4 p.m., when the financial statement for 1922 will be presented and the officers for the ensuing year elected. vear elected.

DEATHS IN THE SERVICES.

Brigade Surgeon Edwin Clement Bensley, Bengal Medical Service (retired), died suddenly in London on March 20th, aged 85. He was educated at St. Thomas's Hospital, and took the M. R. C.S. in 1858, and the L.R.C.P.Edin. and F.R.C.S.Eng. ten years later. Entering the I.M.S. as assistant surgeon, in the Company days, in

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1859, he became surgeon major in 1873, and retired with an honorary step of rank as bridade surgeon in 1885. The whole of his service was passed in civil employ in Lower Bengal, where he held for many years the important civil surgeoncy of Rajshabai. He was the author of a small work on The Diarrhyea of Infants in India, while he did all the control of the control published in 1867. Several members of his family have served in the I.M.S.; the late Surgeon Major C. E. W. Bensley was his brother, Colonel C. H. Bens ey is his son, and Lieut.-Colonel C. N.

brother, Colonel C. H. Bens ey is his son, and Lieut.-Colonel C. N. Bensley his nephew.
Lieut.-Colonel David Claude Kemp, I.M.S.(ret.), died of angina on April 3rd, aged 51. He was born on June 8th, 1871, the eldest son of the late D. S. Kemp, F.C.S., and educated at University College, London, taking the diplomas of L.R.C.P.Lond., M.R.C.S. Eng., and L.S.A. in 1896. He went out to India in 1898 as a special plague officer, and entered the I.M.S. as lieutenant on January 28th, 1899, becoming lieutenant-colonel after twenty years' service, and retiring on October 22nd, 1921. Most of his service was spent in civil employ in Madras, where he was for several years resident medical officer of the Madras General Hospital. He served in the late war, and in 1914–15 was specialist in advanced surgery in the Kitchener Hospital for Indian troops at Brighton.

## Medical Aelus.

THE annual meeting of the Royal Medical Benevolent Fund will be held at the Royal College of Physicians, Pall Mall East, S.W., on Monday, May 7th, at 4 p.m., when the annual report and financial statement for 1922 will be presented and the officers and committee for the current year elected.

A COURSE of lectures on pathological research in its relation to medicine has been arranged for the summer session at the Institute of Pathology and Research, St. Mary's Hospital, W.2. The lectures, which will be delivered in the Lecture Room of the Bacteriological Department of the Institute on Thursdays at 5 p.m., commence on April 26th, when Sir Almroth Wright will discuss the principles of medical research. The lectures are open to the medical profession and to all students in medical schools without fee.

IT is announced that Sir Charles Brown of Preston has given £800 to the Harris Orphanage, Fulwood, Lancashire, to which he is consulting physician. In offering the gift Sir Charles Brown said that he was prompted to make it during his lifetime by the desire to add to his own happiness by seeing the benefit which will result to the children. The gift will enable the council to purchase a house in Lytham which has been occupied for some seven years as a seaside home for sick and convalescent children of the orphanage.

DR. MILLAIS CULPIN will give a course of ten lectures on psycho-neuroses at the London Hospital Medical College on Tues lays and Fridays at 5.15 p.m., commencing on May 1st. The fee for admission to the course is £1 1s.

A DISCUSSION on some problems in the lighting of printing works will be held at a meeting of the Illuminating Engineering Society at the house of the Royal Society of Arts on Tuesday, April 24th, at 8 p.m.

AT the meeting of the Tuberculosis Society to be held on Monday, April 23rd, at 8 p.m., at the Margaret Street Hospital, Dr. A. K. Chalmers, M.O.H. for Glasgow, will read a paper on housing and tuberculosis.

A COURSE of six post-graduate lectures on ante-natal care will be given by Professor A. Louise McIlroy at the London (Royal Free Hospital) School of Medicine for Women, Hunter Street, Brunswick Square, W.C.1, on Tuesdays at 5 p.m., commencing on May 1st. Admission is free to medical practitioners and post-graduate students.

THE Association of Public Vaccinators of England and Wales will hold a dinner at the Hotel Cecil, Strand, W.C., on Friday, April 27th, at 6.30 for 7 p.m.

A SPECIAL course of lectures and demonstrations has been arranged by the London University Extension Board and a committee of the International Society of Medical Hydrology. It will be held at the University, in laboratories in London, and at two of the British spas, from May 29th to June 4th. Full particulars will be announced later.

FROM the statement issued by the India Office on April 13th regarding the prevalence of plague in India it appears that during the six weeks ending March 31st there were 48,041 deaths. The mortality was highest in Bihar and Orissa, United Provinces, Punjab, and Delhi. Special measures have been taken to encourage inoculation and rat destruction in Delhi Province, which is administered by the Government of India, and the population of Delhi are reported to be coming forward readily for inoculation.

AT a meeting of the Association of Economic Biologists, to be held in the Botanical Lecture Theatre of the Imperial College of Science, Prince Consort Road, S.W.7, on April 27th, at 2.30 p.m., Dr. C. M. Wenyon will read a paper on some recent observations on pathogenic protozoa of plants and animals.

THE Automobile Association states that its attention has been drawn by the authorities to the insufficient illumination of number plates on motor vehicles. The Regulations do not prescribe the distance from the car or motor cycle at which the index mark and numbers should be readable after lighting up time, but in their own interests all motorists should satisfy themselves that their lighting arrangements are so contrived that—as required by the Regulations—every letter or figure on the illuminated identification plate is rendered "easily distinguishable."

A COURSE of eleven lectures on the management and feeding of infants and young children will be given by Dr. Eric Pritchard to qualified practitioners at the Infants' Hospital, Vincent Square, S.W., on Mondays and Thursdays at 6 p.m., commencing on April 26th. The fee for the course is two guineas, and those participating are entitled to attend the round-table consultations held by Dr. Pritchard at the hospital on Tuesdays and Fridays, and are also afforded opportunities of visiting the Nursery Training School, 3, Wellgarth Road, Golders Green, N.W., and the Home for Blind Babies, Chorley Wood, on Saturday afternoons at 3 o'clock.

PROFESSOR BORDET, director of the Brussels Pasteur Institute, has recently been presented by the King of Sweden with the Grand Order of the Polar Star.

A COMMITTEE has been formed to make arrangements to celebrate the 70th birthday of the well known Italian parasitologist, Professor Battista Grassi. by the establishment of a Grassi Foundation for the zoological study of parasitic diseases." Subscriptions should be sent to the Rivista di Biologia, 27, Via della Dogana, Vecchia, Rome.

DR. NATTAU-LARRIER, a well known writer on tropical disease, has been nominated professor in the new chair of colonial studies and pathological protistology at the Collège de France.

# Ketters, Aotes, and Answers.

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

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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 namez—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 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 Mediscara, Westrand, London; telephone, 2530, Gerrard.

250, Gerrard.

3. MEDICAL SECRETARY, Medisecra, Westrand, London; telephone, 250, Gerrard. The address of the Irish Office of the British Medical Association is 16, South Frederick Street, Dublin (telegrams: Bacillus, Publin; telephone, 4737, Dublin), and of the Scottish Office, 6, Rutland Square, Edinburgh (telegrams: Associate, Edinburgh; telephone, 4361, Central).

### QUERIES AND ANSWERS.

THE NOTATION OF CORRELATION.

THE NOTATION OF CORRELATION.

"H." writes: In reading reports such as those issued from the Francis Galton Laboratory for National Eugenics, and some of those published by the Medical Research Council on statistical matters, the ordinary reader is puzzled by some of the mathematical formulae used; for instance, in the Medical Research Council's Report on the relation between home conditions and the intelligence of school children, a subject in which many of us would like to take an intelligent interest, such a statement as that the correlation is + 0 2027 ± 0.0815 is encountered. I gather that there is a direct correlation, but as I do not know what unity is my understanding of the statement is vague. unity is my understanding of the statement is vague

\* \* The subject was fully discussed and explained in an article published in this JOURNAL of July 13th, 1907 (p. 95), and it is not easy to state the facts and theories briefly. It may, however, be said that perhaps the most graphic way of apprehending the idea of a coefficient of correlation is to take the case of two equally variable quantities, x and y. Suppose we plot on a diagram the mean values of sets of y's assiciated with particular values of x, the mean value of y when x is equal to 1, the mean value of y when x=2, and so on. Then, if the points representing the mean values of y lie on a horizontal straight line parallel to the base, clearly y has on the average the same