

strain, the "sugar" reactions of which were not tested, we find 33 virulent and 52 avirulent.

Of the cultures of *B. diphtheriae* from clinical cases we find 100 per cent. virulent; of those from convalescents 90.9 per cent.; while of the cultures from carriers which were typical on morphology and "sugar" reactions we find only 38.8 per cent. virulent.

These results agree with the findings of most other workers in so far as they show that avirulent strains are rarely found except in people who have never, or at all events not recently, suffered from diphtheria (Graham Smith, 1908, Arkwright, 1912).

Fermentation Reactions.—Of the 161 cultures in the three groups the sugar reactions were tested in all except twelve instances. We used as a routine only glucose and saccharose. Thirty strains were also examined for action on dextrin, salicin, and litmus milk. We found, however, that by using glucose and saccharose alone we obtained as much information as we could from the more extended set of reagents. All the virulent *B. diphtheriae* which we have tested hitherto produce acid in glucose but not in saccharose. The same reaction was, however, given by 53 out of 61 avirulent cultures, though the amount of acid produced by two of them was very slight. We have not so far met with a virulent strain which, when absolutely pure, produces acid in saccharose. Graham Smith (1908) has reported several from one epidemic. Our difficulties in getting rid of contamination by saccharose-fermenting organisms have been noticed. We succeeded only by repeated plating, and in more than one instance after picking off several colonies from the same plate and testing the sugar reactions of each, we found that some of the "single" colonies failed to ferment saccharose, whilst others did so.

We have so far found no evidence that a culture may "lose its virulence" on being kept. It need only be mentioned that smears must be made from every culture before it is used for inoculating animals. One culture in our series appeared to be a pure culture of Hoffmann's bacillus and was avirulent by intracutaneous test. Two months later, when examined for morphology, sugar reactions and virulence, it was found to be indistinguishable from *B. diphtheriae* on morphology and "sugar" reactions, and to be virulent. The culture was plated, and from the plate a number of colonies were picked off. Some proved to be pure cultures of Hoffmann's bacillus, others *B. diphtheriae*. Hoffmann's bacillus and *B. diphtheriae* may therefore live in the same tube for months and neither be destroyed. A culture originally avirulent may, when next examined, be found virulent because the *B. diphtheriae* are in enormous excess, and vice versa.

II. RELIABILITY OF INTRACUTANEOUS TEST.

We have compared the results of determination of virulence by the intracutaneous method with those obtained by the methods hitherto mostly used—that is, the subcutaneous injection of a forty-eight hour broth culture or of the growth from a Loeffler slope.

We chose for comparative testing by the subcutaneous method 83 cultures which had been tested and classified by the intracutaneous method; of these, 57 were avirulent and 26 virulent. All these cultures were subsequently tested by the subcutaneous injection into guinea-pigs of either an emulsion of the whole growth on an eighteen-hour Loeffler slope culture or of 2 c.cm. of a forty-eight or ninety-six-hour broth culture. Twenty-one of the cultures were tested in two ways by the subcutaneous method, the emulsion of a Loeffler slope culture and 2 c.cm. of a forty-eight or ninety-six-hour broth culture being injected subcutaneously into separate guinea-pigs.

As a control a known virulent culture, a Park 8 strain, was used throughout. A small fraction of an eighteen-hour Loeffler slope culture of this organism killed, while of a forty-eight-hour broth culture 0.01 c.cm. killed; smaller doses were not tested.

The batch of broth employed was in constant use for the routine production of high grade toxin; we were, therefore, certain that the broth used in testing our cultures was one suitable for the production of toxin.

In every instance the results obtained by the intracutaneous and subcutaneous methods agreed—that is, no culture proved to be virulent by one method but avirulent by the other.

We think it may be justly claimed that this method of testing virulence is not only rapid and economical but simple and reliable.

Results of Repeated Swabbing.

We had the opportunity of examining swabs taken from seven notified "carriers" who were under observation for two to four months. Twenty-six cultures of organisms morphologically indistinguishable from *B. diphtheriae* were obtained

from these carriers and examined by the intracutaneous method. One child gave four "virulent" cultures over a period of two months. One gave a "virulent" followed by an "avirulent" culture. In one case an "avirulent" *B. diphtheriae* and a Hoffmann's bacillus were found on different dates over a period of three months. Cultures indistinguishable from *B. diphtheriae* but, when isolated, found to ferment glucose and saccharose, were repeatedly obtained from the throat swab taken from two children.

Results and Conclusions.

Of 161 strains cultivated from cases of diphtheria, convalescents and carriers, 79 were virulent *B. diphtheriae*, 62 were avirulent *B. diphtheriae* (including 8 *B. xerosis*), and 20 were Hoffmann's bacillus (all avirulent).

Cultures of *B. diphtheriae* from cases of diphtheria were virulent in 100 per cent. of those examined; from convalescents in 90.9 per cent.; from carriers in only 38.8 per cent.

Sugar reactions were carried out with 149 cultures; glucose and saccharose were the only reagents used as a routine. The value of "sugar" tests may be summed up as follows:

If glucose is not fermented, the culture is not virulent *B. diphtheriae*.

If glucose is fermented but not saccharose, the organism may be virulent or may not.

If both glucose and saccharose are fermented, the organism may be *B. xerosis*, may be contaminated, or (Graham Smith) may be virulent.

We have found no evidence that virulent cultures, if isolated in a pure condition, become avirulent.

For absolute diagnosis, a culture morphologically resembling *B. diphtheriae* and capable of producing acid in glucose must be submitted to a virulence test.

The intracutaneous method is simple, economical, and apparently reliable.

Our thanks are due to those who have provided us with material for this research, especially Dr. F. Foord-Caiger and Dr. Graham Forbes. Without the help of Dr. Okell and our other colleagues and the guidance of Dr. O'Brien, our work would have been still less complete than we have left it. Finally, to Mr. Tottem and the rest of the laboratory staff we hereby offer acknowledgement of their large share in whatever success we may have obtained.

REFERENCES.

¹ Eagleton and Baxter. "The Virulence of Diphtheria-like Organisms," BRITISH MEDICAL JOURNAL, May 28th, 1921. ² Nuttall and Graham Smith. *The Bacteriology of Diphtheria*, Cambridge, 1903, pp. 160-161, 194, 185, and 200. ³ Ledingham and Arkwright. *The Carrier Problem in Infectious Diseases*, 1912, chap. iv. (Summaries of the work done up to that date and full references.)

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

AN EMERGENCY METHOD IN PRESBYOPIA AND HYPERMETROPIA.

The following cases are recorded as examples of the use of the stenopaic disc in presbyopia and hypermetropia:

Case 1.—Aged 58. Vision: R. = J. 6; L. = J. 6. With disc, R. = J. 1; L. = J. 1.

Case 2.—Aged 61. Hypermetropic, wearing for distance + 4.5 D. sphere in each eye. Vision: R. = 6/60; L. = 4/60. With distant glasses, R. = 6/12; L. = 6/12 partly. With disc only, R. = 6/9 partly; L. = 6/12 partly. Without disc, R. = J. 18; L. = J. 16. With disc only, R. = J. 10; L. = J. 6. With disc and correcting lens for distance, R. = J. 1; L. = J. 1. Retinoscopy revealed astigmatism in the left eye.

Case 3.—Aged 47. Vision: R. = 6/6 H.M., with + 1.0 D. sphere, R. = 6/6; L. = 6/6 H.M., with + 1.0 D. sphere, L. = 6/6. Without disc, R. = J. 2 with some difficulty; L. = J. 2 with some difficulty. With disc only, R. = J. 1; L. = J. 1.

We have thus a simple substitute, in emergency, for the reading glasses of presbyopes.

The presbyope, even an early presbyope, without the suitable lens, is in a most helpless condition when trying to decipher the small print of a telephone directory, time table, newspaper, exhibition catalogue, etc. This small print is easily, though slowly, read by means of an improvised stenopaic disc, which can quickly be made with a piece of paper or cardboard, through which a hole 1 to 2 mm. in diameter is pierced by a pin, the point of a pencil, or knife. Such an emergency measure would be of real benefit to the presbyope, stranded without reading glasses, specially in the country or on a railway journey. A hole, about the same size, through a piece of bread forms an excellent emergency substitute for a convex lens! The tunnel formed by the fingers and palm of a partially closed fist acts in the same way, though not so clearly.

The reading distance is also much decreased. Case 3 could read J. 1 at 16 cm. with a disc; J. 2 at 29 cm. without a disc.

For distant vision in hypermetropia this emergency method would probably not be of so much practical use, though, as shown in Case 2, the distant vision is much improved.

AGNES ESTCOURT-OSWALD, M.B., D.P.H.,
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A CASE OF FULL TERM ECTOPIC GESTATION WITH LIVING FOETUS.

I THINK there are few cases on record in which a living foetus at full term has been extracted from an ectopic sac, as in the following case:

A woman, aged 30, married nine years, who had had one full-term child eight years ago, gave a history of pelvic pain when she had missed two periods, and there was also a small amount of loss of blood per vaginam. She took no notice of this, and did not complain of anything until she had missed six periods, when she suffered from partial retention of urine. Rest and catheterization on one or two occasions soon resulted in the normal passage of urine. At this time there was a soft swelling in the middle line extending a little above the umbilicus. This seemed to be an intrauterine pregnancy. Behind the uterus was an ill-defined swelling, which was thought to be an adherent fibroid or ovarian tumour. With this diagnosis the patient was allowed to go to term with a view to Caesarean section.

At term the abdomen showed a soft, uniform swelling which was in no way different from a normal intrauterine pregnancy at term. The foetal parts could be felt, and the heart was heard beating strongly in the left iliac fossa. What appeared to be the foetal head was fixed and well down in the pelvic cavity. On vaginal examination there was a hard fixed mass lying low in Douglas's pouch with the cervix high up in front. As this appeared to be the foetal head and no other tumour could be made out I thought we had to deal with an ectopic gestation and not with an intrauterine pregnancy with a tumour behind. I decided to open the abdomen and attempt to extract a living foetus.

On opening the abdomen a soft surface, like an ordinary pregnant uterus, was found, but while there was plenty of room in front, above, and to each side, the large and small intestine were firmly adherent. I decided to go through the anterior wall of the sac, and at once found that the incision had gone through a very thinned-out anterior wall of the uterus, which covered and was implanted into the anterior wall of the sac. There was no other way to the foetus except through the posterior wall of the uterus. This was cut through and the placenta found lying in front of the baby. The baby was delivered quickly and the placenta, which was very adherent to the sac, was removed piece by piece. At this stage the haemorrhage was most alarming. The cut edges of the anterior uterine wall, which formed the anterior wall of the sac, were quickly sutured to the lower part of the abdominal incision and the sac was packed firmly with gauze strips. This controlled the haemorrhage.

The patient, after a somewhat stormy convalescence, made a good recovery. The baby, pink and healthy, weighed 7½ lb.; its trunk was well formed; the head was anvil-shaped from prolonged pressure and both lower limbs were greatly deformed. There was no liquor amnii in the sac of the ectopic gestation. The baby died about thirty hours after delivery.

My experience in this case has led to the following conclusions:

1. The diagnosis between an intrauterine pregnancy complicated with a tumour and an ectopic gestation at term is often very difficult, and such cases are rarely seen at this stage.

2. If diagnosed, the question of saving the foetal life should be neglected. The foetus will most likely be deformed, and the haemorrhage from the living ectopic placenta is extremely alarming.

3. The patient should therefore be allowed to go through the spurious labour (when the foetus dies), and the operation should take place about three weeks later, when the dangers of haemorrhage will be much less.

As far as could be ascertained, the ectopic pregnancy had begun in the left tube, and the slight bleeding from the uterus in the early history of the pregnancy no doubt denoted a threatened rupture.

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Honorary Gynaecological Surgeon,
Derbyshire Royal Infirmary.

RESUSCITATION AFTER APPARENT DEATH.

IN view of the opinions held about the cessation of function of the brain cells after stoppage of the circulation, I beg to report the following case:

On December 7th, 1921, I performed double middle turbinectomy on an apparently healthy woman aged 38 years. The following notes are copied from her case sheet, which was entered up at once, the times and statements being the common agreement of several observers.

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6.5 p.m.: The patient left the theatre in a perfectly satisfactory condition, in very light anaesthesia, as she had only been under the anaesthetic for five or six minutes, and she had had scarcely any haemorrhage. She was put to bed in the ward, and at 6.15 p.m. it was noticed that she had stopped breathing and had no pulse. I received a request in the theatre to go to the ward at once. I was just completing the succeeding operation, and went to the ward immediately it was finished.

I found the patient ashen and pulseless. There was no heart beat to be heard on auscultation. Artificial respiration had been in progress and oxygen had been administered since 6.15 p.m.; these measures were continued whilst preparations were made for heart massage.

At 6.25 p.m. an incision was made along the left costal margin; the heart was found to be stopped in diastole. Bimanual massage was applied through the diaphragm, whilst another house-surgeon applied Schafer's method of artificial respiration. The foot of the bed was raised on to chairs, the legs bandaged tightly from below upwards, hot bottles placed around the patient, and pressure applied to the splanchnic plexus. At 6.40 p.m. the heart was still inert, so 1 c.cm. of adrenaline was injected direct into the left ventricle. At 6.42 p.m. the heart began to beat. At 6.45 p.m. the radial pulse was felt, and at this point digitalin gr. 1/100 and strychnine gr. 1/60 were injected into the median basilic vein. By 7 p.m. the heart was beating strongly, but there was no respiratory effort, in spite of continuous artificial respiration and massage to the heart in order to assist its efforts, so 1 c.cm. pituitrin and 1 c.cm. adrenaline were injected into the left ventricle.

In spite of continual heart massage and artificial respiration there was at 7.25 p.m. still no effort to breathe. The pulse was good, the rate 100 a minute. As the other house-surgeon, the anaesthetist, and myself were unable to carry on any longer, two more house-surgeons took our places. At 7.50 p.m. the heart was beating strongly, but there was no respiratory effort. The house-physician and a dresser were now assisting by doing artificial respiration alternately. At 8 p.m. the patient made a voluntary inspiration, and one minute later made voluntary inspiratory and expiratory efforts. At 8.5 p.m. she was breathing well, the pulse rate was 90 to 100, respirations 24. She moved her position in the bed, rolled her head, moved her eyelids and eyes; she retched but did not vomit, and the pupil reflexes were present. The incision was stitched up, hot saline having been run into the abdomen, and a tube placed in the left kidney pouch. At 9.10 p.m. the pulse was scarcely perceptible; 1 c.cm. pituitrin and 1 c.cm. adrenaline were given direct into the left ventricle, and also hot saline and 1 oz. brandy per rectum. A moment after the heart became weaker, and before the intra-ventricular injection was given, the breathing became more feeble, so artificial respiration was restarted. At 9.12 p.m. the patient had a good pulse and was breathing normally. At 9.20 p.m. heart and respiration both stopped at the same time. Digitalin gr. 1/100 and strychnine gr. 1/60 were given into a prominent vein over the anterior part of the left deltoid, and 1 c.cm. pituitrin and 1 c.cm. adrenaline into the left ventricle. Artificial respiration was again begun. At 9.25 p.m. 1 c.cm. ether was given into the left ventricle and continuous artificial respiration carried on. At 9.40 p.m., however, all attempts at resuscitation were reluctantly given up.

In spite of the fact that apparently the patient "lived" for 1 hour 20 minutes it will be noted that the heart was stopped for 27 minutes, so far as its own efforts were concerned, and that it was completely inert for 10 to 12 minutes before massage was begun. When further endeavour was decided to be useless the first question which arose in one's mind was whether the patient was dead all the time, and the actions which were aroused were merely on a par with a physiological experiment. I am indebted to Mr. A. L. Macleod, honorary aural surgeon to this infirmary, for permission to publish this case.

GILBERT R. A. ARMSTRONG, M.B., Ch.B. Edin.,
Late House Surgeon, Leicester Royal Infirmary.

FRACTURE OF THE TERMINAL PHALANX OF A FINGER WITH RUPTURE OF THE COMMON EXTENSOR TENDON.

THE case reported by Dr. J. N. Laird (p. 101) is interesting to me, for I had the misfortune to experience a similar injury to my right ring finger while playing football in 1913. The shot was very forceful and at close range to the goal. The chip of bone from the dorsal aspect of the base of the terminal phalanx seems to have been larger in my case. Treatment by hyperextension was tried for fourteen days, but without success.

Sir J. O. Skevington, Windsor, kindly agreed to operate. He made a horseshoe skin flap (base proximal) over the joint and took a "tuck" in the dorsal tendon expansion, which was sutured with catgut. The skin was then stitched back in position. The finger was splinted for fourteen days. The result is excellent, both functionally and aesthetically. Only with difficulty can the line of incision now be demonstrated.

It may be worthy of mention that the pain experienced after operation was considerable, presumably due to effusion under the unyielding tendon. It was relieved by morphine.

London, W.

CECIL BURNHAM, M.B., Ch.B., F.R.C.S.E.

acquaintance with him began in August, 1907, when, at the Annual Meeting at Exeter, Sir Victor Horsley moved and I seconded his election as Treasurer. There was a sharp contest, in which Dr. Rayner represented those who earnestly believed in the then new constitution of the Association, while his opponent, Mr. C. R. Straton of Wilton, a highly esteemed member of the Council, was regarded as representing the more conservative views. After the election Dr. Rayner said that he had been a member of the Association for some thirty years and had taken a great interest in the work both of his own Branch and that of the Association generally; he hoped that at the end of his term of office, if he lived for the three years, they would say he had done his work as well as those who had preceded him. He lived not only to have this said of him, but to make a record, for he held the office for nine years, resigning in 1916. In that year he was elected by the Representative Meeting as a whole as one of the four members of Council chosen by it, and finally retired from the Council in 1917. In 1914 he was awarded the Gold Medal of the Association, and the Chairman of Council (Dr. Macdonald), in presenting it, told the meeting what an anxious post that of Treasurer had been for the past few years, and referred to the "distinguished bravery" Dr. Rayner had shown in administering the finances of the Association during a critical period. The term was not an exaggeration.

I came on the Central Staff in 1908, and then saw a great deal of Dr. Rayner, though, of course, as Treasurer he came much more in contact with my deceased colleague Mr. Guy Elliston. A Treasurer, however, is *ex officio* a member of all committees, and Dr. Rayner did his full share of committee work. The impression mainly left on my mind by him was his cheery optimism. He was as good as a sunny day coming into the office. We went through some most anxious times during his term as Treasurer, but I never saw him down-hearted. His faith in the future of the Association was unassailable. The most striking evidence of this was the occasion on which, when the funds of the Association were heavily overdrawn by the demands made on us by the Insurance Act fight and the bankers were getting restive, he offered to place (and I believe did place) his own private account at the service of the Association. He was a very hospitable man and nothing gave him greater pleasure than to collect a few of his fellow workers together, as he frequently did at the National Liberal Club, and give them a good dinner. He enjoyed such a function thoroughly, and he saw that all his guests did too. Another thing which could not fail to strike anyone brought closely into contact with him was his pride in his profession, in his own practice, and in his own town. I never knew a man who was prouder of his position as a general practitioner than Dr. Rayner was. He regarded his patients as part of his family and was ready to put himself to any amount of inconvenience for any of them. As I look at his photograph which hangs in my office I feel devoutly thankful for the privilege of having worked with a man like Dr. Rayner and for an Association which can attract and command the devotion of such men.

DR. JAMES LAWRENCE, late of Darlington, died at the close of last year at Westward Ho, North Devon, whither he had retired some two years ago. Born in 1844, near Portrush, he received his medical education at Belfast and Dublin, graduating M.D., M.Ch., R.U.I. in 1871, and taking the M.R.C.S.Eng. diploma in 1872. In the latter year he went to Darlington Hospital as house-surgeon, and in 1874 he was appointed medical superintendent to the Infectious Diseases Hospital, becoming medical officer of health in 1882. He supervised the building of the Darlington Fever Hospital on its present site, and worked hard and successfully to improve the sanitary conditions of the town. He had also an extensive private practice, and was for many years senior surgeon to the Darlington General Hospital. He was held in the highest affection and esteem by all who knew him, and his fellow practitioners marked their appreciation, personally and professionally, by making him a handsome presentation on his retirement from the office of medical officer of health in 1911. Dr. Lawrence was keenly interested in many branches of sport; he had been a well known oarsman, and he was a director of the Darlington Football Club. He was an old member of the British Medical Association, and at the last meeting of the Darlington Division a resolution of condolence was unanimously passed, many tributes being paid by the members present to the memory of Dr. Lawrence. He leaves a widow and five children.

VITAL STATISTICS FOR ENGLAND AND WALES, 1921.

We are indebted to the Registrar-General for the following statement regarding the birth rates and death rates and the rates of infantile mortality in England and Wales and certain parts of the country during 1921.

ENGLAND AND WALES.

Birth Rate, Death Rate, and Infant Mortality during the Year 1921 (Provisional Figures).

	Birth Rate per 1,000 Total Population.	Death Rate per 1,000 Population (Crude Rate).	Deaths Under One Year per 1,000 Births.
England and Wales	22.4	12.1	83
96 great towns, including London (populations ex- ceeding 50,000 at the Census of 1911)	23.5	12.3	87
148 smaller towns (populations from 20,000 to 50,000 at the Census of 1911)	22.7	11.3	84
London	22.8	12.4	79

The death rate for England and Wales relates to the whole population, but that for London and the groups of towns to the civilian population only.

The death rate for England and Wales is the lowest on record for the country as a whole, and the infant mortality is the lowest on record with the exception of the rate in 1920. The birth rate is the lowest recorded for the whole country except in the war years 1915-1919.

The Services.

SANATORIUM TREATMENT FOR TUBERCULOUS OFFICERS.

AN Army Council Instruction (No. 15 of 1922) provides that as from January 1st of this year the cost of sanatorium treatment for officers and nurses on full or half pay who are suffering from tuberculosis, and whose disabilities have been contracted in and by military service, may be refunded up to a limit of 8 guineas a week. Officers and nurses whose disabilities have not been directly contracted in and by military service, but have only been aggravated by such service, will cease from the same date to be eligible for such sanatorium grants. This Instruction cancels Army Council Instruction 339 of 1919.

Universities and Colleges.

UNIVERSITY OF CAMBRIDGE.

At a congregation held on January 20th the following medical degrees were conferred:—

M.D.—Sir William T. Lister.
M.B., B.Ch.—R. L. Williams.
B.Ch.—*D. Crawford, G. F. Abercrombie, W. R. Carling, *C. Dunscombe.
* Admitted by proxy.

UNIVERSITY OF ST. ANDREWS.

At the Graduation Ceremony held on January 20th the following were among the degrees conferred:

M.B., Ch.B.—T. K. Buchanan, Phyllis Fleming, Nona S. Lesslie, Katharine D. Macfarlane, J. N. D. Smith, Margaret H. R. Young.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

Hunterian Lectures.—Mr. Kenneth M. Walker will deliver a Hunterian lecture on the nature and cause of old age enlargement of the prostate in the theatre of the Royal College of Surgeons, Lincoln's Inn Fields, W.C., on Friday, February 3rd, at 5 p.m. Mr. Alan H. Todd will deliver a Hunterian lecture on orthopaedic aspects of rheumatoid arthritis on Monday, February 6th, at 5 p.m.

THE provisional figures of deaths in the great towns registered in the week ending January 21st show a considerable decrease in London, where 443 deaths from influenza are returned, as compared with 551 in the previous week. The total for the 105 great towns has increased from 1,262 to 1,433. The most noteworthy increases are in the northern and midland cities, especially Newcastle-on-Tyne, 82 against 23 in the previous week, Gateshead 42 (13), Sunderland 40 (6). In the south, Brighton, Bristol and Portsmouth record increases. One-third of the deaths from influenza in London are of persons over 65.

Medical News.

THE first of Sir Leonard Rogers's three Lettsomian Lectures on amoebic liver abscess will be given before the Medical Society of London on Monday, January 30th, at 9 p.m. This lecture will deal with etiology and pathology. In his second lecture on Wednesday, February 8th, Sir Leonard Rogers will consider the varieties and treatment; and in the third lecture on Monday, February 20th, he will discuss prevention and the recent reduction in prevalence and mortality.

A THREE weeks' course of post-graduate study for general practitioners will be given, under the direction of Sir James Mackenzie, at the St. Andrews Institute for Clinical Research, commencing on May 3rd. The course will consist of lecture demonstrations dealing with the symptomatology of disease in its early stages, and will be supplemented by demonstrations on matters of clinical interest in anatomy, physiology, chemistry, bacteriology, ophthalmology, and radiology. The fee is 10 guineas. Early application should be made to the Secretary, the Clinical Institute, St. Andrews, for particulars and advice with regard to securing rooms.

SIX lectures on the physiology and pathology of ante-natal and early post-natal life will be given by Dr. W. M. Feldman at the Infants' Hospital, Vincent Square, Westminster, S.W., on Thursdays, at 4 p.m., commencing on February 2nd. Members of the profession are invited to attend.

A FUND for a wedding present to Princess Mary has been opened by the Lord Mayor of Manchester and the Mayor of Salford. It is hoped to raise one million shillings (£50,000) between Manchester and Salford, and the object to which this sum is to be devoted is the District Nursing Association. The income will be used to add another fifteen nurses to the fifty-three at present working among the sick poor of Manchester and Salford, and it is proposed to call them Princess Mary nurses.

A FURTHER course of lectures and practical instruction for the Diploma in Psychological Medicine, granted by several universities, will be held at the Bethlem Royal Hospital, London, commencing at the end of this month. Lectures will be given by members of the staff of the Bethlem Royal Hospital and others, including Dr. Kinnier Wilson, Dr. William Brown, Sir Maurice Craig, Dr. M. H. Smith, Dr. J. A. Hadfield, Dr. James Collier, and Dr. C. Stanford Read.

A REUTER'S telegram announces that Sir Arthur Currie, principal of McGill University, has received the following intimation from Lord Atholstan, the Canadian newspaper proprietor, better known in this country as Sir Hugh Graham, LL.D. *honoris causa* of the University of Glasgow: "To help in stimulating the work of research throughout the world I hereby offer a prize of 100,000 dollars to the graduate or student of any recognized university who within five years after this date is the first to discover a medicinal treatment for the effective cure of cancer, the decision to be left to the Royal Colleges of Physicians and Surgeons, London, England. This offer may be renewed."

THE Voluntary Hospitals Commission has had under consideration the preparation of a simplified uniform system of accounts which could be recommended for adoption by hospitals to which the uniform system of King Edward's Fund may be inapplicable. The Commission has appointed a small subcommittee to draft proposals for this purpose, and has secured the assistance of Captain H. G. Howitt, D.S.O., of Messrs. W. B. Peat and Co., who was closely associated with the preparation of the financial statements for Lord Cave's Committee on the Voluntary Hospitals.

A CONGRESS of medical education, licensing, public health, and hospitals will be held in Chicago from March 6th to 10th. The congress will include representatives of the Council on Medical Education and Hospitals and the Council of Public Instruction of the American Medical Association, the Association of American Medical Colleges, the Federation of State Medical Boards of the United States, and the American Conference on Hospital Service.

THE last issue of the *St. Dunstan's Review*, which is published monthly as a record of St. Dunstan's men all over the world, is a special memorial number commemorating the life and work of the late Sir Arthur Pearson, whose tragic death all interested in the welfare of the blind so greatly deplore. Included with the account of the funeral and details of Sir Arthur Pearson's fascinating career are a number of personal memoirs and tributes, which were paid to his memory from all over the world. The work to which he was so devoted is being carried on unfalteringly, and, as we have already announced, a memorial fund has been initiated to consolidate and endow all the charities for the blind in which Sir Arthur Pearson was interested.

DR. J. GORDON THOMSON, lecturer on protozoology at the London School of Tropical Medicine, has, at the invitation of the British South Africa Company, gone to Rhodesia to investigate protozoological diseases in Rhodesia. Dr. Thomson, who sailed on January 5th, expects to be absent six months, and will give special attention to the etiology of blackwater fever.

A CONFERENCE of experts is in session at the Ministry of Health, under the chairmanship of Mr. I. G. Gibbon, C.B.E., Assistant Secretary to the Ministry, to consider what measures can be taken in view of the shortage of water which now exists, and is thought not unlikely to increase in the near future. The members are Sir Alexander Houston, M.D., Metropolitan Water Board; Dr. W. H. Bullough, M.O.H. for Essex; Dr. W. H. Hill, M.O.H. South Oxfordshire Combined Districts; Mr. R. Ross, Public Analyst, Burnley; Mr. F. W. Davies, Waterworks Engineer, Nottingham; with Dr. S. W. Wheaton, Medical Officer, Mr. E. A. Sandford-Fawcett, Chief Engineer, and Mr. R. J. Simpson, a principal of the Ministry.

THE annual general meeting of the Society of Superintendents of Tuberculosis Institutions will be held at 122, Harley Street, on Monday, January 30th, at 4 p.m.

THE annual report of Livingstone College, Leyton, for 1920-21 states that during the year the lectures and clinical work at the college were opened to women students, of whom five attended during the whole or part of the session. The college was founded in honour of Dr. Livingstone in order to provide practical training in medicine, surgery, and tropical hygiene for missionaries who expect to work in fields where qualified medical aid is not available. The value of such partial training, though it is, of course, no substitute for the medical curriculum, is considerable, and at the last Commemoration Day Sir George Makins said that such instruction as the students received would make them capable of doing an amount of good impossible without it. The number of students attending the courses showed a slight increase on the previous year, although the numbers are not yet up to pre-war entries. The financial state of the college shows an increased deficit, and the committee urges those interested in the work to do all in their power to raise the £1,500 to £2,000 needed to balance the accounts.

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.

MENTAL DEFECTIVES.

"D. C. D." describes a case of mental deficiency with vicious tendencies in a boy, aged 15, and asks to be recommended a special school.

* * The case is possibly certifiable under the Mental Deficiency Act, 1913. In this event the course "D. C. D." can be advised to take depends upon the financial position of the parents or guardians.

(1) If not moderately well off the case should be referred to the county authorities. Each county council has a special Mental Deficiency Committee for the administration of the Act, and