

either of the polyvalent variety, or it may be a specific antiserum for the particular causative organism, the latter having first been determined by bacteriological examination.

In conclusion my thanks are due to Dr. J. Menton, director of the Staffordshire County Bacteriological Laboratory, for his kindness in performing the many bacteriological examinations necessary during the course of this case, and for many useful suggestions as to its treatment.

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GAS GANGRENE FOLLOWING A MOTOR ACCIDENT.

BY

EDWARD C. ELLIS, M.B., CH.B., D.P.H.ED.,
COCKERMOUTH.

As the opportunity seldom arises in civil practice for observing gas gangrene, the following case is, I think, worthy of record, occurring as it did after a motor accident, cases of which are now so frequent both in town and country districts.

A youth, aged 18, ran into the rear of a motor car, sustaining a punctured wound of the left leg, produced by the projecting arm of the luggage carrier on the car. The head of the fibula was torn away from its articulation, and the arm of the carrier passed through the interosseous space, tearing the tibialis anterior, the extensor digitorum longus, and the posterior tibial vein, to reappear in the calf of the leg. The tibia was not fractured, but the fibula was cracked just below the head. The posterior tibial artery was intact.

On admission to the cottage hospital the wound was enlarged, thoroughly cleansed with hydrogen peroxide, and bruised skin and tissue removed. The posterior tibial vein was ligatured at its commencement, and the muscle and sheaths repaired. The wound was closed anteriorly, drainage being provided through the wound in the calf of the leg. A prophylactic injection of antitetanic serum (1,500 units) was given locally. The limb was cold, but in a few hours became warm and comfortable. Within eighteen hours of the accident a foul acid smell from the leg was noticed and the toes were cold. Twenty-two hours from the time of the accident the whole limb from just below the knee was cold, discoloured, and swollen. The patient was delirious, with a high temperature and a rapid feeble pulse. After consultation, amputation was decided upon and carried out forthwith just below the knee. On cutting the stitches, the underlying tissue was seen to be discoloured and swollen, and the injured muscles were of a dull brick-red colour, and of putty-like consistence. On cutting the muscles, bubbles of gas were seen to escape; gas also escaped from portions of the vein distal to the ligature. The stump was left open and irrigated by the Carrel-Dakin method. The patient had a relapse about a week after the amputation, accompanied by a rise of temperature and delirium, the cause of which is described below. Eventually he made a good recovery.

I am deeply indebted to Dr. J. T. Selby, Cockermouth, and Mr. Richardson, Keswick, by whose courtesy I am able to publish these notes.

Bacteriological Examination.

A small piece of vein and tissue which showed the presence of gas was sent for examination, and the report stated that two types of Gram-negative bacilli were present in large numbers, the one short and plump, the other much larger and exhibiting, in many cases, terminal or subterminal spore formation. Gram-positive cocci were also present in small numbers, chiefly in chains resembling streptococci. The following facultative organisms were isolated from the vein and tissue: staphylococci, *Streptococcus faecalis*, and *B. coli*. A large Gram-positive, pleomorphic, non-motile bacillus (*B. welchii*) was isolated also. No spore or capsule formation could be demonstrated. It was a strict anaerobe, and actively saccharolytic. No *B. tetani* were recovered, nor any proteolytic organisms of the malignant oedema type.

There is no doubt that the emphysematous condition of the wound was due to the activity of the *B. welchii* in the tissues, but additional interest was given to the case because a slough taken from the wound a week after the accident, when the patient had a relapse with rise of temperature, etc., showed on cultural examination the presence of a motile spore-bearing bacillus, which produced acid and gas in carbohydrates, but failed to coagulate milk, and did not liquefy gelatin. It was therefore not a typical organism of the *B. welchii* group, but resembled the clostridium *B. multifementans*. It was not pathogenic to guinea-pigs, but produced in them a large amount of oedema.

The question arose as to where the contaminations had arisen. The road surface had been recently tarred and was comparatively clean, but the patient was wearing his farm trousers, part of which had been driven into the wound. Examination of blood-stained and non-blood-stained portions of the trousers showed the presence of *B. welchii*, *B. coli*, *Streptococcus faecalis*, *Staphylococcus aureus*, and *B. megaterium*, no anaerobes other than *B. welchii* were recovered.

This case is of interest from several points of view. One is the exceedingly rapid onset of gangrene and the presence of terminal and subterminal spore-forming organisms, emphasizing the need for prompt prophylactic inoculation of antitetanic serum in all street accidents; although no typical *B. tetani* were isolated, the inoculation may have inhibited their growth. Secondly, we have the presence of two gas-forming bacilli, the typical *B. welchii* being evident in the region of the wound, while *B. multifementans* was demonstrated in a slough removed a week later.

Furthermore, it points to the advisability of treating all punctured and contused wounds occurring in street accidents and in agricultural districts by open irrigation and dressings, although a somewhat similar case recently treated by primary suture of muscle and sheath resulted in complete functional recovery without sepsis or complications.

My partner, with thirty-three years' experience in an agricultural district, tells me that he has never had a case of gas gangrene, but has had four cases of tetanus. Of these four cases three were punctured wounds: one was an abrasion of the elbow received in a cycle accident; in this case the wound was covered over with adhesive plaster by the patient himself as a first dressing and neglected for a few days; he died. In this district a large number of wounds received by farm labourers and road workers in the course of their work come under my care, and it is only in punctured and contused wounds that any complications have to be feared. Simple incised wounds lend themselves to easy cleansing.

The nidus of infection was here provided by the clothing, and the pabulum for growth by the injured yet viable muscle, assisted by stasis of the circulation and lowering of the temperature of the limb due to shock.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

DIABETES MELLITUS TREATED WITH
GLUKHORMENT.

At the request of the Medical Research Council the clinical effect of a preparation called "glukhorment," introduced by Professor von Noorden in May, 1927, for the treatment of diabetes, has been investigated. It was stated to be obtained by "strong tryptic digestion of fresh pancreas substance," and to contain no synthalin or related guanidine compound. This statement, however, has been shown to be incorrect in the recent article by Drs. Dale and Dudley (*JOURNAL*, December 3rd, p. 1027).

In two cases of diabetes the effect of glukhorment has been observed on sugar and ketone excretion, on the blood sugar concentration, and on the general clinical condition. Four tablets a day were given after meals. In both cases definite reduction of the glycosuria and the blood sugar was obtained without any appreciable effect on the ketosis, weight, or general clinical condition. Similarity in the action of glukhorment to synthalin was at once noticed, in regard to the slow onset of action, its prolonged action after omission, and the production of toxic symptoms of vomiting and depression.

CASE I.

A man, aged 57, a moderately severe diabetic requiring no insulin, was fed beyond his carbohydrate tolerance until a glycosuria of some 30 grams was produced (diet: carbohydrate 140 grams, protein 75 grams, fat 150 grams). Glukhorment reduced his blood sugar concentration slightly and his sugar excretion from 30 to 15 to 10 grams. No nausea or depression was produced.

CASE II.

A girl, aged 11, with very severe diabetes. The dose of insulin was reduced sufficiently to allow glycosuria of about 25 grams. She was receiving 20 units of insulin twice a day and a diet of carbohydrate 60 grams, protein 60 grams, and fat 100 grams, throughout the test and for ten days previously. She had been in coma five weeks before, and I think her metabolism was not entirely stable and her carbohydrate tolerance still improving slightly at the time of the experiment. Four tablets of glukhorment a day produced vomiting on the third and fourth days, and the sugar excretion fell from 25 to 1 or 2 grams. The number of tablets was reduced to three for two days, after which she again tolerated four without nausea or vomiting; the glycosuria remained low, and the blood sugar was reduced. On omitting

the glukhorment the sugar excretion rose to nearly its previous figure. This was again reduced by further administration of the tablets, but this time she was able to tolerate only three without gastric disturbance. Synthalin, 20 mg., was then substituted for the glukhorment, as this was judged to be the equivalent amount from information received from Dr. Dudley, but it caused severe nausea, headache, and depression, and 10 mg. of synthalin appeared to be about the clinical equivalent of three tablets of glukhorment. When synthalin was omitted the glycosuria and hyperglycaemia returned, though to a less degree than before.

In this case the toxic symptoms of nausea, vomiting, headache, and depression caused by glukhorment and synthalin were precisely similar. The delayed onset on commencing and the continued action on omitting glukhorment (in both about two days) is exactly what happens in cases where synthalin has any effect. Slight proteinuria without casts was produced by glukhorment, but no hepatitis, jaundice, or urobilinuria was observed.

From the above results it might appear (roughly) that three tablets (0.9 gram) of glukhorment contained the equivalent of 10 mg. of synthalin, and that it therefore has about 1 per cent. of the clinical activity of pure synthalin. The chemical analysis of glukhorment, however, suggests a higher percentage of synthalin or a synthalin-like substance, so that the potency of the active principle of glukhorment is probably reduced either by its poor absorption when mixed with dried pancreatic extract or by the antagonistic action of the latter.

In conclusion, the clinical results observed with glukhorment in these two cases of diabetes are precisely the same as may be obtained in many cases with synthalin—namely, moderate reduction of glycosuria and hyperglycaemia and the production of similar toxic symptoms.

R. D. LAWRENCE, M.D., M.R.C.P.,
Biochemical Department, King's College Hospital.

A CASE OF PROTRACTED LABOUR.

The following case of protracted labour, apparently due to premature ossification of the foetal skull, seems worthy of record.

Mrs. X gives a maternal history as follows: Her first child was born at term, the labour being so quick that she was unable to have attention, and the child died during birth. The second child was born two years later, the confinement being normal; the child is alive and is now 10 years old. No further pregnancy occurred until the one under consideration.

She started to be in labour five days after the expected day, and continued in labour over two days without sending for me. I found the abdomen rather larger than usual; the presentation was a left occipito-anterior, and on vaginal examination I was unable to feel the promontory, although the head was rather higher than usual; the os was dilated to the size of a half-crown piece, and the membranes projected.

I saw her again early the next morning, and found that no progress had been made, and, indeed, even after noon the conditions locally were just as at my first examination, but her pulse rate had advanced to 120, and her tongue had become dry. I then had her removed into hospital and performed a Caesarean section. The child weighed 10 lb. 6 oz., and mother and child are quite well.

On examining the child's head I found that the anterior fontanelle was smaller than usual, and I then arranged for an x-ray examination of the head, and also for a control examination of the head of another child three weeks older. The negatives show that the frontal, occipital, and parietal bones give a much more dense shadow in the child in my case two days after birth, than those of the other child three weeks older.

I wonder if such a condition of the foetal head could have been diagnosed before birth; and, if not, how often some general practitioner has been blamed for an unfortunate result which he could not have been expected to anticipate, however scrupulous he might have been in his ante-natal care.

Oldham.

FRANK RADCLIFFE, M.D., J.P.

ACUTE PERITONITIS COMBINED WITH LABOUR.

The following case is worth recording, as illustrating the difficulty of recognizing acute abdominal conditions during and after labour.

A married woman, aged 39, was admitted to the maternity ward at Salisbury Infirmary on September 15th at 1 a.m. Two years earlier she had had a child weighing 7½ lb. (instrumental delivery), and three years before that she had been in a surgical ward with a very intractable cystitis due to *B. coli*. I saw her at 7.30 a.m., when the temperature was 100.8°, pulse 104, respirations 28. She said she had been feeling seedy for about a week with abdominal pain, which she ascribed to tight-lacing in order

to conceal her condition. She had done her ordinary work and had not mentioned her pain to her friends. She complained of abdominal pain, but not more than many women do in labour. She also said her abdomen was tender, but she did not resent palpation. The abdomen gave the impression of rather excessive liquor amnii, and the position of the foetus could not be made out. The os was about the size of a shilling and the head was not engaged. The position of the head could not be diagnosed with certainty. The pains had become weak, and she was given one-sixth of a grain of morphine. She was examined again about three hours later. She still complained of some abdominal pain and tenderness; the pulse and temperature were about the same. The os was then found to be about the size of half a crown, the head was still above the brim, and was in the right occipito-posterior position. The pains were stronger and the general condition quite good. The head was easily flexed and rotated into the right occipito-anterior position, when it engaged at once. An enema was returned unchanged. The membranes ruptured three-quarters of an hour later and a female child, weighing 6 lb., was born normally twenty minutes afterwards. The placenta came naturally five minutes after the child.

That evening the temperature was 99.8°, pulse 136, respirations 40. She was comfortable except for some slight abdominal pain. Next morning the temperature was 98.4°, pulse 112, respirations 40. She had vomited several times in the night and she was slightly distended and tender. No physical signs could be found in the chest.

A turpentine enema was given and a faecal motion obtained, but no flatus. In the evening the temperature was 100.6°, pulse 136, respirations 60. Vomiting had continued and distension was marked, and there was free fluid in the abdomen. A needle was inserted, and turbid fluid was withdrawn which was not blood-stained and had no smell.

My surgical colleague, Dr. Kempe, opened the abdomen and found general peritonitis, but, in spite of careful search, no local lesion to account for it; he expressed the opinion that it was a case of pneumococcal peritonitis. The abdomen was drained and closed.

Her condition went from bad to worse, and she died thirty-six hours later.

The fluid withdrawn from the abdomen gave a copious growth of pneumococcus. The child appeared to be perfectly healthy.

JOHN ARMITAGE, M.R.C.S., L.R.C.P.,
Medical Officer, Maternity Department, Salisbury Infirmary.

TRIGEMINAL NEURALGIA PRECEDING ACUTE GLAUCOMA.

The following is a brief account of an unexpected sequel to an apparently straightforward case of trigeminal neuralgia or tic-douloureux.

A woman, aged 65, had been subject to neuralgic headaches all her life; they had become more severe and localized during the last two or three months. They occurred at frequent intervals, usually began on waking, and consisted of a dull right-sided headache (hemispheric) with brief stabbing darts of pain in the right temple, forehead, and cheek, radiating over the right side of the scalp. At such times the whole of the affected area was exquisitely tender. Sight was not affected, and the attacks were usually relieved in a few hours by rest and aspirin.

Examination on September 10th, 1926, showed nothing abnormal in the heart, lungs, alimentary or nervous system; the blood pressure was 110/80 mm. Hg; the fundi were normal. A diagnosis of trigeminal neuralgia, for which no exciting cause could be found, was made. The patient was anxious to proceed on a holiday to the Continent, but was dissuaded from this by her medical adviser, who suggested a short period of rest and observation. On September 25th, 1927, she awoke with excruciating pain in the right forehead and cheek, coming on in paroxysms of a few minutes' duration. The parts were tender to touch and the eyes were closed; a little circumcorneal injection was noted on the right side. Vomiting followed, but without relief, the pain being eventually relieved by 1/4 grain of morphine. The patient passed a good night, but the next day the pain was still present, and was localized in the right orbit. The tension of the globe on that side was increased, and there was much circumcorneal injection, but no disturbance of the acuity or field of vision. By evening the diagnosis of acute glaucoma was no longer in doubt, the cornea being steamy, tension ++, and the fundus reflex lost. The condition failed to react to palliative measures, and on September 29th Mr. Hugh Jones of Liverpool performed the operation of trephining and iridectomy on the right eye; recovery was uneventful. During the past year there have been occasional mild headaches, but the severe neuralgic attacks have completely ceased.

The manner in which glaucoma, in the prodromal stages, may mimic other disorders is well known, and this case is of interest in presenting a picture of lifelong tendency to headache, and of trigeminal neuralgia for some months without eye symptoms until the actual onset of acute glaucoma.

My thanks are due to Dr. R. B. Edwards of Mold, from whom the patient was referred, for help in the preparation of these notes.

R. SYDNEY ALLISON, M.D., M.R.C.P.
Ruthin Castle, North Wales.

DIET AND PYORRHOEA.

SIR,—For the past few years I have been firmly convinced that diet is a most important factor in the causation of both dental caries and pyorrhoea, and have advised my patients accordingly, with varying results, depending on which the patients considered of greater value, "the pleasures of the table" or their teeth.

On January 20th, 1927, Mr. X was referred to me by his medical adviser, with the object of having several of his teeth extracted on account of pyorrhoea. He suffered from the typical so-called pyorrhoea, with marked gingivitis and pus exuding, on pressure, from several points; salivary calculus was present in abundance on the lingual surfaces of the lower incisors and on the buccal surfaces of the upper molar teeth, and halitosis was very marked. In the upper jaw were three teeth with ill fitting gold crowns, X-ray examination revealed general absorption of the alveolar margins, but no apical infection. I removed the gold crowns, reamed the pulp chambers, inserted creosote dressings, and sealed with temporary cement, being unwilling to proceed with the recrowning until I felt assured that the condition was responding satisfactorily to treatment. At the same time I performed thorough prophylaxis and instructed the patient in the proper care and hygiene of the mouth, including the use of a mouth wash composed of lemon juice and water.

I reported the results of my examination to his doctor, at the same time telling him that I thought it would be possible to save all the teeth if the patient could be persuaded to adopt a diet I should schedule for him. The doctor readily agreed to this, and gave me whole-hearted support, which was of great assistance in tiding the patient over the difficult period that must elapse before any result could be seen or felt. The patient rather grudgingly agreed to give the treatment a trial for six months.

I prescribed a diet which contained a large proportion of fresh raw fruit and vegetables, and of which the salient features were three meals daily—one fresh fruit, one carbohydrate, and one protein. The fresh fruit was eaten, absolutely alone, for breakfast, the carbohydrate meal consisted of any kind of coarse grained bread with plenty of butter, followed by a large raw vegetable salad, and the protein meal consisted of a small portion of meat (to be taken not oftener than twice a week), or eggs or fish or cheese or fowl, etc., always accompanied by two of the less starchy vegetables, properly (that is, conservatively) cooked, and followed, as in the carbohydrate meal, by a large raw vegetable salad. I also allowed him when he so desired to partake of a purely vegetable soup (neither bones nor meat of any kind to be used in its preparation), or stewed dried fruit. The carbohydrate and protein meals were to be taken, one at mid-day and the other in the evening, in whichever order the patient preferred. No condiments of any description were to be consumed.

The patient has reported at intervals since his first visit, and an improvement has always been manifest. On November 14th, 1927, examination of his mouth revealed teeth firmly implanted in sockets, absence of pus pockets, no halitosis, no salivary calculus, and only the slightest trace of gingivitis, which, I am confident, will disappear after a further period of treatment. The patient himself said that the rheumatism, from which he had long suffered, was quite gone and that constipation was much less marked. In appearance he looks much more virile, his skin is clean and healthy, and he declared, voluntarily, that his diet suited him admirably, and that he would never think of returning to the old regime.

This result confirms what Howe, McCollum, Simmonds, and others have been teaching—namely, that pyorrhoea is merely a symptom of a general poisoning of the body brought about by a wrong diet.—I am, etc.,

J. MENZIES CAMPBELL,
L.D.S., D.D.S., F.R.S.Ed.

Glasgow, W.2, Nov. 23rd.

TUBERCULOUS LESIONS FOLLOWING INJECTION
OF PITUITARY EXTRACT.

SIR,—Would it not be as well to bear in mind the possibility that the cases noted by Messrs. Donaldson and Lane-Roberts were due, not to fresh infection by tubercle bacilli in the pituitary extract, but to stirring up of an existing tuberculous focus in the patient, either by the injection or by the disease for which it was given?

In our urban population most people are infected with tubercle, though only a small proportion of these suffer from it, and the breakdown is nearly always due to quite other causes than the infection. That disturbance of endocrine balance is concerned is extremely probable, though the connecting metabolic links between different accepted causes of tuberculosis have not yet been clearly traced.—I am, etc.,

Farnham, Dec. 19th.

F. R. WALTERS.

THE BIPP METHOD.

SIR,—With reference to the remarks of Professor Rutherford Morison in your issue of December 10th (p. 1077) on the "bipp method" of treating infected wounds, I think that one reason why this invaluable method is not more widely used is that many of the leading chemists sell under the name "bipp" an ointment with a base of soft paraffin (paraffinum molle) instead of the liquid paraffin. Such a preparation will not form a film on the surface of a wound, and is therefore perfectly useless for the purpose intended.—I am, etc.,

A. G. COULLIE, M.D., F.R.C.S.Ed.,

Cheadle, Staffs, Dec. 15th.

Lieut.-Colonel, I.M.S.(ret.).

CONVEYANCE OF MILK.

SIR,—From your interesting note on the conveyance by rail of London's milk supply in glass-lined tanks (BRITISH MEDICAL JOURNAL, December 10th, p. 1102) it is not clear what precautions are taken to prevent contamination of the milk by mud and refuse from the churns when these are emptied into the trough which leads to the coolers. I learn that in Denmark care is taken to avoid such contamination by not turning the churns upside down in emptying them, and by rejecting the bottom layer of milk in which the grosser impurities accumulate. Moreover, it is said that the milk is centrifugalized in order to remove muddy deposit. Perhaps the United Dairies Company would state whether any such methods are used in their process, or whether reliance is placed on sterilizing the mud by pasteurization.—I am, etc.,

December 12th.

Galat.

Universities and Colleges.

UNIVERSITY OF WALES.

Honorary Degrees.

At the last meeting of the Court of the University of Wales, held at Colwyn Bay, it was decided to confer the honorary degree of LL.D. upon Sir Thomas Lewis, F.R.S., for his distinguished scientific work in medicine, particularly in cardiology; upon Sir Robert Philip, President of the British Medical Association, for his distinguished services to the science and profession of medicine; and upon Dr. H. B. Brackenbury, Chairman of Council of the British Medical Association, for his distinguished services to the profession of medicine.

The acting Pro-Chancellor explained that the list of recipients of honorary degrees might not yet be complete, since, in view of the British Medical Association holding its Annual Meeting in Cardiff next July, it was contemplated that the University might like to confer degrees upon some eminent visitors attending the conference.

UNIVERSITY OF OXFORD.

THE Board of Management for the Francis Gotch Memorial Prize in Physiology has awarded the prize to John Carew Eccles, B.A. Magdalen, M.B., B.S.Melb., who was recently elected to a Junior Research Fellowship at Exeter College.

At a congregation held on December 17th the following medical degrees were conferred:

D.M.—Sibyl R. J. Eastwood.
B.M.—H. A. Byworth, L. W. H. Bertie, H. P. Gilding, A. W. Cubitt,
A. P. Kingsley, R. E. Havard.

UNIVERSITY OF CAMBRIDGE.

At a congregation held on December 19th the following medical degrees were conferred:

M.D.—P. Lazarus-Barlow.
M.B., B.CHIR.—*G. F. Oakden, A. S. Hollins, W. S. Grove.

* By proxy.

UNIVERSITY OF LONDON.

THE title of Emeritus Professor of Pathology in the University has been conferred on Sir Frederick Andrewes, O.B.E., D.C.L., M.D., F.R.C.P., F.R.S., who retired from the University Professorship of Pathology, tenable at St. Bartholomew's Hospital Medical College, in July, 1927.

Lord Dawson of Penn has been appointed the representative of the University at the tercentenary celebrations in honour of William Harvey, to be held in May, 1928, at the Royal College of Physicians.

The following candidates have been approved at the examinations indicated:

THIRD M.B., B.S.—*†R. C. Brock, *§N. L. B. V. Eckhoff, *†A. B. Hyman, *†§R. S. Pilcher (University Medal), *†§K. H. Watkins, C. A. Amesur, V. FitzC. Anderson, W. A. Ball, B. Barling, P. Berry, L. R. B. Birt, J. W. Bottoms, R. V. Bowles, F. W. Bradley, Doris E. Bunbury, M. R. Burke, Isabella M. G. Butler, J. C. D. Carothers, Phyllis P. Case, J. A. Cholmeley, M. M. Cowasjee, F. H. N. Cruchley, R. P. P. Davies, D. A. Dewhurst, H. A. Dunlop, Phyllis M. Edgar, D. C. McC. Ettles, L. Fatti, R. Fells, J. R. Forrest, Isabella Forshall, K. T. Gajjar, Helena M. Gambrell, Dorothy Godden, A. Golombek, Helen E. Goodman, S. W. Hardwick, G. E. Harries, Catherine M. Hext, S. L. Hicks, J. W. O. Holmes, Isabel E. S. James, A. W. Kendall, A. J. King, Eileen M. King, J. G. Kingsbury, Caroline M. Kingsmill, F. E. Kingston, K. H. Lachlan, R. A. V. Lewys-Lloyd, Isabella L. H. Livingstone, L. J. McGregor, R. M. Maher, H. L. Marriott, S. P. Meadows, R. L. Midgley, W. S. Morgan, L. Moss, M. A. Nicholson, W. D. Nicol, Ethel E. M. Ogilvie, N. D. Patel, R. T. Payne, K. R. T. Peiris, Ethel E. A. Pepper, G. M. Phadke, L. G. J. Pitt-Payne, M. M. Posel, E. R. Rees, Elsie E. A. Ridley, Muriel Rippin, E. H. Roche, J. E. C. Rouse, B. F. Russell, Margaret V. Saul, W. D. Sheldrake, E. W. Skipper, Hilda W. Slack, W. R. C. Spicer, Olive F. Sydenham, Victoria W. Symonds, Dorothy Taylor, Kathleen A. Vernon, R. F. Ward, J. G. Weston, Dorothy M. Wilkins, M. C. Wilkinson, J. E. B. Williams, Elsie B. Wright, H. D. Wyse.

*Honours. †Distinguished in Medicine. ‡Distinguished in Pathology. §Distinguished in Surgery. ¶Distinguished in Midwifery.

UNIVERSITY OF LEEDS.

The West Riding panel practitioners' prize in medicine and the William Hey medal have been awarded to D. W. Currie, M.B., Ch.B. Leeds.

UNIVERSITY OF LIVERPOOL.

The following candidates have been approved at the examinations indicated:

M.D.—R. W. Brookfield, Ethel Browning, Kathleen Edgecombe, M. T. Morgan.

CH.M.—W. H. A. Dodd.

M.Ch.Orth.—L. O. Betts.

FINAL M.B. AND CH.B.—*W. S. Creer, *G. L. Roberts, †S. L. Tunnicliffe. **Part III:** A. B. Anderson, A. N. Cameron, D. E. Davies, Lillian W. Edwards, A. W. Green, Elsie A. Griffiths, I. Gurland, R. E. Jackson, T. Lotter, J. McWilliams, J. J. O'Donovan, G. W. Phillips (Medicine), J. W. Pickup, E. S. Smith, E. F. Thompson. **Part I:** W. W. Gerrard (Pathology), I. Kossev, I. Lipshitz. **Part II:** Ariel R. S. Deacon, H. F. Cohen, R. A. Furniss, J. R. Jones, Hilda M. C. McMahon-Garry, N. W. Roberts (Public Health), Elizabeth B. Robson.

DIPLOMA IN TROPICAL MEDICINE.—H. S. Hara, R. E. Evans, F. A. Khan, M. M. Khan, P. N. H. Labuschagne, W. J. Laird, B. F. Lewin, A. I. Meek, H. C. Mehta, M. V. Menon, H. V. R. Miller, S. N. Mokand, F. Murgatroyd, Pauline V. Murray, P. L. Nirula, D. O. Peters, J. H. Pottinger, G. V. S. Rodriguez, H. Singh, S. D. Sturton, S. A. Wilkinson.

DIPLOMA IN TROPICAL HYGIENE.—P. N. H. Labuschagne.

* With Honours Class II Surgery. † With Honours Class II Medicine.

UNIVERSITY OF MANCHESTER.

The following appointments have been made: Lecturer in anaesthetics, E. Falkner Hill, M.B., Ch.B.; lecturer in diseases of the throat and nose, F. G. Wrigley, M.D.; lecturer in histology, Miss E. R. A. Cooper, M.D., M.Sc.; demonstrator in anatomy, Miss Fanny Howe, M.B., Ch.B.; demonstrator in chemistry in the department of bacteriology and preventive medicine, Mr. W. M. Short, M.Sc.

UNIVERSITY OF EDINBURGH.

At the graduation ceremony held in the Upper Library of the University on December 16th, under the presidency of Sir J. Alfred Ewing, Vice-Chancellor, the following degrees were conferred:

M.D.—E. W. Anderson, M. J. Bett, †G. Brewster, †J. C. B. Craig, †S. E. Croskery, †D. M. Dunlop, H. J. C. Durward, J. F. Fraser, I. M. D. Grieve, H. H. Holden, G. J. Hughes, †D. J. A. Kerr, *J. G. Kinimonth, Helen M. Russell, H. T. Smith, †D. Stewart, †D. Wilkie.

CH.M.—A. L. M'Gregor.

M.B., Ch.B.—C. H. B. Adamson, H. J. van den Berg, A. G. Bonnyman, K. V. R. Choudari, Bessie L. Clark, A. J. Clements, B. Cohen, J. L. Cowan, T. A. Edwards, E. A. Fergusson, Jessie D. Forrester, J. Fraser, L. M. E. R. Henshaw, W. H. Houghton, S. Jesudasan, W. H. E. Johnson, F. M. Khan, J. Kingsley, A. A. MacArthur, J. W. B. Macdonald, A. E. Mackintosh, K. M'Neill, A. G. R. Macpherson, A. W. MacQuarrie, F. F. Main, R. Mennie, W. M'G. Mitchell, W. D. Moore, J. S. R. Pandit, W. H. D. Patterson, P. J. G. Payne, Frances M. Porter, L. L. Ratazzi, A. S. Reilly, R. H. Robertson, J. M. Russell, B. S. Sandhu, Margaret A. Spencer, E. R. Thomson, E. W. T. Webber, Elisabeth M. Williams.

D.P.H.—Margaret A. Mackenzie.

* Awarded gold medal for thesis. † Highly commended for thesis. ‡ Commended for thesis.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH.

The following 49 candidates, out of 94 entered, having passed the requisite examinations, were admitted Fellows on December 16th:

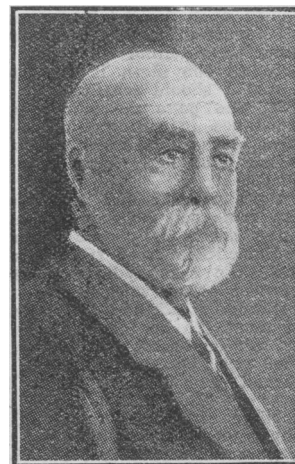
H. H. Barnett, I. Blain, P. D. Braddon, C. V. Braimbridge, J. W. D. Buttery, W. J. W. Close, P. Connan, C. E. Cross, J. T. Danis, Bessie P. Darling, B. V. Dunn, J. T. R. Edwards, H. G. Furnell, E. G. Gerstenberg, R. E. Gibson, E. G. M. Gilchrist, J. C. Gillies, W. C. Gissane, W. R. D. Griffiths, E. W. Gutteridge, W. G. Hazelton, W. A. Hervey, S. W. Houston, L. W. Johnston, Mary Keith-Thompson, G. B. King, F. A. Lamb, G. E. J. Lannin, G. Lowe, D. J. Martin, E. Morton, E. A. Menon, K. R. Menon, J. MacGowan, A. A. MacKellvie, D. C. MacRae, S. MacVicar, D. J. P. O'Meara, N. M. Rao, S. I. H. Reid, C. C. Ross, K. Rush, A. C. Sawday, H. M. Simpson, H. Singh, C. M. Smithies, T. W. Stephens, N. Waddle, A. S. Wong.

Obituary.

AMAND JULES McCONNELL ROUTH, M.D., F.R.C.P.,
Consulting Obstetric Physician, Charing Cross Hospital and the Samaritan Free Hospital for Women.

We much regret to report the death, on December 18th, of Dr. Amand Routh, who rendered distinguished services to gynaecology and took a great interest in the active campaign for the prevention of infantile mortality.

Amand Routh, who was the son of Dr. C. H. Routh, also a gynaecologist well known in his day, was born in London in 1853; he was educated at King's College School and University College Hospital; he obtained the diplomas M.R.C.S., L.R.C.P. in 1880, and graduated M.B., B.S. Lond. in the following year. In 1882 he proceeded M.D. and became M.R.C.P.; he was elected F.R.C.P. in 1900. During his student days he was captain of the Rugby football club of University College Hospital from 1875 to 1877, and for several years was a member of the United Hospitals football team. After practising for a little time in Upper Montagu Street he removed to Manchester Square, where he resided for nearly forty years; he also had a house and grounds close to the golf course at Northwood, which enabled him to devote himself to this game, of which he was no mean exponent. He was appointed pathologist and chloroformist at the Samaritan Free Hospital for Women in 1881; he became out-



patient physician in 1882, and received charge of beds in 1884, being elected full physician soon afterwards. On his resignation in 1901 he was appointed consulting physician to the hospital. Dr. Routh was elected obstetric physician to St. Marylebone General Dispensary in 1882, consulting physician in 1890, and consulting obstetric physician to St. John's Hospital, Twickenham, in the following year. From 1883 to 1898 he held the post of assistant physician-accoucheur to Charing Cross Hospital; he then succeeded Dr. Watt Black as obstetric physician and lecturer on midwifery. When he resigned in 1912 he was appointed consulting obstetric physician to the hospital. Soon after his appointment to the gynaecological ward of Charing Cross Hospital he succeeded in getting the rule removed which prevented obstetric physicians from performing abdominal operations unless the patient was pregnant. He was examiner in midwifery and gynaecology for the Conjoint Board from 1894 to 1900, for the University of London from 1901 to 1904, for the University of Birmingham from 1903 to 1906, and for the University of Cambridge from 1909 to 1915. He was on the standing committee of convocation of the University of London from 1904 to 1923, and a member of the Board of Advanced Medical Studies from 1906 to 1910. In 1910, on the invitation of the committee of the International Congress of Obstetrics and Gynaecology at St. Petersburg, he opened a discussion on Caesarean section. He attended this congress as representative of the Royal Colleges of Physicians and Surgeons and of the Royal Society of Medicine. He published his report in a book entitled *Cases of Caesarean Section by Living Obstetricians in Great Britain and Ireland* (1911). This report, to which we referred at the time (JOURNAL, 1911, vol. i, p. 219), led to much discussion, and it was subsequently concluded that in aseptic and suitable cases when there had been no attempts at delivery the mortality of Caesarean section was only about 2 per cent. Afterwards, however, the operation was employed in many unsuitable cases of eclampsia and antepartum haemorrhage, and for minor pelvic contractions.

the poor, such as polonies, sausages, and potted meats. Mr. Chamberlain said he was not empowered to instruct local authorities, who could not confine their attention to selected articles.

Blind Persons.—The cost of administering the Blind Persons Act, 1920, in England and Wales amounts to about £650,000 a year. This is exclusive of the large amounts spent by voluntary agencies for the purposes of the Act, and of the contributions made by the Exchequer and the local education authorities for education and training of the blind. The number of registered blind persons in England and Wales on March 31st, 1927, was 46,822. Of these there were 17,232 between the ages of 50 and 70.

Notes in Brief.

The Minister of Health will shortly publish figures giving particulars of the results of various schemes for the treatment of tuberculosis.

The Committee on Vaccination has met thirty times, and Mr. Chamberlain states that it is now considering its report.

Medical News.

THE foundation stone of the extension building of the Elizabeth Garrett Anderson Hospital, Euston Road, London, was laid on December 15th by Sir Alan Garrett Anderson, K.B.E., the son of the founder.

THE Royal College of Physicians of London will be closed from to-day, Friday, December 23rd, to Saturday, December 31st, both days inclusive.

THE meeting of the St. John's Hospital Dermatological Society arranged for December 28th has been cancelled. The next meeting will be held at St. John's Hospital, 49, Leicester Square, W.C., on Wednesday, January 25th, 1928. The annual oration before the society will be delivered by Sir John Bland-Sutton, Bt., on May 23rd, the subject being the debt of dermatology to optical glass.

AT the meeting of the Tuberculosis Society on Friday, January 20th, there will be a discussion on the work and aims of tuberculosis care committees and kindred agencies. At this meeting, which will take place at 8 p.m. at the house of the Royal Society of Medicine (1, Wimpole Street, W.), the draft constitution and by-laws of the Tuberculosis Association will be submitted.

AN illustrated lecture on modern athletics will be given by Mr. H. M. Abrahams, at the Central Hall, Westminster, on January 13th, 1928, at 3 p.m., in aid of the Tavistock Clinic for Functional Nervous Disorders.

THE Royal Institution has now issued its programme of lectures to be given before Easter. Among the Friday evening discourses will be one (on March 2nd) on the psychology of the sick, by Sir Farquhar Buzzard, the new Regius Professor of Medicine at Oxford; and another by the daughter of his predecessor, Miss D. A. E. Garrod, on prehistoric cave art. The discourse on February 3rd will be by Professor E. C. C. Baly on photosynthesis, and that on February 17th by the Rev. Dr. E. M. Walker on the university, its ideals and its problems. The juvenile Christmas lectures this year will be given by Professor Andrade, who will tell his hearers about engines. Among the general courses of lectures will be one on the physiological aspects of flying, by Group-Captain Martin Flack, Director of Medical Research, R.A.F.M.S., on March 22nd and 29th, at 5.15.

THE report presented to the annual meeting of the constituents of the Metropolitan Hospital Sunday Fund, held at the Mansion House on December 19th, showed that the collections this year amounted to £86,935.

VISCOUNT KNOTSFORD presided at the annual meeting of the British Charities Association, held at Kingsway House, London, on December 15th. He reported that the activities of the association had resulted in a surplus for the year of £18,150, being an increase of over £4,000 on the previous year's figure. Distributions to voluntary hospitals during the year amounted to £20,600, and the council had since made further grants of £15,000 to King Edward's Hospital Fund for London and £5,000 to the League of Mercy, the latter for distribution among hospitals outside the London area. The total distributions since the formation of the association four years ago now exceed £173,000.

THE first annual dinner of the Ringer Society was held on December 10th at Jules Restaurant, with Dr. Henry Ellis, in the chair. A large company of guests were present at the invitation of the president and council. The president delivered the Ringer Oration. He explained that the society was named after Sydney Ringer, one of the first clinicians to realize the value of physiology and biochemistry applied to practical medicine, and best remembered perhaps by his perfusion experiments with the fluid bearing his name. Dr. Ellis explained that the council of the society

had been actively engaged in formulating standards of urinary analysis, and as a result of team work among different members of the council, working independently, these had been almost completed. He stated that the society would, in the ensuing year, proceed to define standards for blood in the same way. Professor Maclean, in response to the toast of "Clinical Biochemistry," said he was much interested in the evidence presented of the activities of the new society, and Professor Joseph Barcroft of Cambridge also replied. The health of the guests was proposed by Dr. Halls Dally, who said that one of the aims of the society was to study functional efficiency, and Drs. Langdon Brown and C. M. Wilson, who replied, spoke optimistically as to the future of biochemistry applied clinically in the way advocated by the society. The health of the president was proposed by Dr. David Barcroft.

THE KING has appointed Dr. Joseph Clarke McPherson, senior medical officer, to be an official member of the Executive Council of the Presidency of Montserrat.

DR. A. R. WIGHT, who has been elected provost of the burgh of Leslie, has been a member of the Town Council since 1906, with a break of only three years during that period. He graduated M.B., C.M. Edin. in 1897, and is a member of the British Medical Association and the Fife Medical Association.

DR. FREDERICK CHARLES WILLMOT, Government Health Department, Capetown, South Africa, has been elected a Fellow of the Royal Sanitary Institute.

THE Mental After-Care Association for poor persons convalescent or recovered from institutions for the insane is appealing for funds to continue and extend its work. One of its chief objects is the prevention of relapse, and last year 1,660 persons were assisted. Contributions should be sent to the secretary, Miss Vickers, Church House, Dean's Yard, Westminster, S.W.1.

THE Minister of Health has issued a revision of a memorandum, which was first published in March, 1921, and dealt with the provision of treatment for tuberculous ex-servicemen. In the revised memorandum—30/T (Revised)—it is announced that certain modifications will be introduced on January 1st, 1928. County and county borough councils are now asked to prepare new and authoritative lists of patients whose treatment is chargeable to the Ministry of Pensions, thus correcting the present lists, which, owing to the lapse of time, have become inaccurate. The Ministry of Pensions will continue to notify councils of any fresh cases which from time to time are accepted for financial support by the Ministry. Tuberculosis officers are warned that treatment allowances are not necessarily payable when a man is incapacitated by his war disablement, but only in those cases, now much reduced in number, where a special treatment to be undertaken precludes the man from following his usual occupation. A list of the addresses of the chief area officers accompanies the circular, which has been sent to county councils, county borough councils, and tuberculosis joint committees of England.

By her will the late Mrs. Marryat has directed that, after paying public bequests amounting to £380,000, the residue of her estate is to be divided into two parts, one of which is to be paid to the governors of the Dundee Royal Infirmary to be funded for the purpose of that institution and the Sidlaw Sanatorium. It is understood that the sum to be funded will yield a very substantial return. Mrs. Marryat had previously given to the Dundee Royal Infirmary £10,000 to clear off the deficit on accounts, and £75,000 to provide an x-ray and medical electrical department.

A POST-GRADUATE course in dermatology and syphilis, with special reference to therapeutics, will be held in Vienna from February 13th to 25th. Particulars may be obtained from the secretary of the international post-graduate courses, Dr. A. Kronfeld, Porzellangasse 22, Vienna IX.

THE first international congress of mental hygiene will be held at Washington in April, 1929.

WE have received the first issue, dated September, of *Revista de Neurologia, Psiquiatria y Medicina Legal de Uruguay*, a monthly journal published at Montevideo under the auspices of Dr. Americo Ricaldoni, professor of clinical neurology, and other members of the Montevideo medical faculty. The issue contains original articles on the pathology and treatment of nervous and mental diseases, abstracts from current literature, society intelligence, and medical news.

THE November-December issue of *Norsk Magazin for Lægevidenskaben*, the organ of the Norwegian Medical Society, is dedicated to Dr. F. G. Gade, who has recently retired from the editorship of the journal.

SIR D'ARCY POWER, K.B.E., one of the representatives of the Ministry of Health on the Metropolitan Asylums Board since 1921, has resigned on account of ill health.