following morning for a similar purpose, and to excise the wound by removing the skin and subcutaneous tissue, the wound being swabbed with antitetanic serum and undiluted chloramine. The cerebro-spinal fluid which was withdrawn showed a few polymorphonuclear leucocytes, but no organisms were found in films or on culture. This reaction was ascribed to the serum given the day previously. The fluid withdrawn on this day failed to give tetanus to a mouse inoculated with it, so that presumably any toxin was by now neutralized.

Treatment given.	Day of Disease.	Intra- thecal.	Intra- venous.	Intra- muscular.	Sub- cutaneous.
August 31st	20th	1,200	10,000	3,000	_
September 1st	21st	1,500	6,000	_	2,000
September 2nd	22nd	-	10,00,0	_	_
September 3rd	23rd	_	10,000	_	_
September 4th	24th	_	9,500	_	500*
September 5th	25th		9,5:0	_	500*
September 6th	26th	-	Serum stopped	_	_

* Desensitizing dose.

Restlessness and vomiting came on after the anaesthetic on August 31st (twentieth day), possibly post-anaesthetic; this continued till the twenty-second day, during which he was still restless, but the vomiting ceased in the morning. The pulse rate was now very slow but regular: in the morning of this day 52 was the lowest rate.

From the thirteenth day to the twenty-fourth day of the disease chewing was practically impossible, and fluid nourishment only was attempted to be given by the mouth. From the twentieth day to the twenty-third day vomiting was almost incessant, and liquids, such as grape juice and lime water, were not retained completely.

not retained completely.

Medicinal Treatment.—Calomel 1/10 grain was given at intervals on the night of September 1st (2 grains in all), but some of this was vomited. To overcome the restlessness on the night of September 3rd an enema containing 15 grains of chloral hydrate and 1/2 drachm of sodium bicarbonate in 4 ounces of water was given; this was retained and he passed a good night. A mixture of chloral hydrate and potassium bromide (5 grains of each) was given subsequently for two days, three times a day. He settled down well after this, and from this time his convalescence became assured.

On the twenty-fifth day of the disease the patient began to masticate his food fairly freely; he became more restful, and the tonic spasm of his masseters and abdominal muscles practically disappeared. Convalescence now became assured, and within five weeks the patient was able to return to school. At this time all symptoms had disappeared; the mouth could be opened widely and the natural facial expression was present. The knee-jerks alone showed slightly increased activity.

This case of tetanus, in which well marked spasms of the masseters and abdominal muscles were associated with persistent vomiting, was cured by repeated doses of serum given chiefly intravenously and intrathecally. To accomplish this nearly 100,000 units of antitetanic serum had to be administered before the symptoms were finally subdued.

FOREIGN BODY IN THE OESOPHAGUS: DIFFICULT REMOVAL.

BY

LINDLEY SEWELL, M.B., B.S.Lond., M.R.C.S., HONORARY SURGEON TO THE EAR AND THROAT DEPARTMENT, ROYAL INFIRMARY, MANCHESTER.

The chief reason for placing the following case on record is the difficulty experienced in exactly locating the swallowed toothplate, in spite of the fact that a radiograph distinctly showed its presence, and also in removing it.

A woman, aged 64, was admitted to the Manchester Royal Infirmary on March 5th, 1927, with the following history. Fourteen weeks previously she had swallowed a portion of a dental plate; since that time she had been an inmate of another institution, where on two occasions oesophagoscopy had been performed, without, however, revealing the foreign body. A bougie had also been passed and met with no obstruction; a radiograph had not shown very definitely whether the toothplate was present or not.

A radiograph taken the day after admission to the Infirmary showed the toothplate very clearly at about the level of the sternal notch. Oesophagoscopy under local anaesthesia failed to reveal the plate, but a mass of granulation tissue at the level of the sternal notch was seen, from which haemorrhage was brisk enough to prevent further examination.

enough to prevent further examination. Five days later, under local anaesthesia, the oesophagoscope was very cautiously passed again; the plate was felt in the granulations and was removed from their lower end with forceps. On attempting to remove the plate from its new position it was found to be too large to pass the site of the granulations; it was therefore released in order that an effort might be made to so place it that its narrowest width was crosswise. In attempting this the plate slipped downwards and was not



Toothplate : Half scale.

seen again owing to the blood which was coursing freely from the granular area.

The patient was given a week's rest and the tube was again passed, a radiograph having shown the plate to be now about two inches above the diaphragm. To the surprise of the operator no foreign body could be seen, although a radiograph taken soon afterwards showed the foreign body still in the same place. After a further week's rest, under general anaesthesia a further examination was made, and again ended in failure.

It was now determined to try retrograde oesophagoscopy. One week later, therefore, the patient, having swallowed a length of silk, a gastrostomy was performed by Mr. Bryce, the silk thread brought out, the oesophagoscope passed on it to the cardia and a little over two inches up the oesophagus, when the plate was seen and removed at once without any difficulty.

The gastrostomy wound was kept open for ten days for the

The gastrostomy wound was kept open for ten days for the purpose of feeding and for giving rest to the oesophagus. The patient was now able to swallow any kind of food, and had apparently made a complete recovery. Whether the contraction of the granular area will bring about a stricture the future will show.

The case must be regarded as a relative failure because the foreign body was not removed per vias naturales, for it would be supposed that anything which had got into the gullet from above could also be removed from above. I cannot condemn too strongly the use of the bougie. In the case of an irregularly shaped foreign body it may easily drive the same into the oesophageal wall and cause impaction, or even perforation. The bougie should only be used under inspection with the oesophagoscope, and then only for treatment of strictures, not of foreign bodies.

The failure to find the plate on the third and fourth examinations was due to the facts that its thin upper border fitted closely the posterior oesophageal wall, that its colour was exactly that of the gullet, and that possibly a fold may also have obscured things.

The silk thread was used to guide the oesophagoscope quickly, because sometimes it is not easy to find the cardiac opening from below.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

ACUTE INTESTINAL OBSTRUCTION BY BANDS IN CHILDREN.

Two cases of acute intestinal obstruction in children were admitted to the Worthing Hospital under my care, the one in December, 1922, and the other in June, 1827. Both cases were sent in by Dr. Thompson of Lancing, with the diagnosis of acute appendicitis, and in each case I operated through a gridiron incision, expecting to find an acutely inflamed appendix. In both patients physical signs predominated in the right iliac fossa, for reasons which will be obvious when the findings at operation are read.

Both patients recovered. The condition of Case I was dangerous for some twenty-one days after resection at primary operation, owing to broncho-pneumonia, and his stay in hospital was more than three months. Case II spent only fourteen days in hospital.

Case 1.

A boy, aged 8 years, admitted on December 7th, 1922, had abdominal pain (umbilical and hypogastric) for two days. The child was obviously ill. There was general rigidity of the

abdomen, and very little movement on respiration. Under the anaesthetic tense coils of small intestine were felt in the hypogastrium and to the left. A gridiron incision was made, and free fluid was found in the peritoneum. Neither caccum nor appendix could be delivered through the wound, which was therefore enlarged downwards by division of muscle fibres. A coil of gangrenous small intestine then presented in the wound. This loop of about 6 inches of ileum, close to its termination, was strangled tightly under the appendix, the tip of which was fixed firmly to a breaking down calcareous gland in the mesentery, just central to that of the portion of gut involved. The appendix was taut and was the only agent of strangulation. It was excised; resection of the gangrenous intestine, invagination of the small portion of remaining terminal ileum by purse-string suture into the caecum, fixation to the peritoneum of the proximal free end of the ileum, with a tube fixed into it, and closure of the wound completed the operation.

The child's condition was serious for some three weeks, mainly on account of broncho-pneumonia, but this resolved and the general condition became excellent. On March 22nd, 1923, I performed a lateral anastomosis between the terminal portion of the ileum and the ascending colon, and excised the ileostomy opening. The bowels acted on the third day, the wound healed satisfactorily, and the child was soon able to go home. In November, 1927, Dr. Thompson reported that his condition was excellent.

Case II.

A boy, aged 3 years, was admitted on June 2nd, 1927, with a history of twenty-four hours' severe abdominal pain and frequent vomiting. The bowels were stated to have acted on the day of admission and on the previous day. The child looked ill; the temperature was 100.4°, pulse 114, respirations 26. The tongue was dry and furred. The abdomen moved satisfactorily on respiration; there was no rigidity, and tenderness in the right iliac fossa was elicited only after very careful examination. Immediate operation was decided on. Following a gridiron incision, free fluid was seen to be present in the peritoneum, and coils of small intestine appeared to be abnormally distended. The appendix was excised. Except that it appeared cyanosed, it seemed normal and hardly sufficient to account for the symptoms, general condition, and signs of peritoneal reaction.

Investigation of the terminal portion of the ileum revealed a condition almost identical with that found in Case I, with the following differences. The constricting band was a tag-like, fibrous structure, about three-eighths of an inch in length, binding to the mesial aspect of the caecum a portion of the ileum, which should have been about 8 inches distant from the ileo-caecal valve. The strangulated gut was damaged much less severely, and on division of the constricting band rapidly recovered colour and was replaced in the abdomen without any doubt as to its viability.

The bowels acted in a few hours; the child made an uneventful

viability.

The bowels acted in a few hours; the child made an uneventful recovery and left hospital on the fourteenth day.

C. Gibson, F.R.C.S.Ed., Honorary Surgeon, Worthing Hospital.

FATAL POISONING BY BORAX.

It may be of interest to record this case of poisoning by borax; the signs and symptoms were almost similar to those described by Mr. Donald Currie in the Journal of January 14th (p. 48) as erythroedema or "pink disease."

14th (p. 48) as erythroedema or "pink disease."

On January 1st, 1928, I was summoned to a case of precipitate labour, the child having been born an hour previously. On January 12th mother and child appeared to be well. Breast fed.

About 6 p.m. on January 15th a message from the nurse stated that the child was dying. I found the child had wasted extremely during the three days which had passed since my last visit; he was unconscious and the eyelids were closed. The thighs were fully flexed close to the abdomen, and the legs were fully flexed on the thighs, the feet being inverted. The arms were pressed close to the trunk, the forearms being fully flexed on to the arms, so that each clenched hand was pressed to the side of the head, just below and touching the ears. The heart beats were normal, but the respiratory rhythm was irregular. The temperature was subnormal—96° F, in the rectum. The finger-nails and terminal phalanges of the left hand were coloured a bright red, as if painted; the forefinger was red and swollen as far as the wrist, in marked contrast to the fingers of the right hand. The coloured fingers were tender. Pressure failed to elicit response on the right hand. A red ring surrounded the anus; the entire scrotum and the lips had the same abnormal colouring. A spot of red was visible at the external extremity of the upper eyelid on the right side. The feet were normal.

I found that during the previous five or six days the child had consumed about one and a half drachms of borax and boric acid, in the form of honey and borax and glycerin of borax, administered to prevent thrush, on the advice of the nurse. Bowel washings had the same "cooked spinach" appearance described by Mr. Currie. In the last washing there were three or four inches of what appeared to be a narrow mucus cast coloured green.

A semi-comatose condition persisted for the next three days;

A semi-comatose condition persisted for the next three days; during the last two of these the child appeared to be reviving and took milk, but died suddenly on the afternoon of the third day.

The necropsy appearances were as follows: There was postmortem staining of the same pink colour; the muscles and arterial blood were pink. The brain was normal, but the ventricles were

empty. The lungs were normal and expanded, and the heart was normal and empty, as was the bladder. The intestines were almost empty and normal. The pylorus was unaffected, but the duodenum had extremely thin walls and was empty. The stomach contained about 1 ounce of a substance having the appearance of honey; it was yellow, opaque, and moderately thin. The liver and kidneys were dark, the latter being congested with spots of haemorrhage under the capsule, which stripped easily.

Borax has been described as a brain and nerve poison, even in what is commonly regarded as the medicinal dose; many cases of obscure illness may be attributed to its administration. A dummy teat dipped in glycerin of borax may convey from $\mathbf{1}_{2}^{1}$ to 2 grains of borax to a child's mouth, all of which is swallowed. It is, however, twenty years since I saw so severe a case as the one recorded here.

Luton.

JOHN BIRCH, M.R.C.S., L.R.C.P.Lond.

HYPERPYREXIA IN TERMINAL CHRONIC NEPHRITIS.

WE think the following case is of sufficient interest to be recorded.

A woman, aged 24, now suffering from chronic nephritis, had scarlet fever during childhood. Two years ago uraemia developed with hyperpyrexia (temperature 110° F.), from which she recovered. She has now been ill for the past five weeks, and her temperature has been continually above 110°; on two occasions the thermometer has been found broken after removing it from the axilla. Many different thermometers by various makers were tried. The patient has appeared to be fairly comfortable throughout nspite of passing not more than 4 to 6 ounces of urine a day. She has frequently asked for solid food and to be allowed up; she has not been delirious nor comatose during the present illness.

According to Tidy, hyperpyrexia occurs in blackwater fever (103° to 105°), malaria (104° to 106°), rheumatic fever (104°), pericarditis (103°), sunstroke (110° to 112°), and haemorrhage into the pons (105°), but we have found no mention of hyperpyrexia appearing in the terminal stages of a chronic nephritis.

HOWEL B. PIERCE, M.B., Ch.B. JOHN F. SCALES, L.R.C.P. & S.I. G. L. PIERCE, L.R.C.P.Ed.

Mountain Ash.

VESICAL BILHARZIA: DOUBLE INFECTION.

I HAVE read with much interest the memorandum by Dr. H. Fairbairn, in the Journal of January 14th (p. 52), about vesical bilharzia, in which he mentions cases showing the double infection with S. haematobium and S. mansoni. We can confirm this from our work at the C.M.S. Hospital, Old Cairo, Egypt, where we have frequently seen patients with this double infection.

In 1926, in a paper on Egyptian splenomegaly and its relation to schistosomiasis, I drew attention to the fact that, though it is not at all common to find lateral-spined ova in the urine, yet we get a good number of cases showing this condition. I especially pointed out in that paper how far more limited throughout the country of Egypt the distribution of S. mansoni infection is than that of S. hacmatobium infection. For instance, we constantly get numbers of cases of rectal schistosomiasis from districts where there is no S. mansoni infection, and on microscopical examination they invariably show the terminal-spined ova, proving the cause to be S. haematobium. Also, quite a number of patients with vesical symptoms, coming from the region of the Delta, where end-canals are plentiful and where S. mansoni infection exists as well as S. haematobium infection, show the lateral-spined ova as well as the terminal-spined variety in the urine.

It was for these reasons that I suggested that the usual classification of the disease into urinary schistosomiasis and intestinal schistosomiasis was perhaps a mistake, and that a better definition might be:

(1) Schistosomiasis caused by Schistosoma haematobium (commonly called urinary schistosomiasis).

(2) Schistosomiasis caused by Schistosoma mansoni (commonly called intestinal schistosomiasis and including visceral schistosomiasis).

Bromley, Kent.

ROBERT B. COLEMAN.

¹ Transactions of the Royal Society of Tropical Medicine and Hygiene, vol. xx, No. 3, June, 1926.

BILATERAL EMBOLISM OF THE CENTRAL RETINAL ARTERY.

BILATERAL embolism of the central retinal artery is a sufficiently rare condition to merit the mention of the following case.

following case.

A farm labourer, aged 74, was sent to see me in February, 1927, having lost the sight of the right eye three months earlier, and having suddenly lost the sight in the left eye a few days previously. The patient himself informed me that up to three months before he had always had exceptionally good sight, but that suddenly one day he noticed that there was something wrong with his vision on the right side, and that on covering his left eye he found that he was completely blind in the right. Apparently he did not think it necessary to seek advice about the trouble, and continued with his work until a few days previously, when suddenly, whilst in the house, everything became black, and he found himself totally blind. The pupils were fixed, dilated, regular, and there was no reaction to light, nor any perception of light. The media of both eyes were clear, but the fundus of the right eye showed a pallid, clear-edged disc; many of the vessels usually radiating from it were obliterated, while those remaining were represented by mere threads. There was some faint brownish pigmentation at the macula. The left eye showed the typical picture of recent retinal embolism—the disc pale, the vessels diminished in calibre, a general pallor of the fundus, with the "cherry-red spot" at the macula.

From the history of the sudden and complete blindness

From the history of the sudden and complete blindness in the right eye three months before, together with the typical ophthalmoscopic picture in both eyes, there is no doubt that there had been an embolism of the central retinal artery in the right eye, followed about three months later by another retinal embolism in the left eye.

Embolism of the central retinal artery is practically always unilateral, and I note that only three cases of bilateral embolism were observed at the Tübingen eye

clinic in a period of thirty-seven years.

It is noteworthy that, although this condition might be expected to occur more commonly in the aged, it is found most frequently in persons under 60 years of age, and often in quite young people, particularly of the female sex. Heart lesions, endarteritis, etc., are given as the usual causes of this unfortunate condition—in the case here recorded there was advanced cardio-vascular trouble-but in about 30 per cent. of cases, according to Leber, no demonstrable cause can be found, particularly among the younger patients. If seen early, attempts can be made by massage, tapping the anterior chamber, and the inhalation of amyl nitrite to promote dilatation of the retinal vessels and a larger blood flow into the eye, in the hope that the clot may be moved from the main branch into one of its smaller ramifications, thus limiting the area of retina affected. To achieve this, however, the cases must be seen very early, and few successful results have been reported. T. G. WYNNE PARRY, M.R.C.S., D.O.M.S. Carnaryon.

Reports of Societies.

THE LIVER DIET TREATMENT OF PERNICIOUS ANAEMIA.

AT a meeting of the Medical Society of London on January 23rd, with Mr. H. W. Carson in the chair, a discussion took place on the treatment of pernicious anaemia, more especially with liver diet. It was opened by Professor F. R. Fraser in a paper the substance of which appears

at page 165.

Sir William Willcox, continuing the discussion, agreed that the liver treatment of pernicious anaemia had completely altered the general view as to the treatment of the disease, and possibly as to the disease itself. It was extra-ordinary that, just as with fasting in glycosuria, this simple observation should have been delayed so long. It was not, however, a chance discovery, but the result of a gradual evolution, following upon the demonstration that various protein foods improved the blood after haemorrhage. In many cases of pernicious anaemia the yellow tint of the sclerotics had been observed, the swelling up of the liver when relapses occurred, and the appearance of toxic jaundice. Therefore, it was not remarkable that liver treatment should be of value in pernicious anaemia, seeing that the liver suffered so much in this disease. In sprue, which very closely resembled pernicious anaemia, successful treatment in Ceylon by liver soup had been in vogue for

many years. The speaker, having now tried liver treatment in several cases of pernicious anaemia, could agree that the way in which patients improved was striking, as was also the tolerance to liver they exhibited. Under the treatment the jaundice cleared up and the icterus index quickly fell to normal. The liver also seemed to act as an intestinal corrective, obviating the necessity for aperients. The stools, which in pernicious anaemia were usually most offensive, became more or less normal. In these severe cases of pernicious anaemia the lymphocytes approached the polynuclear cells in percentage, sometimes even exceeding them, in which case there was the great difficulty of distinguishing it from leukaemia, but under liver treatment both the total leucocytes and the differential count became normal. This was shown in the account of a case by F. A. Phillipps in the British MKDICAL JOURNAL (January 21st, p. 93). There seemed to be no adequate explanation why liver acted in this way, but the discovery was of great value, not only in the treatment of this disease, but as opening up a new field of therapeutics. At the same time, it was not well to throw aside entirely what was learnt about pernicious anaemia before the value of liver was discovered. Pernicious anaemia began very insidiously; it was an altered blood condition due to some toxaemia in the body, and early diagnosis was essential, so that any septic focus in the body could be eradicated. The teeth, nasal sinuses, and tonsils particularly should be examined, and very often, when a case was just beginning to show signs, if the underlying septio infection could be discovered and eradicated, this progressive and previously fatal disease could be nipped in the bud. Sir William Willcox thought that in a case of pernicious anaemia with the haemoglobin 40 per cent. or lower, transfusion would still have a place in treatment, since it would raise the haemoglobin perhaps by 5 to 10 per cent., and the patient would then be able to take advantage of the liver treatment. Hydrochloric acid was still undoubtedly of value in addition to liver treatment. Treatment of pernicious anaemia by arsenic had been a sheet anchor for many years, and he, as a toxicologist, had always doubted whether some of the nervous symptoms which the patient presented were the result of the disease or of the treatment. Undoubtedly the giving of large doses of arsenic in the past in these cases did give rise to neuritis and other signs of arsenical poisoning. He thought the discovery of liver treatment really marked the exit of arsenic and of the arsenobenzol derivatives which had been recommended for pernicious anaemia. He had never seen these derivatives do any permanent good, though cases of temporary improvement had been observed.

Dr. HERBERT FRENCH mentioned a case of pernicious anaemia treated only with liver; it showed the same kind of result as the cases described by Professor Fraser. There was a rapid improvement in haemoglobin, from 35 to 95 per cent. in seven weeks. Liver was tried in different forms, but the patient preferred it uncooked. Thin slices of raw liver were given in sandwiches with lettuce or watercress, and of these the patient could eat almost any The other lines of treatment must not be quantity. forgotten, and probably must be used in addition to liver in certain cases. He strongly advocated transfusion for pernicious anaemia, but not merely when the haemoglobin had become diminished to 30 per cent.; it should be used much sooner. If there was too long a delay before transfusing it would be found that the patient merely received so much haemoglobin, and did not build upon that haemoglobin for himself. On the other hand, if transfusion were performed in an early stage of pernicious anaemia, with a haemoglobin of 55 per cent., the patient, receiving 7 or 8 per cent. of haemoglobin in this way, was able to build thereon, so that in two weeks, instead of having 62 or 63 per cent., he would have perhaps 68 or 70 per cent.; after a second transfusion he would build again to a higher level, and so on. The haemoglobin with early transfusion was maintained in a way which was not the case when transfusion was employed late in the course of the disease. Disappointments in blood transfusion were due to delay in using it. This transfusion treatment was worth while, even though it was not curative. Dr. French also favoured arsenical treatment; if he suffered from pernicious

work wonders, and the mother is willing to carry out this treatment and interrupt school life when the risk of permanent heart trouble is pointed out.-I am, etc., LOFTUS E. WIGRAM, M.B.Cantab.

London, E.4. Jan. 18th.

FOREIGN BODIES IN THE ABDOMEN.

SIR,—I read with interest the account of the second case described by Dr. H. Roland Segar on p. 96 of your issue of January 21st, because it affords a human parallel with an animal experiment performed by the late Professor Paul Heger at the Solvay Institute, Brussels, about twenty years ago, and described by him to me in 1925. He was working on the functions of the omentum and similar structures in the abdomen, and related how in one case a foreign body introduced into the abdominal cavity was carried to the root of the omentum, excluded from the abdominal cavity by the folding over and adhesion of the omentum, and finally made its way through the wall of the intestine and was passed per rectum.

I believe the specimen is still at the Solvay Institute, although I cannot be sure.—I am, etc.,

KENNETH J. FRANKLIN, D.M.

The Pharmacological Laboratory, Oxford, Jan. 26th.

THE PHYSIOLOGY OF DEFAECATION.

Sir,-As a physiologist I have been following the correspondence on the physiology of defaecation with much interest, and I am glad to see that at last one of your correspondents, Dr. E. R. Barton, refers to the height of the seats of closets as one of the causes of constipation.

It would seem that we are never going to get a change in the construction of these seats, which appear to become higher and higher as each new hotel, club, train, or steamer is built. It is not only that they are far too high, but they are invariably level, whereas they ought to slope backwards or downwards in order to permit of the assumption of the natural squatting position, the physiology of which is so well understood.

That such a physiologically correct seat has been made I know for certain, for the makers of it were good enough to send me an illustration of it many years ago, and this I showed to my class each session. If I had it beside me I should send it for editorial comment, but it is not available, and I forget the name of the makers. I hope, however, that if they see this communication they will make it known that a physiologically correct type of closet has been on the market.

There is really no valid reason why the absurdly high and level type of seat should continue to be made; the explanation is the physiological momentum of those who continue to construct something not adequately adapted to its uses. There are many analogies. One is the large jug or pitcher which is provided with so small a spout that this cannot possibly permit a sufficient outflow of fluid. The makers, of course, have forgotten what a spout is for, and are now treating it merely as an ornament.—I am, etc.,

D. F. FRASER-HARRIS.

The Authors' Club, London, S.W.1, Jan. 18th.

Anibersities and Colleges.

UNIVERSITY OF OXFORD.

DR. F. A. DIXEY, F.R.S., late Wills Medical Fellow, Bursar, and Sub-Warden of Wadham, and formerly demonstrator of physiology in the University, has been elected to an Emeritus Fellowship at Wadham College.

UNIVERSITY OF CAMBRIDGE.

AT a congregation held on January 27th the following medical degrees were conferred:

M.B., B.CHIR.—W. F. Cooper, E. S. Bolton. M.B.—W. G. S. Hopkirk.

The Nita King Research Scholarship for the encouragement foriginal research in the etiology, pathology, and prevention flevers has been awarded to Mr. Leonard R. Janes, M.A., of Emmanuel.

UNIVERSITY OF LONDON.

MR. M. E. DELAFIELD, M.C., M.B., B.Ch.Camb., has been appointed to the University Chair of Chemistry as applied to Hygiene tenable at the London School of Hygiene and Tropical

Hygiene tenable at the London Bollook C. 2,83-1 Medicine.
Dr. E. L. Kennaway has been awarded the William Julius Mickle Fellowship for 1928 (value £275) in respect of the work carried out by him on cancer research during the past five years.
Mr. H. L. Eason, C. B., M.S., has been reappointed to represent the University on the General Medical Council.
Dr. Andrew Ballour, C.B., will be the representative of the University at the Congress of the Royal Sanitary Institute to be held in Plymouth in July next.

UNIVERSITY OF LIVERPOOL.

MRS. ADAMI, the widow of Dr. J. G. Adami, Vice-Chancellor of the University, who died in 1926, has presented the sum of £100 for the endowment of a prize in the department of pathology.

ROYAL COLLEGE OF PHYSICIANS OF LONDON. A QUARTERLY comitia of the Royal College of Physicians was held on January 26th, with the President, Sir John Rose Bradford, in the chair.

Membership.

The following candidates were admitted to the membership:

The following candidates were admitted to the membership:
Roland George Anderson, M.B.Lond., Godfrey William Bamber,
M.B.Camb., Donald Campbell, L.A.H.Dub., Cleinent Clapton
Chesterman, O.B.E., M.D.Lond., Ronald Cove-Smith, M.B.Camb.,
William Hefmeyr Craib, M.B.Camb., Shelden Francis Dudley,
O.B.E., M.D.Lond., Surgeon (ommander R.N., William Norwood
East, M.D.Lond., Abd el Kader Hilmi, El-Shutbagi, L.R.C.P.,
William Evans, M.D.Lond., John Rex Godsall, M.B.Sydney, Cecil
William Hutt, M.D.Camb., Una Christina Ledingham, G.B.Lond.,
Noel Vernon McKenna, M.D.Melb., Basil William Sholto Mackenzie,
M.B.Camb., Richard Glyn Maliphant, M.B.Lond., Phillip Justin
Markell, M.B.Sydney, Albert Victor Neale, M.D.Birm, Alexander
Adam McIntosh Nicol, M.D.Aberd., Charles Bruce Perry, M.B.
Bristol, Ronald Arthur Phillips, L.R.C.P., John Douglas Procter,
L.R.C.P., Reginald Hans Taylor Rea, L.R.C.P., Abd el-Azim Yonsif
Mostafa Salama, L.R.C.P., Sydney Watson Smith, M.D.Edin,
Howard Hilton Stewart, M.D.Belfast, Charles Cady Ungley, M.D.
Durham, Marion Boyd Wanliss, M.B.Melb., Lawrence Stuart Woolf,
L.R.C.P.

Licences.

Licences were granted to the following 120 candidates who had passed the necessary examinations of the Conjoint Board and conformed to the by-laws and regulations of the College:

passed the necessary examinations of the Conjoint Board and conformed to the by-laws and regulations of the College:

R. Anderson, G. D. Augenlicht, L. Bernard, F. G. Booker, G. N. Box, M. S. R. Broadbent, J. W. Bromley, C. E. S. Bullen, *Eleanor M. Oarless, A. M. Chaudhuri, S. S. Chesser, T. L. Cleave, G. A. Coggin, C. N. Cohen, C. C. Cookson, N. Cox, *Pera R. C. Crawford, W. S. Creer, D. S. Davies, E. R. L. Davies, *Helena M. De Hartog, M. M. Dey, *Olivia F. Digby-Smith, H. Doyle, M. R. Doyle, C. B. Drew, John St.C. Elkington, *Alexandra G. H. Enclish, A. G. Ensor, H. Epstein, M. M. Fikri, J. Foster, H. D. F. Fraser, *Mabel O. C. Freeston, T. R. Gaha, P. J. Ganner, *Caterina P. Giles, E. M. Gottein, R. A. P. Gray, C. R. Greene, C. S. Gross, *Bridget S. P. Gurney, B. Haring, R. M. J. Harper, J. Harris, R. L. Harward, N. F. Haslam, J. C. Hatrick, L. Hennell, *Margaret A. L. Herbertson, *Anna M. Hilliard, E. A. H. Hindhaugh, N. M. Hodviela, *Josephine M. Howells, W. H. Hubert, W. L. Hurn, A. L. Hyatt, *Dorothy M. James, D. C. R. R. Jenkins, I. J. Jones, R. T. Jones, H. Kaitz, *A. R. Kerridge, A. K. M. Khan, P. Kuhne, T. E. Lamech, B. A. Lamprell, W. J. Lloyd, *Margaret I. Meacock, A. A. Miles, *Mary M. Moller, C. F. Moore, C. S. Morgan, W. H. Myburgh, J. J. O'Donoghue, *Lois J. Ogle, E. N. O'Neill, *Ella M. Oswald T. N. Parish, W. E. C. Parry, P. I. Peltz, P. P. Peries, C. D. Politeyan, A. E. Porritt, *Monica M. M. Power, J. C. Preston, *Agnes M. Ramsbotham, W. G. Richards, J. H. Richmond, T. McK. Robb, F. E. Roberts, *Elizabeth J. Robinson, *Florence E. Robinson, R. S. Rudland, *Margaret M. Russell, R. W. Sabouadiere, W. J. M. Sadler, H. A. Seidenberg, *Doris G. Sharvelle, D. C. Shields, *Clarice A. Skidmore, T. E. Skinner, W. D. Steel, G. Steinberg, W. P. R. Swemmer, B. A. Taylor, *Dorothy Tims, *Ruth M. W. Turner, D. R. Tweedie, G. P. A. van Rossum, J. A. Vernon, *Elizabeth H. Waller, H. S. Waters, K. H. Watkins, I. Waynik, C. H. C. White, H. O. White, *Hannah E. Wilby, E. A. Wood, N. R. W. Wynne-Williams.

*

Diplomas in Special Subjects.

Diplomas in the subjects indicated were granted jointly with the Royal College of Surgeons to the following:

DIPIOINAS IN the Subjects Indicated were granted jointly with the Royal College of Surgeons to the following:

D.P.H.—F. Asker, A. D. Belilios, F. J. Benjamin, W. A. Brown, Isabella M. G. Butl-r, Dorothy M. Catchpool, N. E. Chadwick, Nancy M. Coutts, Angel V. B. Crawford, G. N. Curnow, Gweneth M. Daniel, Hilda C. Dean, E. L. F. De Mel, Kathleen Dickinson, Christabel S. Eyre, Nancy K. Gibbs, Gladys Goument, W. H. Hamilton, R. S. Johnson, M. H. Khan, F. E. B. Laborde, E. R. Lewis, K. L. Malhantra, H. L. Malhotra, Ethel W. Morris, G. Napier, H. A. A. Pargeter, B. L. Patney, K. P. Pillai, T. A. Seekings, S. R. A. Shah, Kathleen Shelton, C. H. C. Toussaint, S. N. Wasti, P. L. Whig, C. A. Wood.

PSYCHOLOGICAL MEDICINE.—W. A. Caldwell, L. C. Cook, I. Frost, N. G. Harris, E. J. C. Hewitt, R. G. B. Marsh, N. R. Phillips, R. P. Rees, H. H. Steadman.

OPHTHALMIO MEDICINE AND SURGERY.—H. K. Basu, J. C. Bringan, A. E. F. Chaffer, E. J. Collins, S. Dayal G. I. Evans, B. F. Eminson, E. R. Jagger, M. S. Katre, B. Kay, R. B. Khare, L. R. Lalwani, G. D. Malhoutra, M. A. Mithavala, D. G. Patwardhan, W. J. B. Riddell, Louie A. Rubidge, D. D. S. Stewart, C. R. Verling-Brown.

LABYNGOLOGY AND OTOLOGY.—H. Bahgat, R. E. Huckingham, H. S. Chhachhi, H. A. Cowan, S. Dayal, E. M. Dearn, H. G. Downer, R. A. Highmoor, Barbara M. Logan, P. MacMurray, J. H. O'Donnell, A. MacK. Ross, S. S. Sen, J. J. Stander, P. Subbaramayya, H. L. Vaidva.

Appointments.

Dr. A. E. Russell was elected to the Council in the place of the late Sir Percy Bassett-Smith. Dr. Monckton Copeman was appointed to represent the College at the 39th Congress of the Royal Sanitary Institute. Sir Leonard Rogers was appointed as delegate to the centenary celebration of the Faculty of Medicine, Cairo, in response to the invitation of the Minister of Education of the Kingdom of Egypt.

Reports.

Communications were received from the President of the University of Toronto and from Dr. R. D. Rudolph with reference to the recent celebration of the centenary of King's College, Toronto. A report was received from the representative of the College on the General Medical Council. Dr. C. O. Hawthorne reported on the Departmental Committee of the Optical Practitioners (Registration) Bill. Books and other donations to the library presented during the last quarter were received and thanks were accorded to the donors. The annual report of the Examiners for the Licence on the examination held in the year 1927 was received. received.

SOCIETY OF APOTHECARIES OF LONDON.

THE following candidates have passed in the subjects indicated:

SURGERY.—G. N. Fox, A. W. Lassowsky, J. R. Mitchell.

MEDICINE.—G. N. Fox, D. I. Jones.

FORENSIC MEDICINE—G. N. Beeston, B. P. Jones, D. I. Jones, A. W.

Lassowsky, J. R. Mitchell.

MIDWIFERY.—W. B. Hallums, H. T. Ince, E. A. Johnstone, H. D. K.

Wright.

The diploma of the Society has been granted to Messrs. D. I. Jones and A. W. Lassowsky.

Obituary.

JOHANNES FIBIGER, M.D.,

Professor of Pathology, University of Copenhagen.

WITH profound sorrow we have to record the death of Johannes Fibiger, professor of pathology in the University of Copenhagen. Professor Fibiger was in his sixtieth year, and had lately undergone a serious operation. Whatever be the triumphs the future holds for cancer research, his name and his work will always have an honoured place, for he was the pioneer of the experimental inquiry into the causation of cancer.

While the study of malignant diseases remained for the most part a matter of observation and conjecture little or no progress could be made in our knowledge of their etiology. Theories and ingenious hypotheses led us no further to the heart of the problem. No one had produced cancer experimentally. His was the first successful attempt, and his claims were at once recognized and welcomed by authorities throughout the world. It is a matter of pride to us to remember that within a few days of the publication of his preliminary communication before the war the BRITISH MEDICAL JOURNAL emphasized the importance of this first successful direct attack on the central problem. When the story was fully unfolded no one could withhold admiration for the brilliant manner in which he developed his research from a simple chance observation, and the dogged perseverance which enabled him to overcome almost insuperable difficulties. Appreciations of this work, as it developed, have appeared from time to time in these columns, and only a brief summary need now be given.

In the course of some experiments in tuberculosis, a subject on which he had gained more than a national reputation as an investigator, Professor Fibiger noticed that three rats in one batch had tumours of the stomach. Knowing that this was a rarity, if not an unheard-of occurrence, he attempted, though without success, to transmit these tumours by transplantation and feeding experiments, and by putting fresh rats into the cages previously occupied by the infected animals. Prolonged investigation of hundreds of serial sections of the tumours, which proved to be squamous epitheliomata, revealed to his observant eye minute structures which enabled him to reconstruct the picture of an undescribed nematode threading its way through the superficial layers of the epithelium. Careful dissection of a preserved tumour afterwards provided him with a complete specimen of this worm, to which he gave the name Spiroptera neoplastica. Convinced that the occurrence of this parasite in all three tumours was more

than an accident, he set himself to discover the origin of the spiroptera, but the only information he could elicit from extensive reading of the literature about nematodes was that Galeb, many years previously, had found nematodes in the stomachs of rats that had been fed on the common cockroach (Periplaneta orientalis). This clue was pursued, though the nematodes described by Galeb were of a different species, and Fibiger examined the bodies of many rats in a district of Copenhagen where the cockroaches abounded, and he fed his laboratory rats on these cockroaches, but in no case did he find parasites in the stomachs, nor was there ever any trace of new growths. But he did not lose heart. He found out that in a large sugar factory in Copenhagen there were numbers of rats and swarms of cockroaches of a large and unusual type—the *Periplaneta americana*—which had come from the West Indies with the consignments of sugar. Several of these rats were caught and killed, and when they were examined they were found to have gastric tumours, and in the tumours the Spiroptera neoplastica was found. His perseverance deserved its reward. He collected some of the cockroaches and fed his laboratory rats on them, and demonstrated that the cancers were always associated with the spiropterae. Investigation showed him that these cockroaches contained in their muscles the larval stage of a worm which, when the cockroach was eaten by the rat, developed into the adult spiroptera in the gastric mucosa of the rat. The worm in some way stimulated the gastric epithelium to excessive proliferation of an invasive type, and when the mature stage of the parasite was attained the eggs were evacuated with the faeces. This in turn was eaten by the cockroaches, and so the cycle was carried on. Having thus succeeded in infesting the rats, and being uncertain of his supply of American cockroaches, he endeavoured to infest the ordinary type of cockroach from the eggs evacuated from the rat, and in this he was fortunately successful, for the sugar refinery was burned to the ground and his supply of American cockroaches ceased. The experiments, as the research went on, showed clearly that he could produce gastric cancer in the rats at will, that the epitheliomata produced were preceded by more benign proliferations, that there was a minimum period required before the spiro-pterae produced their effects, that metastases were formed without the presence of parasites, that the age of the animals was of no importance in respect of results, that wild rats and other rodents were immune to the action of the worms, that mice were relatively insusceptible and that the production of gastric cancer in them was exceedingly slow in comparison with rats, that the spiroptera could lodge in and produce epithelioma of the tongue, that other parts of the intestinal tract were resistant to the action of the parasites, and numerous other observations. In short, he demonstrated that cancer could be caused by chronic irritation of peculiar types—in this case some toxic secretion from a parasite; but it was perfectly obvious that this cancer-producing agent could not be invoked to account for any cancer except the gastric cancer of these rats. There must be other causes operating in other cases.

Inspired by his work, Yamagiwa and Ichikawa in Japan took up again the attempts to produce cancer by prolonged applications of coal tar, and showed us once more that patience was the necessary requisite for success. Their experiments were welcomed by Fibiger, who introduced them to the Western world and extended them, and furnished investigators the world over with a ready means of inducing cancer and studying its early phenomena. Others have carried on the work in other lines, but all will agree that to Fibiger is due the honour of blazing the trail.

WILLIAM BRITAIN MORTON, M.D.,

Medical Superintendent, Wonford House, Exeter.

DR. WILLIAM BRITAIN MORTON, medical superintendent of Wonford House, Exeter, died on January 10th, aged 60. He was educated at University College Hospital, London, took the diplomas of the England Conjoint Board in 1890, and graduated M.B.Lond. two years later, proceeding to

Medico-Legal.

CONVICTION OF A "MEDICAL ELECTRICIAN."

THE ancient rule of our criminal law that a man who, in committing a felony, causes the death of a human being is guilty of the capital offence of murder obtains no favour with a modern jury. Proof of this was afforded by the trial at the Old Bailey last week of Charles Jackson Palmer, who had been committed on charges of murder and manslaughter of a young married woman named Goldsmith, three months pregnant, whose death in Palmer's consulting room followed an attempt to procure abortion.

In the past the abortionist was invariably charged with murder and sentenced to death in our criminal courts, as witness the words of Mr. Justice Hawkins in passing sentence of death in R. v. Culmore, reported in the Times of August 9th, 1881: "That the offence amounts to wilful murder is the law as it at present stands, and as in all human probability it will exist in time to come." Juries, however, became unwilling to convict on the capital charge, and the Crown, towards the end of last century, ceased endeavouring to obtain a conviction for murder in cases of abortion, relying on the manslaughter charge instead.

Here the Crown reverted to the old rule in charging Palmer with murder, but the Grand Jury threw out the bill, and the trial proceeded on the lesser charge of manslaughter. Despite the brilliant forensic efforts of the defending counsel, Mr. Norman Birkett, K.C., the petty jury found the prisoner guilty upon evidence which the Lord Chief Justice described as so clear as to be quite overwhelming—"it approached the certainty of mathematical demonstration."

The verdict of guilty meant that the jury accepted the evidence of two pathologists, Sir Bernard Spilsbury and Dr. H. B. Weir—whose post-mortem examination revealed an abrasion which suggested the use of a syringe and the presence of soapy water recently injected—and that they did not accept the defence that the young woman died of shock from the passing of alternating currents through the body at a low voltage and for an innocent purpose.

The defendant denied all knowledge of the fact that his patient was pregnant. Possessing no medical qualifications, he conducted a practice as a medical electrician, licensed by the London County Council, at Upper Brook Street, giving treatment for muscular weakness and nervous debility. He said that Mrs. Goldsmith visited his consulting room five times for electrical treatment for nervous debility, and it was during the last of these visits that she died. The Lord Chief Justice's questions to an electrical engineer called to give evidence for the prosecution elicited the comparatively harmless nature of the apparatus found in the defendant's consulting room. It was similar to what is in use in hospitals, and the amount of current of which it was capable was limited to 80 volts-quite insufficient, in his opinion, to cause a serious burn or shock. This evidence the jury accepted, notwithstanding the testimony of an electrical engineer called for the defence, who said he himself could not withstand the intensity of the full current obtainable from the apparatus. The discovery made at the post-mortem examination was met by a complete denial-that the defendant did not give the vaginal injection of soap and water, and that this must have been done by the deceased herself, or by some third party, before she came to his consulting room. Dr. F. J. Browne, professor of obstetric medicine in the University of London, who, on the defendant's behalf, attended the post-mortem examination, expressed the opinion that death did not follow immediately on the injection, as his microscope revealed indications that a miscarriage had been going on a few hours. Professor Browne thought it possible that the woman could have made the injection herself, and agreed with the possibility of death from shock from electricity at low pressure. This was the strongest evidence produced by the defence, but it did not explain why, if the deceased or some third party gave the injection elsewhere, she went immediately to Palmer for further electrical treatment for debility. It is not unusual for medical men to find themselves ranged on different sides in a court of law, with the inevitable com-ments by counsel. "The jury," said Mr. Birkett, "in dealing with the medical evidence were in a region where an eminent man said one thing and an eminent man on the other side said 'I say to the contrary.' Both were honest men and both were

distinguished men. One said this and one said that." In law, if there is a reasonable doubt in the minds of the jury the defendant is entitled to the benefit of it, and an acquittal should follow. The Lord Chief Justice, in the final words of his summing up, said to the jury that "they might think it right to ask themselves the question whether the true conclusion was not, as it well might be on this evidence, that the case for the prosecution had been established in every vital particular." The jury, after an absence of an hour and twenty-five minutes, brought in a verdict of guilty.

After the verdict there came the police disclosure that for months past the defendant's premises had been visited frequently by the authorities because of suspicions that the practice of medical electricity was largely a cloak for running

a profitable business as an abortionist.

The Lord Chief Justice, in passing sentence on Palmer, said:

"The officer who gave his evidence so fairly concerning you mentioned on Friday certain suspicions that you had for some time past been carrying on the trade of abortion. I shall deliberately put out of my mind suspicions and rumours of suspicions. It is right that I should direct my attention to the evidence, and to the evidence in this case alone. That evidence convinces me that you were carrying on the trade of abortion. It was as a person carrying on that trade that you were consulted by Mrs. Goldsmith. It was as a person carrying on that trade that you treated her. Such persons undoubtedly subject their patients or clients to very grave risks, and it is right that all of them, wherever they may be in this country, should understand that they incur grave risks themselves. The law must have regard to human life, even though the particular life in the individual case may not be of the highest consequence. In the public interest it is necessary that you should go to penal servitude for seven years and pay the costs of the prosecution."

Medical Aelus.

As already announced a special meeting of the council of the Charity Organization Society will be held at Denison House, 296, Vauxhall Bridge Road, S.W.1, on Monday, February 13th, when there will be a discussion on the voluntary hospitals and the public authorities. The speakers will be Sir William H. Hamer, Dr. E. Graham Little, M.P., and Dr. Humphrey Nockolds. The chair will be taken by Lord Dawson of Penn at 3.30 p.m.

AT the Mansion House meeting at 3 p.m., on February 8th, in aid of the extension fund for the General Lying in Hospital, Lord Dawson will take the place of Sir Berkeley Moynihan, who is unable to attend. The other speakers will include

Lord Birkenhead and Mrs. Stanley Baldwin.

The Fellowship of Medicine announces that Dr. R. M. Stewart will lecture on secondary forms of mental deficiency at the Medical Society, 11, Chandos Street, on February 6th, at 5 p.m. On the same day, but at 2.30 p.m., Mr. J. P. Lockhart-Mummery will give a clinical demonstration at St. Mark's Hospital. On February 10th there will be two clinical demonstrations; the first, on diseases of children, will be given by Dr. G. A. Sutherland, from 2 to 3 p.m., at the Paddington Green Children's Hospital, and the second, on cataract, will be given at 5 p.m. at the Royal Westminster Ophthalmic Hospital by Mr. C. L. Gimblett. The lecture and the demonstrations are free to medical practitioners. From February 6th to 18th there will be a special course in diseases of children at the Paddington Green Children's Hospital has been postponed to February 20th. The start of the course in venereal disease at the London Lock Hospital has been postponed to February 20th. The course will continue for one month and occupy each afternoon and some evenings with clinical work; lectures will be delivered if there is an entry of six, and early application is therefore requested. A course in medicine, surgery, and the specialties will be held at Queen Mary's Hospital, Stratford, from February 20th of March 3rd; morning and afternoon sessions of lectures, demonstrations, and operations will be arranged. The general course of the Fellowship consists of attendance at the ordinary practice of over forty London hospitals; tickets for any period may be taken out at any time. Syllabuses, tickets, and copies of the Pest-graduate Medical Journal may be obtained from the secretary of the Fellowship, 1, Wimpole Street, W.1.

A COURSE of lectures on nutrition in health and disease has been organized by the People's League of Health, and will start on February 17th, at 6 p.m., continuing, with one exception (March 1st), on the following Fridays, until the end of March. Professor Leonard Hill will open the course with a lecture on the nature and purpose of food, and other subjects to be dealt with include historical and geographical considerations, the significance of vitamins, food in relation to growth, dietetic errors, and diet in rheumatic diseases. The fee for the course is 10s., and tickets may be obtained from the People's League of Health, 12, Stratford Place, W.1.

THE fifteenth annual post-graduate week for midwives, arranged by the General Lying-in Hospital, York Road, S.E.I, will be held from May 21st to 25th inclusive. The names of those wishing to attend should be sent without delay to the secretary, Post-graduate Week, care of General Lying-in Hospital.

THE following members of the medical profession were called to the Bar on January 26th: Dr. G. Wignaraja (Lincoln's Inn), Dr. Norman G. Thomson (Middle Temple), and Dr. Daniel Broderick (Gray's Inn).

MAJOR W. H. WHITEHOUSE, coroner for the south-eastern district of London, has appointed Lieut.-Colonel W. H. Leslie McCarthy, D.S.O., M.C., M.D., D.P.H., barrister-at-law, to act as his deputy assistant.

THE Minister of Health has issued a circular (No. 857) to local superintending authorities under the Midwives Acts announcing that the reasonable expenditure of these authorities on compensation of midwives suspended in order to obviate risk of infection will be eligible for grant under the Maternity and Child Welfare Regulations. It is added that such compensation should normally be calculated on the basis of the loss of income actually sustained by the midwife; exceptional cases are to be reported to the Minister before the authority concerned commits itself to paying compensation.

AT a meeting of the Joint Tuberculosis Council on January 21st it was announced that next June there would be a course of post-graduate study at Alton on surgical tuberculosis; in July a post-graduate course at Papworth and Cambridge; and in October there would probably be one in Edinburgh. At the subsequent luncheon Sir George Newman delivered a short address emphasizing the importance of notification, the dispensary, the sanatorium, and after-care in the tuberculosis campaign. Those present at the luncheon included Sir Robert Philip, President of the British Medical Association, and Dr. C. O. Hawthorne, Chairman of the Representative Body; Sir St. Clair Thomson, president of the Tuberculosis Society; Dr. F. R. Walters, president of the Society of Superintendents of Tuberculosis Institutions; and Mr. G. S. Elliston, secretary of the Society of Medical Officers of Health.

ACCORDING to the Canberra correspondent of the *Times* the Australian Inland Mission of the Presbyterian Church has arranged with the Queensland and Northern Territory Aerial Services, Ltd., for an aeroplane to be at the constant disposal of the medical officer of the mission. The machine will be fitted with a stretcher and will accommodate a nurse in addition to the doctor. In this way isolated settlers will receive medical attention and may be transported to hospital. Consultations will be arranged also with medical practitioners in remote districts.

In is announced in the Indian Medical Gazette for January 1928, that there will be no medical and veterinary section of the Indian Science Congress in 1928. This is because the recent congress of the Far Eastern Association of Tropical Medicine has absorbed the available papers. The section will be revived at the annual Indian Science Congress in Madras in January, 1929, and those who intend to be present, or to read papers, are invited to communicate with Lieut.-Colonel B. Knowles, I.M.S., at the Calcutta School of Tropical Medicine.

It is proposed to endow a chair of surgery in the Women's Medical College of Pennsylvania in honour of Professor William W. Keen, the veteran surgeon who celebrated his 91st birthday on January 19th. The college was founded at Philadelphia in 1850, and Br. Keen was in charge of the surgical department from 1883 to 1890. Contributions are invited towards the endowment of the new professorship; they may be sent to Mrs. James Starv, president of the college, at North College Avenue and 21st Street, Philadelphia.

THE fifth International Medical Congress for Industrial Accidents and Occupational Diseases will be held at Budapest from September 2nd to 6th. Further information can be obtained from the secretary, Council of Industrial Medicine, 12, Stratford Place, W.1.

THE twenty-second Dutch Congress of Natural Science and Medicine will be held at Rotterdam from April 2nd to 4th, 1929, under the presidency of Professor P. E. Verkade of Rotterdam.

An international congress for the protection of childhood will be held in Paris from July 2nd to 5th, 1928, inclusive, under the presidency of M. Paul Strauss, formerly Minister of Hygiene.

THE centenary of the birth of Professor Eugene Koeberle, the inventor of haemostatic forceps, has recently been celebrated at Strasbourg.

DR. CÉSAR JUARROS, a prominent Madrid psychiatrist, has been elected a member of the Spanish Royal Academy of

AFTER twenty-five years' active work the Swedish National Society for Combating Tuberculosis has issued a report which indicates that the process of eradication of this disease in Sweden is advancing. Over 7,000,000 kronor (about £380,000) has been received in voluntary contributions, and more than half this sum was raised by co-operation with the Post Office, telegraphic messages being delivered on tastefully decorated forms on payment of a small extra fee, the net profit of which went to the funds of the society. In Southern and Central Sweden there has been a decided decrease in tuberculosis, and fresh efforts are being prepared to combat-the disease in the North, where it is still very prevalent. Tuberculous children receive special attention, and in one year free treatment was provided for no fewer than 4,600.

In the annual report of the United States Public Health Service for the year ending June 30th, 1927, the death rate from all causes was given as 12.1 per 1,000 of the population for the year 1926, which is rather higher than the rate for the previous year, the increase being due principally to respira-tory affections, excluding influenza, from which that country for the most part was free. The diphtheria rate was the for the most part was free. The diphtheria rate was the lowest on record, both as regards incidence and mortality; this is attributed to the increasing use of antitoxin and toxinantitoxin immunization. Declining death rates were shown by tuberculosis, heart disease, diabetes, and nephritis. Small-pox in most parts of the United States was mild, but in some localities severe forms occurred, particularly on the Pacific coast. The infant death rate continued to decrease. Investigation of narcotic drug addiction indicates a reduction in the number of cases, and tends to confirm the opinion previously reached that this is a neuro-psychopathic symptom. symptom.

THE "Metalix" x-ray tube, which embodies its own protection, and has already been noticed in these pages (December 24th, 1927, page 1192), is the subject of two booklets published by the manufacturers (Philips Lamps Limited, 145, Charing Cross Road, W.C.). One of these illustrates many examples of the use of the tube in connexion with concludes and severaling stands and other outfles of the principal couches and screening stands and other outfits of the principal makers of x-ray apparatus. The other booklet explains in clear language the construction of the tube and the method of its use, and emphasizes its value in physical research.

Letters, Hotes, and Answers.

All communications in regard to editorial business should be addressed to The EDITOR, British Medical Journal, British Medical Association House, Tavistock Square, W.C.1.

PRIGINAL 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, not necessarily for publication.

Authors desiring REPRINTS of their articles published in the Secretary and Business Manager, British Medical Association House, Tavistock Square, W.C.1, on receipt of proofs.

All communications with reference to ADVERTISEMENTS, as well as orders for copies of the JOURNAL, should be addressed to the Financial Secretary and Business Manager.

The TELEPHONE NUMBERS of the British Medical Association and the British Medical Journal are MUSEUM 9861, 9862, 9863, and 9864 (internal exchange, four lines).

The TELEGRAPHIC ADDRESSES are:

EDITOR of the British Medical Journal, Aitiology Westcent.

FINANCIAL SECRETARY AND BUSINESS MANAGER (Advertisements, etc.), Articulate Westcent, London.

MEDICAL SECRETARY, Medisecra Westcent, London.

The address of the Irish Office of the British Medical Association is 16, South Frederick Street, Dublin (telegrams: Bacillus, Bublin; telephone: 4737 Dublin), and of the Scottish Office, 6, Drumsheugh Gardens, Edinburgh (telegrams: Associate, Edinburgh; telephone: 24361 Edinburgh).

QUERIES AND ANSWERS.

TREATMENT OF ULCERS OF THE MOUTH.

PR. A. ALEXANDER (Doddington, near Sittingbourne) writes: Empirically it has appeared to me that there is a physiological cause for the mucous ulcers—namely, lack of potash in the tissues. "X. Y. Z." might try the effect of, say, 5 to 10 grains of potassium bicarbonate in water charged with carbon dioxide gas; a sparklet syphon made to contain about 3 grains to the onuce of aerated water, and a wineglassful taken at odd times during the day.