

nastin B2 had been followed in him on one occasion by a reaction of such violence that the form was deemed to be unsafe and was definitively thrown out of use. I had no reason at all for doubting the soundness of my supply; but here, it seemed, was an opportunity of testing such a suspicion as Dr. Lenz has more recently mentioned, and at my request the Chief Health Officer of New Zealand was good enough to turn over to me the remainder of his stock of nastin B2. I applied it in the following way:

H. F., male, aged 40, lepra tuberosa, duration unascertained (but probably several years), received 1 c.cm. of nastin B2 (N.Z.) on three days with two intervals of two days each. His temperature remained unaffected and no other result ensued.

Cases I and II (above) each had 1 c.cm. of nastin B2 (N.Z.) on each of two days; Case III had one such dose; in Case V the nastin B2 continuously administered on and after May 28th to the end of the year was part of this New Zealand supply.

In none of the patients did it cause any reaction, either local or general. These discrepancies are puzzling. It is possible that they have their psychological aspect.

As regards the bacilli in the cases described above, they had their usual appearances, and no changes could be detected. Professor Deycke's description⁷ of the degenerative alterations observed after treatment do not (I think) indicate anything unusual. In cases of leprosy, in which bacilli can be easily obtained from the surface of the body, it is generally found that wholly-stained specimens lie among a larger number of others which are either vacuolated, or dotted, or reduced to mere acid-fast granules. In many situations none wholly stained are found; in some, which perhaps are generally more recent deposits, all may be wholly stained. The imperfect bacilli can take a differential stain.

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- ³ 1909. Lenz: *Lepra*, ix, p. 19.
- ⁴ 1909. Ziemann: *Ibid.*, p. 23.
- ⁵ 1909. Rodriguez: F. A. Smith and Bissett, Beauchamp Williams: *Trans. of Bombay Medical Congress*. F. Raschid: *BRITISH MEDICAL JOURNAL*, ii, p. 1343.
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THE SCIENCE COMMITTEE

OF THE

British Medical Association.

REPORT CXX.

PERITONEAL BLOOD TRANSFUSION.

By A. E. BOYCOTT, B.Sc., M.D. OXON.,
LECTURER ON PATHOLOGY, GUY'S HOSPITAL.

BLOOD injected into the peritoneal cavity is quickly absorbed into the circulation, with the exception of a small quantity which remains entangled in the omentum. The volume of the circulating blood is within a few days adjusted to its proper level, so that the concentration of red cells is increased and a condition of polycythaemia produced. The general phenomena are fully described by Hunter,¹ where an abstract of the older literature will be found.

In previous investigations Boycott and Douglas² determined the rate at which the red cells contained in the blood of normal rabbits transfused by direct intravenous injection into other normal rabbits are destroyed. They found that the mean daily amount of haemoglobin destroyed, expressed in terms of oxygen capacity, varied from -0.19 c.cm. to 0.44 c.cm., on an average 0.24 c.cm. It was the immediate object of the present research to see whether the rate of destruction of red cells passed into the circulation via the peritoneum was greater or less than this. In a series of twenty-two experiments a mean daily rate of 0.55 c.cm. was found. From a consideration of the nature of the stimulus which excites a rabbit to destroy the red cells of another rabbit which it may find in its

circulating blood, it appeared that the relatively foreign nature of the cells was an important factor. The degree of foreignness of the cells is presumably increased by passing them through an extravascular position (peritoneum) on their way to the circulation, and it is suggested that this is the reason why cells so transfused are destroyed more rapidly than when they are put straight into the blood of the recipient. With intravenous transfusions the rate of daily destruction increases as the process advances, while with intraperitoneal transfusions the rate is much quicker during the first than during the second week.

The red cells are not destroyed by a process of intravascular haemolysis, nor has it been found possible to induce the production of antolytic or isolytic substances in the blood serum of rabbits by repeated intraperitoneal injections of whole or laked blood, nor by destroying a rabbit's red cells inside the body by such a poison as phenylhydrazine. The initial phase of destruction seems to find its morphological expression in abundant phagocytosis of red cells by the endothelial (stroma) cells of the lymphatic glands and spleen pulp. Within these cells the red corpuscles are broken up, and pass gradually to a condition of amorphous pigmented debris, some of which gives the reaction for inorganic iron. This phagocytosis is very much more abundant with intraperitoneal than with intravenous transfusions—an observation in accordance with the view that the cells are made more foreign by passage through the peritoneum.

Apart from the various other reasons which point in the same direction,³ these observations suggest that intravenous transfusion is to be preferred to intraperitoneal transfusion, as giving a prospect of more lasting benefit to the recipient. This conclusion does not, however, necessarily follow, since experiments show that considerations of whether the red cells are needed in the body can outweigh those concerning the precise degree by which they are foreign to the economy.

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Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

LYSSOPHOBIA OR HYDROPHOBIA?

In June, 1903, my orderly—a Mohammedan Sepoy of the Kapurthala Infantry—was bitten by a dog on the outer side of the left leg below the knee. The wounds (two) healed in eight days, and he had forgotten all about the incident until February 9th, 1905—one year and eight months later—when he felt unwell, irritable, and fretful; that evening he had some fear of water, and was evidently thinking about the bites. On the following day (February 10th), when sitting in the quarter guard, he told his comrades the story of the dog, mentioning his symptoms of the previous day and his fear of water. The native officer in charge did not think him really ill, but at 11 p.m. locked him up in an adjoining room, and at 6 a.m., when he opened the door, found that the man had developed symptoms of hydrophobia. His brothers were sent for, and they conveyed him to his house in the city. He was quite conscious, but, as he bit at the sight of water, his eyes were bandaged during the journey. When I saw him at 11 a.m. on February 11th he was sitting on his bed retching and spitting with a brass basin in front of him. His hands were kept down by a pillow placed in front of them. He was biting and snapping, with quiet intervals. His aged mother watched by his side and when he wanted to bite, a pillow was each time thrust toward him and he bit it. He occasionally raised his hand to his mouth as if to bite, but he never closed his teeth over it, nor did he leave any impression of teeth on the skin, although the pillow presented to him was torn to bits. His eyes were wild, ferrety, intensely congested, and the pupils dilated. In the intervals he spoke naturally, and asked his brother to give me a chair. He held up his leg and pointed out the scars of the bites, which had a blue congested look. With great vehemence he declared that he had felt pain in the

bites on the previous day, and that they were severely painful then. He said he would die, and I feared he must. I gave him 10 c.cm. of antitetanic serum which he swallowed, but was sick soon after. I had to leave the town, but at noon he was ordered a pill containing ext. cannabis ind. and cocaine, 1 grain of each; but was sick after, and probably vomited the pill. He retched again at 1 p.m. and 2 p.m., but slept or was quiet in the intervals, and at 5 p.m., when he was seen by Dr. Sadik Ali, the convulsions had ceased, he asked for an orange which he sucked, and soon after he drank an ounce of water; this was repeated several times, and when on my return next day I drove to his house at 11 a.m., he stood up on his cot and saluted me. He was well, his eyes were clear and normal, and the pulse was 96.

Later I ascertained that at 8 a.m. on February 11th a powder had been administered by a local Hakim, who was said to have cured a case of hydrophobia. Violent sickness and retching followed, and at 3 p.m. a second powder of the same kind was given. After much difficulty I procured from the Hakim enough powders to treat 20 cases. Their composition was given as follows:

Powder No. 1.—Potassium bichromate, 4 grains; some mercury and sulphur triturated together; croton seed, say, 1 to 2 grains; cloves, condiments, etc., to make up a powder of 12 grains.

Powder No. 2.—Common salt, 12 grains.

Both powders to be given at the same time.

I have seen three cases of hydrophobia; one in St. Thomas's Hospital in 1864, a second at Guy's in the Sixties, the third in Amritsar in 1882 when civil surgeon there. I have heard and known of numbers, specially when serving in Central India. I had no doubt that this was a true case of hydrophobia. My assistant, Dr. Sadik Ali, had seen thirteen cases of true hydrophobia in Kapurthala, and had no doubt in his mind. The violent vomiting and retching puzzled us, but this symptom can be attributed to the potassium bichromate. If this was a case of hydrophobia, the man was absolutely cured, and within six hours of my first seeing him, when the violence of the symptoms was such that had they not ceased he must certainly have died from exhaustion.

The *Lancet* of July 18th, 1903, p. 160, contains a report of a case of lyssophobia or spurious hydrophobia.

The patient was a Eurasian medical student, aged 20, who had within the previous year seen, and helped to attend, three cases of hydrophobia. On May 15th, 1903, he was deeply bitten on the base of the left thumb by a rabid dog. While under treatment at the Pasteur Institute, Kasauli, India, on May 22nd, or the eighth day after the bite, he suddenly developed symptoms of hydrophobia. His aspect was one of extreme terror, eyes wide open, pupils dilated; he had great dread and spasm at the sight of or on an attempt to drink water. At first sight his case appeared to be typical of hydrophobia, but against this view was the fact of its being impossible for hydrophobia to develop after so short an incubation period as seven days. He was therefore ordered 15 grains of chloral and 20 grains of potassium bromide in water, which, by dint of firmness, he was induced to swallow, and he retained it. He slept for five hours, woke up much better, and was well by the evening.

My own case differs particularly in the long lapse of time before the appearance of the initial symptoms and by the premonitory symptoms on February 9th and 10th, specially local pain in the site of the bites. The man had no doubt been thinking about these bites and hydrophobia, though what started such ideas after a long period of oblivion is not known. Against the case being hydrophobia is the rapidity of the development of acute symptoms on February 11th, the rapidity of the cure, and the fact that he never bit his own hand, while a pillow was torn to pieces.

Guernsey.

JOSHUA DUKE, Lieut.-Col. I.M.S. (ret.)

AVULSION OF THE EYEBALL DURING INSTRUMENTAL DELIVERY.

IN the Memoranda of the BRITISH MEDICAL JOURNAL of January 22nd I read with great interest Dr. Donaldson's case of avulsion of the eyeball, as strange to say only three days before I had a similar case, the first I had seen or ever heard of, although I have been in practice twenty years. The mother was a primipara, of very diminutive stature and deformed, 20 years of age. She had a contracted pelvis, and I had the greatest difficulty in delivering with forceps.

When the baby was born, I was astonished to find the right eye lying on the cheek. I replaced it, but the child

was dead. A good account of injuries to the child's eyes occurring during birth is contributed by Stumpf, of Munich, to Winckel's *Handbuch der Geburtshilfe*, III, 3, page 491. He says that there is no form of injury, from simple effusion of blood under the conjunctiva to complete destruction of the globe, which has not been seen even after perfectly spontaneous delivery. Subconjunctival haemorrhages may be observed forming semilunar areas around the corneal edge, and even retinal and choroidal haemorrhages with detachment of retina. Coburn made *post-mortem* examinations on 36 children, either stillborn or dead, within a few days after birth. In 5 there were sclerotic and in 17 retinal haemorrhages (1 with detached retina). In 4 haemorrhage into the optic nerve, in 5 haemorrhage into its sheath. In 4 subhyaloid and in 2 intravitreal haemorrhage. Paul estimated the frequency of retinal haemorrhage in spontaneous births at 20 per cent. and at 50 per cent. in cases of contracted pelvis. Such haemorrhages may be very extensive, and if involving the macula there may be permanent visual disturbance. In recent times retinitis pigmentosa has been referred to haemorrhages at birth. Wolff observed the occurrence of haemorrhage in the connective tissue and retina, and also of strabismus in spontaneous birth, with special frequency in cases of contracted pelvis, face presentations, anterior parietal presentations, and forceps cases; but he referred the lesion not to direct pressure, but to the retinal haemorrhage of asphyxia. Werhli thinks that such congenital retinal haemorrhage may be the cause of glioma retinae.

Very extensive haemorrhage may occur during forceps delivery, especially when the blade of the forceps has been applied over the outer canthus, or on the frontal bone, or over the eye itself. Under such circumstances great sclerotic and conjunctival effusions or haemorrhage into the anterior chamber, or into or behind the globe may be seen. These commonly occur in consequence of fracture of the roof of the orbit, or of the upper orbital margin, or of the lacrimal bone, extensive haemorrhage may lead to corneal opacity. Without any malposition of the blades of the forceps, the increased pressure of the cerebro-spinal fluid on the optic nerve may lead to lymph stasis and compression of the central artery, and thus to functional or atropic disturbances in the globe. Retrobulbar effusion may cause traumatic exophthalmos, although spontaneous delivery may also be followed by exophthalmos. Further consequences are paralysis of the muscles, especially of the abducens, the rectus superior, and the orbicularis palpebrarum. Intracranial haemorrhage also may cause such paralysis. In cases in which the forceps are pressed directly on the eye there have been seen luxation of the lens in traumatic cataract.

Cramer has recorded a case of complete rupture of the globe in difficult forceps delivery in anterior parietal presentation.

It is proper to say that, according to very good authorities, it is sometimes very difficult to avoid getting the blades of the forceps into such dangerous positions, especially in narrow pelvis and abnormal presentations, so that it does not follow that the accoucheur is to blame for the damage done to the eye.

The eyes may be injured by careless and violent examination. Wecker gives a case in which the eye was mistaken for the anus, and the eyeball destroyed by the finger. In another case narrated by Bock the eyeball was completely luxated from between the lids, and, in spite of reposition, was lost through suppuration.

Osselt.

G. SYMERS MILL, M.D. Edin.

A NEW VEGETABLE FOR DIABETICS.

I SHOULD like to draw attention to a vegetable now offered for sale in our markets which is thoroughly suited for the use of diabetics on strict diet. It is sold under the name of Chinese artichoke, and the price I have been charged for it is 8d. per lb., half a pound making a good dish. The vegetable has been identified by my colleague, Professor West, as the tuberous rhizomes of a plant known as *Stachys tuberosa*, one of the Labiatae closely allied to our native "woundwort." These contain practically no starch, but this is replaced by inulin, which is present in solution in the cell sap.

Birmingham.

ROBERT SAUNDY.

POISONING BY OIL OF EUCALYPTUS.

In connexion with the cases of poisoning by oil of eucalyptus recorded by Dr. W. R. Kirkness in the *JOURNAL* of January 29th, p. 261, the following case may not be without interest.

R. V., a little girl aged 1 year 8 months, was suffering from bronchitis, and was being treated by the application of eucalyptus oil to the chest externally. On the advice of a sympathetic but ignorant neighbour, the mother gave the child a teaspoonful of the oil by the mouth. About twenty minutes afterwards the child became violently sick, and appeared to suffer intense abdominal pain. Very soon, however, she sank into a semicomatose condition.

When I saw her she was much collapsed, respiration was irregular, soft and sighing, and the pulse was intermittent and very feeble. Vomiting had ceased but the bowels moved frequently. The child was pale, and the temperature was subnormal (96.4° F.). The conjunctival reaction was sluggish, and pinching the skin elicited hardly any reaction. The child was put to bed, well wrapped up in blankets, and hot-water bottles were placed in the cot, and a stimulant in the form of brandy was administered, but no emetic was given, nor was the stomach washed out, as it was thought probable that the oil had been already ejected. The child soon improved, and in two days appeared none the worse for her experience.

In this case probably about 1½ drachms of oil of eucalyptus were given, because a "domestic teaspoonful" is, as a rule, more than a "medicinal teaspoonful," which is equivalent to a drachm. Incidentally, it might be mentioned that in prescribing for children it would be a wise precaution to see the spoon that is to be used for measuring, and the "signetur" could be modified accordingly.

Edinburgh.

J. ALLAN, M.D.

Reports of Societies.

MEDICAL SOCIETY OF LONDON.

Monday, February 28th, 1910.

SAMUEL WEST, M.D., F.R.C.P., President, in the Chair.

Atypical Pneumonia.

SIR JOHN BROADBENT read a paper on some difficulties in prognosis in cases of atypical pneumonia with prolonged pyrexia. The atypical cases were met with in adults chiefly in association with influenza. The insidious onset, the delay in the appearance of physical signs, the intermittent pyrexia might at the outset render the diagnosis obscure; while the absence of a definite crisis, the continued pyrexia lasting, it might be some weeks, with progressive loss of flesh, would render the prognosis a matter of considerable difficulty, as in some cases empyema, or malignant endocarditis, might develop, whilst in others after a prolonged period of septicaemia recovery took place without further complications. In children, the tendency in apical pneumonia to the supervention of symptoms suggestive of cerebro-spinal meningitis, might cause undue alarm, or the vagaries of a prolonged attack of lobular pneumonia might lead to a suspicion of pulmonary tuberculosis. Broncho-pneumonia complicating enteric in children might also mask the symptoms of the latter affection, which in children often ran an atypical course.

Protracted Pyrexia in Pneumonia in Children.

Dr. REGINALD MILLER read a paper on some cases of protracted pyrexia in pneumonia in children. He said that out of 217 cases of pneumonia in children no fewer than 55 (25.3 per cent.) showed fever for a period extending beyond ten days. Such a percentage could not but be regarded as too high, and was, he supposed, due to the fact that the longer the fever lasted the more likely was

the child to be sent to hospital. He divided the 217 cases into primary and secondary pneumonias, including in the former cases of lobar pneumonia and primary broncho-pneumonia, and in the latter such cases as appeared to be due to an extension of bronchitis. These two groups contained 126 and 91 cases respectively. The proportions of the protracted cases in the primary and secondary pneumonias showed little difference, being respectively 26.19 per cent. and 24.17 per cent. When the fever was prolonged beyond ten days the danger to life was considerably increased, the death-rate in the protracted cases being rather more than three times as great as in the unprotracted. That was shown in the following figures. Taking all cases together, the death-rate was 15.20 per cent., being 11.11 per cent. and 20.87 per cent. in the primary and secondary pneumonias respectively; but while in the unprotracted cases only 9.87 per cent. died, in the protracted the mortality was 30.90 per cent.

Dr. W. CAMAC WILKINSON suggested that the injection of tuberculin in adult patients would have cleared up the diagnosis in doubtful cases, where tuberculosis might have been the cause of the disease.

Dr. THEODORE WILLIAMS did not believe that a reaction to tuberculin showed tuberculosis; he would require "a good many reactions" to convince him.

After some remarks by Dr. G. A. SUTHERLAND,

Dr. SAMUEL WEST said that though the tuberculin reaction proved the patient was tuberculous, it did not prove that the inflammation he was suffering from at that time was tuberculous.

THE ROYAL SOCIETY.

Thursday, February 24th, 1910.

Sir ARCHIBALD GEIKIE, K.C.B., President, in the Chair.

The Biochemistry of Growth.

MR. W. CRAMER AND MR. HAROLD PRINGLE contributed two papers on the biochemistry of growth. The first dealt with the total nitrogen metabolism of rats bearing malignant new growths. The nitrogenous metabolism was determined before and after transplantation with a rapidly growing spindle-celled sarcoma. The results showed that less nitrogen was necessary to build up a certain weight of tumour tissue than to build up an equal weight of somatic tissue of the host. No evidence could be obtained that the tumour cells had a higher affinity for nutritive material than the growing cells of the host, or that they secreted substances having a toxic action on the nitrogenous metabolism of the host. The conclusion was that the cells of the new growth derived the nitrogenous material necessary for the building up of new tissue by a sparing of the protein metabolism, so that a smaller amount was utilized as a source of energy and a large amount for the building up of new tissue. The second concerned the distribution of nitrogenous substances in tumour and somatic tissues. Estimations were made of the total nitrogen content of rapidly growing transplanted tumours (carcinoma and sarcoma), and of the tissues of the animals bearing these tumours. The results, which confirm those arrived at by observations recorded in the first paper, showed that the nitrogen percentage of rapidly growing tumours was smaller than that of the tissues of the host or that of the tissues of normal animals. This diminution in the nitrogen percentage was found to be due to the fact that, weight for weight, the cancerous tissue contained only about three-fourths of the amount of protein substances present in the tissues of the host. In other words, with the same amount of protein a bigger mass of tumour tissue than of host tissue could be built up. The simpler abiuret nitrogenous products of cell metabolism, however, were present in slightly greater amount in the cancerous tissue. It was pointed out that these results had a bearing on the mode of growth of cancerous tissue. Since the tissue of a neoplasm could be built up with less protein than the same weight of host tissue, the former must grow more rapidly than the latter under circumstances where both were using up nitrogenous material for mere growth at the same rate.

THE death of Dr. CONSTABLE, of Leuchars, was not unexpected, as he had been in feeble health for some months. He long practised in Leuchars, and on his retirement some years ago was presented with a purse of sovereigns by his patients and friends. Dr. Constable graduated M.D. at Glasgow University in 1862, and was parochial medical officer for several parishes in Fife. He was a past-president of the Fifeshire Medical Association.

ANOTHER Crimean veteran has passed away in the person of Surgeon-Major-General GEORGE LANGFORD HINDE, C.B., who died recently at Reading, aged 77 years. He entered the Army Medical Department as an Assistant Surgeon, May 11th, 1855; was made Surgeon, September 19th, 1868; Surgeon-Major, March 1st, 1873; Brigade-Surgeon, April 15th, 1881; Surgeon-Colonel, April 10th, 1883; and Surgeon-Major-General, January 13th, 1892, in October of which year he retired from the service. He served in the Crimea in 1855, being present at the siege and fall of Sebastopol, for which he received a medal with clasp and the Turkish medal. He was also in the Boer war in 1881, and with the Soudan expedition in 1884-5, for which latter campaign he was mentioned in dispatches, received a medal with clasp and the Khedive's bronze star, and appointed a C.B.

Universities and Colleges.

UNIVERSITY OF OXFORD.

M.B., B.Ch.—In congregation holden on Saturday, February 15th, the degree of Bachelor of Medicine and Surgery was conferred on George Harold Cross, Balliol College, and Henry Pratt Newsholme, Balliol College.

Examination in Preventive Medicine.—The statute relating to the examination in preventive medicine has been amended by Convocation so as to allow of the examination being held twice a year, in Michaelmas and in Easter or Trinity Terms.

SOCIETY OF APOTHECARIES OF LONDON.

AT the examination held in February the following candidates passed in the subjects named:

Surgery.—*N. L. Clarke, Cambridge and London Hospital; *A. Cordon, Birmingham; *A. H. C. Dawes, Westminster Hospital; H. P. Jelley, Edinburgh; *O. R. Kelly, Westminster Hospital; *J. G. Morgan, London Hospital; *R. Rowlands, Glasgow and Westminster Hospital; *H. S. Tumber, Sheffield; *A. Whitby, Dublin; *G. F. Wilson, London Hospital.

Medicine.—*N. L. Clarke, Cambridge and London Hospital; H. P. Jelley, Edinburgh; *J. G. Morgan, London Hospital; *J. K. Nariman, Bombay and St. Mary's Hospital; *E. Newhouse, Leeds; *L. M. Potter, Geneva and Royal Free Hospital; *A. H. Rich, University College Hospital; *H. T. Roberts, St. Mary's Hospital; *H. S. Tumber, Sheffield.

Forensic Medicine.—N. L. Clarke, Cambridge and London Hospital; R. Eytton-Jones, Liverpool; H. P. Jelley, Edinburgh; L. M. Potter, Geneva and Royal Free Hospital; W. H. Watson, Guy's Hospital.

Midwifery.—N. L. Clarke, Cambridge and London Hospital; J. B. Holmes, Manchester; O. R. Kelly, Westminster Hospital.

* Section I. † Section II.

The diploma of the Society was granted to the following candidates, entitling them to practise medicine, surgery, and midwifery: N. L. Clarke, A. H. C. Dawes, O. R. Kelly, J. G. Morgan, and A. Whitby.

THE first meeting held out of London by the Royal Meteorological Society took place in the Physical Laboratory of the Manchester University on February 23rd, the President, Mr. H. Mellish, in the chair. Dr. Hopkinson, the Vice-Chancellor, who welcomed the society, said that the history of the university showed that it was not merely in expression, but in act, interested in this branch of scientific work, as much had been accomplished in meteorology by the work that had been initiated and so liberally supported by Dr. Schuster. Dr. A. Schuster, who also welcomed the society, said that although meteorology might be regarded by some as a small part of physical science, yet it was intimately connected with a number of other subjects, especially with one large subject which he thought had received far too little attention in the universities—namely, the whole physics of the globe. Dr. W. Makower related the results of the investigation of the electrical state of the upper atmosphere made at the Howard Estate Observatory, Glossop, by himself, Mr. A. J. Makower, and Miss Margaret White. Mr. A. W. Harwood read a paper on twenty-five registering balloon ascents made from Manchester on June 2nd to 3rd, 1909. The balloons were sent up at intervals of one hour, and interesting and valuable results were obtained.

The Services.

ROYAL ARMY MEDICAL CORPS (TERRITORIAL).

THE FIRST SOUTH MIDLAND FIELD AMBULANCE.

At the annual supper of the First South Midland Field Ambulance, held in Birmingham, the commanding officer, Major C. H. Howkins presiding, the officers of the Field Ambulance present were Captains Craig and Barling and Lieutenants McCall, Sturrock, Lunn, Boedicker, and Kimpton. A large number of non-commissioned officers and men attended, and the guests included Colonel Whitcombe, Lieutenant-Colonel Lister, Majors Robertson, Thompson, Rooker, and Newton, Captains Farrant, Kirkby, Orton, and Goode, Lieutenants Nuthall, Hobling, Webb, Spring, Forrest, and Kingston, and Chief Superintendent Gilbert (St. John Ambulance Brigade). The First Field Ambulance is now at full strength, and the ranks of the special reserve are beginning to be filled in.

THE FIRST SOUTH MIDLAND MOUNTED BRIGADE FIELD AMBULANCE.

The annual dinner and smoking concert of the First South Midland Mounted Brigade Field Ambulance were held at Birmingham on February 26th. The chair was taken by Major W. H. Stephen, the officer commanding, and there were present Colonel W. P. Whitcombe, Majors J. E. H. Sawyer and C. Howkins, Captains Stephens and Craig, Lieutenants Forrest, Hobling, Buchanan, and Spring, and a large number of non-commissioned officers and men. Colonel Whitcombe congratulated the Field Ambulance on the excellent progress it had made, for it was now at full strength, and contained a keen and a superior class of men in its ranks. He complicated Major Stephen on having brought the ambulance to such great efficiency in so short a time, and paid tribute to the splendid services of Captain Stephens, the Adjutant of the South Midland Division of the R.A.M.C.(T.). He also announced that the War Office had made a grant towards the construction and equipment of a new head quarters at Witton.

CHURCH PARADE AT ASTON.

A church parade was held at the Aston Parish Church on February 20th, and there attended the 8th Battalion the Royal Warwickshire Regiment, the 1st Mounted Field Ambulance, the 1st and 2nd Field Ambulances, South Midland Division, and the 1st Southern General Hospital. The R.A.M.C. units were commanded by Colonel Whitcombe, the Administrative Medical Officer of the South Midland Division. Considering the very inclement weather there was a good attendance of officers and men. The sermon was preached by the Right Rev. Bishop Taylor Smith, C.V.O., D.D., Chaplain-General to His Majesty's Forces.

CONDITIONS OF PROMOTION.

WE are asked the following question: A medical officer, whose commission in the Volunteers is dated 1899, was civil surgeon in charge of troops for three years before, and has been in medical charge of recruiting in the town in which he resides for about thirteen years. He is the oldest officer in his regiment, and desires to know whether he is entitled to apply for promotion to the rank of surgeon-major.

* Presumably this officer has been transferred to the Territorial Force either as Surgeon-Captain in his regiment or as Captain R.A.M.C.(T.) attached to the regiment. When he has served eight years and a half as Surgeon-Captain or Captain (Volunteer service will count) he will probably be promoted if he makes application through the proper channel.

Public Health

AND

POOR LAW MEDICAL SERVICES.

THE APPOINTMENT OF MEDICAL OFFICERS OF HEALTH.

W.—The appointment of a medical officer of health, one-half of whose salary will be paid out of the Exchequer grants of a county council, must be made in accordance with the terms of the Order of the Local Government Board dated March 23rd, 1891. This Order requires the appointment to be advertised. A town of over 50,000 inhabitants which is a county borough receives the Exchequer grants. The payment of one-half of the salary of the medical officer of health out of the grants would therefore be a mere question of accounts, and if it were not so paid the funds of the town would suffer no loss. It would appear from this that the medical officer of health of a county borough may be appointed in disregard of the Order of March 23rd, 1891. The medical officer of health of a district or a combination of districts with a population of 50,000 or more persons is required by Section 18 (2) of the Local Government Act, 1888, to possess a qualification in public health, or have been for three years prior to 1888 a medical officer or medical inspector of the Local Government Board, or for three consecutive years prior to 1892 the medical officer of health of a district with a population of at least 20,000 persons.

Medical News.

THE Naval Medical Dinner will take place in June, and a notice giving details will be issued later on.

THE annual general meeting of the Medical Graduates' College and Polyclinic will be held at 22, Chenies Street, W.C., on Friday next, at 5.15 p.m.

At a meeting of the Pharmaceutical Society on Tuesday next, at 8 p.m., Professor Arthur W. Crossley, F.R.S., will read a paper, illustrated by lantern slides, on the utilization of atmospheric nitrogen.

THE Secretary of State for the Colonies has appointed Mr. W. D. Ellis, of the Colonial Office, to be a member of the Advisory Committee on medical and sanitary questions connected with the British Colonies and Protectorates in Tropical Africa.

At a provincial meeting of the Royal Sanitary Institute at Newcastle-upon-Tyne on March 11th, at 7.30 p.m., a discussion on sanitary administration, with reference to legislation, past and recent, will be opened by Dr. H. Kerr, Assistant M.O.H. On the afternoon of the same day a visit will be paid to the new hydrolyzing works at Durham.

At a meeting to be held shortly at Hounslow, Sir R. Douglas Powell, President of the Royal College of Physicians, will deliver an address in connexion with the proposal to establish a consumption sanatorium for Middlesex by private enterprise; the attempt to establish such a sanatorium under the county authority has failed.

AN association for the repression of quackery has lately been founded at Dresden. At the inaugural meeting an address was delivered by Dr. Neustätter, joint editor of the *Gesundheitslehrer*. Dr. Beythien, head of the Chemical Analysis Office of the City of Dresden, was elected the first president of the new society.

OWING to the lamented death of Dr. W. B. Ransom, there is a vacancy for an honorary physician on the staff of the General Hospital, Nottingham. The hospital has within the last few years suffered many losses through the death of Dr. Ransom, senior and junior, and of Dr. Brookhouse, and the appointment of Dr. Handford to be Medical Officer to the Notts County Council.

DR. F. W. ANDREW, medical officer of health, has recently made a report upon the vital statistics of the Hampstead Garden Suburb. The number of births registered was 33, being at the rate of 13.5 per 1,000. No death of an infant occurred during the year, and 3 of the 4 deaths were of persons over 65 years of age. The only cases of infectious disease were 7 cases of scarlet fever, a disease which had been prevalent throughout the district; the cases in the Garden Suburb were traceable to outside cases in school life. The medical officer of health considers that these returns speak well for the health of the community.

THE President of the Board of Education has appointed a Departmental Committee to inquire whether the cost of building public elementary schools can properly be reduced, and whether any alteration in the law is required to authorize the adoption of materials or methods of construction different from those ordinarily employed at present. The chairman of the committee is Mr. L. A. Selby-Bigge, C.B., Principal Assistant Secretary of the Elementary Education Branch of the Board of Education, and the other members are Mr. N. T. Kershaw, C.B., Assistant Secretary of the Local Government Board, and Mr. F. Clay, Architect of the Board of Education. Mr. J. G. Milne, Senior Examiner of the Board of Education, will act as secretary.

SIR GEORGE COUZENS presided on February 25th over the annual meeting of the subscribers to the Royal Portsmouth Hospital, held in the Town Hall. The report stated that there had been an increase in all departments of the institution's work, the number of patients treated being the largest recorded in any single year. Two fresh instalments of the new hospital—namely, the children's wards and an out-patient department—had been completed. The latter, which with the equipment cost £4,583, was the munificent gift of Mr. Woolmer White. It had been found necessary to provide additional accommodation for the nursing staff, and a new nursing home was being built, towards the cost of which an anonymous donor had promised to give £2,000 on condition that £5,500 was raised by the subscribers during three years. Arrangements are being made for a systematic canvass of the town and district, by which it is hoped to raise this sum and also to increase the annual income. The excess of expenditure over the ordinary income for the year 1909 was £2,094 17s. 3d.

Letters, Notes, and Answers.

BRITISH MEDICAL ASSOCIATION AND BRITISH MEDICAL JOURNAL.

THE offices of the British Medical Association and of the BRITISH MEDICAL JOURNAL are at 429, Strand, London.

COMMUNICATIONS respecting Editorial matters should be addressed to the Editor, 429, Strand, London, W.C.; those concerning business matters, advertisements, non-delivery of the JOURNAL, etc., should be addressed to the Office, 429, Strand, London, W.C.

TELEGRAPHIC ADDRESS.—The telegraphic address of the EDITOR of the BRITISH MEDICAL JOURNAL is *Attology, London*. The telegraphic address of the BRITISH MEDICAL JOURNAL is *Articulate, London*.

TELEPHONE (National):—

2631, Gerrard, EDITOR, BRITISH MEDICAL JOURNAL.

2630, Gerrard, BRITISH MEDICAL ASSOCIATION.

2634, Gerrard, MEDICAL SECRETARY.

ORIGINAL ARTICLES and LETTERS forwarded for publication are understood to be offered to the BRITISH MEDICAL JOURNAL alone unless the contrary be stated.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate with the Office 429, Strand, W.C., on receipt of proof.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look at the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

Queries, answers, and communications relating to subjects to which special departments of the BRITISH MEDICAL JOURNAL are devoted will be found under their respective headings.

QUERIES.

F. H. desires to know whether injections of fibrolysin are likely to benefit a case of fibrous ankylosis of joints (metacarpal) following gonorrhoeal rheumatism of some four months' duration.

J. P. desires to hear of any institution for a lady aged 65, very deaf, and unprovided for, unable to earn her own living, but who could do a little light household duty; a few shillings a week payment might possibly be arranged.

EPIDEMIC JAUNDICE IN CHILDREN.

DR. J. H. POWER asks for information as to the cause of simple jaundice in children living in the same house. He has lately met with four cases in the same family, and has come across several others.

** Although the occurrence of "infectious" jaundice is fairly generally recognized, little is said regarding it in most of the ordinary textbooks on children's diseases. Emmett Holt merely states that an epidemic had been noted by Rehn (of Frankfurt). In the textbook of children's diseases by Williams is a concise account of most that was known of the disorder at that time. Professor Stoops, of Berne, in Pfaundler and Schlossmann's treatise on diseases of children (vol. iii), says that widespread epidemics have been repeatedly noticed in early life. He has seen several in Berne, and refers to others elsewhere. In one epidemic in Berne it was traced to infection of the water supply. The complaint is clearly microbic in origin, but the responsible micro-organism has not been definitely identified. In one epidemic the *Bacillus proteus fluorescens* was considered to be the responsible agent, and in others the *Bacillus coli*. Inconclusive results were obtained from clumping with typhoid and paratyphoid bacilli. Hutinel and Prosper Merklen (*Les maladies des enfants*, Hutinel, vol. iii) state that epidemics would appear to be more common in England than elsewhere. They refer to the account of one by Brunnig in the eighteenth century, and to later ones by Meissner, Holmes, Rehn, and Meiner. They give references to BRITISH MEDICAL JOURNAL, 1894, vol. i; Hermann Fleisch, *Jahrb. f. Kinderheilk.*, 1904, Bd. ix; Fringuet, *Presse méd.*, 5 Juillet, 1899; Renon, *Thèse de Paris*, 1895; Lireux, *Thèse de Paris*, 1894. The works of Pfaundler and Schlossmann, and Hutinel contain descriptions of the epidemic form of the disease. Another account will be found in the article by Dr. William Hunter in Allbutt's *System*.

Association Notices.

BRANCH AND DIVISION MEETINGS TO BE HELD.

LANCASHIRE AND CHESHIRE BRANCH.—A meeting of the Branch Organization and Finance Committee will be held at the Liverpool Medical Institution on Wednesday, March 9th, at 4.30 p.m.—F. CHARLES LARKIN, Honorary Secretary, 54, Rodney Street, Liverpool.

LANCASHIRE AND CHESHIRE BRANCH: ALTRINCHAM DIVISION.—A special meeting of the Division will be held in the Board Room of the Altrincham Hospital on Thursday, March 17th, at 4.30 p.m. prompt. Tea will be served at 4 p.m. Further particulars in future notice.—H. G. COOPER, Honorary Secretary.

LANCASHIRE AND CHESHIRE BRANCH: WARRINGTON DIVISION.—A meeting of the Division will be held at the Infirmary, Warrington, on Tuesday, March 8th, at 4 p.m. Agenda: Research Defence Society. Hospitals Board (SUPPLEMENT, April 10th, 1909). Poor Law Reform (SUPPLEMENT, February 5th, 1910). The Relation of Homoeopathy to the Association (SUPPLEMENT, February 12th, 1910). Medical Sociology. Public Medical Service. Other correspondence.—T. A. MURRAY, Honorary Secretary.

SOUTH-EASTERN BRANCH: MAIDSTONE DIVISION.—The next meeting of this Division will be held on Friday, March 25th, 1910, at 3.30 p.m. The Executive meeting will be at 3 p.m. Any member having subjects to bring forward is requested to communicate with the Honorary Secretary, as early as possible.—GEORGE POTTS, Honorary Secretary, Ophthalmic Hospital, Maidstone.

YORKSHIRE BRANCH.—The next meeting of the Branch will be held at the Bull Hotel, Wakefield, on Wednesday, March 16th, at 4 o'clock. Council meeting at 3.15. Members intending to read papers, show cases, or propose new members are requested to communicate at once with the Honorary Secretary. Members will dine together at 6.30.—ADOLPH BRONNER, Bradford, Honorary Secretary.

Vacancies and Appointments.

This list of vacancies is compiled from our advertisement columns, where full particulars will be found. To ensure notice in this column, advertisements must be received not later than the first post on Wednesday morning.

VACANCIES.

ASHTON-UNDER-LYNE UNION.—Assistant Resident Medical Officer (male). Salary, £130 per annum.

BIRMINGHAM: GENERAL HOSPITAL.—Assistant House-Surgeon. Salary at the rate of £40 per annum.

BIRMINGHAM: QUEEN'S HOSPITAL.—House-Surgeon. Salary at the rate of £50 per annum.

BRADFORD CHILDREN'S HOSPITAL.—House-Surgeon (male). Salary, £100 per annum.

BROMLEY BOROUGH EDUCATION COMMITTEE.—Temporary School Medical Officer (female). Salary at the rate of £20 per calendar month.

CARDIFF: UNIVERSITY COLLEGE OF SOUTH WALES.—Professor of Pathology and Bacteriology. Salary, £450 per annum.

CARLISLE: CUMBERLAND INFIRMARY.—Resident Medical Officer (male), to act as House-Physician and House-Surgeon for six months each. Salary at the rate of £80 and £100 per annum respectively.

CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's Inn Road, W.C.—House-Surgeon. Salary at the rate of £50 per annum.

CHELSEA HOSPITAL FOR WOMEN, Fulham Road, S.W.—Clinical Assistant.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—(1) House-Physician (male); salary at the rate of £75 per annum. (2) Physician to Out-patients; honorarium, 40 guineas per annum.

CITY OF LONDON LYING-IN HOSPITAL, City Road, E.C.—Resident Medical Officer. Salary at the rate of £50 per annum.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—House-Surgeon (male). Salary at the rate of £75 per annum.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway, N.—(1) Senior House-Surgeon. (2) Two Junior House-Surgeons. (3) Senior House-Physician. (4) Junior House-Physician. Salary for senior officers at the rate of £45 per annum and for juniors £35 per annum.

HUDDERSFIELD INFIRMARY.—(1) Senior Assistant House-Surgeon. (2) Junior House-Surgeon (males). Salary, £80 and £60 per annum respectively.

HULL ROYAL INFIRMARY.—House-Physician. Salary, £100 per annum.

LEEDS TUBERCULOSIS ASSOCIATION.—Resident Medical Officer for the Sanatorium at Gateforth. Salary at the rate of £100 per annum.

LIVERPOOL INFIRMARY FOR CHILDREN.—Resident House-Surgeon. Salary at the rate of £60 per annum.

LIVERPOOL: ROYAL SOUTHERN HOSPITAL.—(1) House-Physician. (2) House-Surgeon. Salary at the rate of £60 per annum each.

LONDON SCHOOL OF TROPICAL MEDICINE, Royal Albert Dock, E.—Craggs Research Prize. Value, £50.

MANCHESTER CHILDREN'S HOSPITAL, Pendlebury.—Male Resident Medical Officer. Salary for first six months £40, and for second six months £50.

MANCHESTER: VICTORIA UNIVERSITY.—(1) Ashby Memorial Scholarship, value £100. (2) Two Entrance Scholarships in Medicine, value £100 each.

MARGATE: ROYAL SEA BATHING HOSPITAL.—Resident Surgeon, to act as Junior and Senior for six months each. Salary at the rate of £80 and £120 per annum respectively.

METROPOLITAN HOSPITAL, Kingsland Road, N.E.—(1) Resident Anaesthetist. (2) House-Physician. (3) House-Surgeon. (4) Assistant House-Physician. (5) Assistant House-Surgeon. Salary at the rate of for (1) £80 per annum and £10 on completion of annual report, for (2) and (3) £40, and for (4) and (5) £20.

MIDDLESEX HOSPITAL, W.—Medical Registrar.

NATIONAL HOSPITAL FOR DISEASES OF THE HEART, Soho Square, W.—Honorary Assistant Physician.

NORWICH: NORFOLK EDUCATION COMMITTEE.—Assistant Medical Officer. Salary, £250 per annum.

NORWICH: JENNY LIND INFIRMARY FOR CHILDREN.—Lady Resident Medical Officer. Salary, £50 per annum.

NOTTINGHAM: GENERAL HOSPITAL.—Honorary Physician.

PRESTWICH: COUNTY ASYLUM.—Junior Assistant Medical Officer. Salary, £150 per annum, increasing to £250.

QUEEN'S HOSPITAL FOR CHILDREN, Hackney Road, E.—(1) Pathological Registrar. (2) Assistant Resident Medical Officer. (3) House-Surgeon. (4) Surgeon in charge for out-patient department. Salary at the rate of for (1) £200 per annum, for (2) £75, and (3) £60.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City Road, E.C.—Dental Surgeon in Out-patient Department.

SALFORD ROYAL HOSPITAL.—(1) House-Surgeon. (2) Junior House-Surgeon. Salary at the rate of £60 and £50 per annum respectively.

SALFORD UNION.—Two Male Resident Medical Officers at the Union Infirmary. Salary, £120 per annum each.

STAFFORD: STAFFORDSHIRE GENERAL INFIRMARY.—Assistant House-Surgeon. Salary, £82 per annum.

SURGICAL AID SOCIETY, Salisbury Square, E.C.—Surgeon.

WARRINGTON INFIRMARY AND DISPENSARY.—Junior House-Surgeon. Salary at the rate of £100 per annum.

WARRINGTON UNION.—Assistant Resident Medical Officer (male). Salary, £125 per annum.

WINCHESTER: ROYAL HAMPSHIRE COUNTY HOSPITAL.—House-Physician.

WISBECH: NORTH CAMBRIDGESHIRE HOSPITAL.—Male Resident Medical Officer. Salary, £150 per annum.

CERTIFYING FACTORY SURGEON.—The Chief Inspector of Factories announces a vacancy at Montrose, co. Forfar.

APPOINTMENTS.

ADAMS, W. F., M.R.C.S., L.R.C.P., Certifying Factory Surgeon for the Rayleigh District, co. Essex.

BARON, R. W., M.B., Ch.B.N.Z., District Medical Officer of the Hendon Union.

BARRS, J. W., F.R.C.S.I., Honorary Surgeon to the Walthamstow Hospital.

CARSTAIRS, C. Douglas, M.D., D.Sc., F.R.S.E., Extern Examiner in Medical Jurisprudence and Hygiene in the National University of Ireland.

FREER, B., M.D.Camb., District Medical Officer of the Lichfield Union.

GEOGHEGAN, A. V., M.D., B.Ch.Dub., Medical Officer of the Workhouse of the Risbridge Union.

MCGOWAN, N., L.R.C.P. and S.Edin., District Medical Officer of the Risbridge Union.

MILES, T. G., L.S.A., District Medical Officer of the Ross Union.

MOORE, S. G., M.D.Vict., D.P.H., Certifying Factory Surgeon for the West Huddersfield District, co. York.

MORROW, H. L., M.B., Ch.B.Edin., Certifying Factory Surgeon for the Ballyleson District, co. Down.

PRATT, Eldon, M.D.Lond., M.R.C.S., L.R.C.P., Honorary Surgeon, Whitehaven and West Cumberland Infirmary.

ROWLEY, O. F., M.R.C.S., L.R.C.P., District Medical Officer of the Penistone Union.

SMALLWOOD, E., M.D., M.R.C.S., L.R.C.P., L.S.A., Medical Officer for the Norwood District; Medical Officer to the Home for Aged Poor, Norwood.

SMART, W., F.R.C.S., L.R.C.P.Irel., District Medical Officer of the Brixworth Union.

WATSON, J. N., M.R.C.S., L.R.C.P., Certifying Factory Surgeon for the Wootton Bassett District, co. Wilts.

WHITELEY, H. W., M.B., Ch.B.Vict., District Medical Officer of the Bradford (Yorks) Union.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 8s. 6d., which sum should be forwarded in post-office orders or stamps with the notice not later than Wednesday morning, in order to ensure insertion in the current issue.

BIRTH.

TURNER.—On February 27th, at 17, Harley Street, W., the wife of William Turner, M.S., F.R.C.S., of a son (Douglas Hamilton),

DEATHS.

CLARK.—On February 24th, at Lichfield, James Clark (only son of John Clark), M.D.Univ.Aberd., L.R.C.S.E., F.R.C.S.E., aged 75. Friends please accept this (the only) intimation.

PITTS-TUCKER.—On February 23rd, at Sutton, Isle of Ely, suddenly, F. A. Pitts-Tucker, M.B.C.S., L.R.C.P., aged 42.

SPENCE.—At St. Ninians, Burntisland, on February 24th, Robert Spence, M.B., C.M., aged 62 years.