The following may be given as an example of the serum treatment which has been successfully employed in early, but well marked, tetanus:

Day.	Sub-cutaneous.	Intra-muscular.	Intra-thecal.
First day	—	8,000	16,000
Second day	—	8,000	16,000
Third day	—	4,000	8,000
Fourth day	—	4,000	8,000
Fifth day	2,000	—	—
Seventh day	2,000	—	—
Ninth day	2,000	—	—

2. *Symptomatic.*—Symptomatic treatment consists in the exhibition of sedative drugs. Perhaps the most suitable is morphine in ¼ grain doses, and administered every four hours; potassium bromide, chloral, chloretone, paraldehyde are also given by the mouth or rectum.

Carbolic Acid.—There is no convincing evidence that the carbolic acid treatment of tetanus has any curative effect whatever, or any action upon the course of the disease.

Magnesium Sulphate.—Treatment by sulphate of magnesium has no effect upon the disease itself. The cessation of spasm which follows an injection is only temporary, and is purchased at the cost of risks which are far from negligible. It is very doubtful if any real advantage is gained by its use.

Surgical Treatment of the Wound.

There is a general impression that it is of advantage to excise the wound or amputate the limb in cases of tetanus. The matter is one upon which there is considerable difference of opinion. From the clinical experience of many observers it would seem that these procedures are of little avail, and may actually accelerate the course of the disease. Animal experiment, so far as it goes, also suggests that operative measures are useless.

While more evidence is required before any dogmatic statement can be made, it appears safer to abstain from surgical interference with the wound until the ordinary treatment for tetanus has been carried out, unless there exist other and imperative reasons for immediate operation.

The irrigation of the wound with oxidizing agents, such as hydrogen peroxide, when this can be done without undue disturbance and without opening up the wound, is to be recommended.

Reporting and Care of Cases.

In every Command one or more officers with special knowledge should be detailed by the D.D.M.S. to visit and assist in treatment of cases of tetanus. These officers should be at the general hospitals of the district, and their names and telephonic addresses should be communicated to the officers and medical practitioners in charge of subsidiary and V.A.D. hospitals.

On occurrence of a case of tetanus the appointed officer will be immediately informed, and he will at once proceed to visit the case and offer assistance in the carrying out of such treatment as has been suggested in the present memorandum. He will if necessary assist in the operation of lumbar puncture and intrathecal injection. This will seldom be necessary, as from what has already been said as to the danger of even an hour's delay this intrathecal injection will usually have been done before his arrival, unless the distance to be travelled is short. He will make careful inquiry into the case in order to ascertain if any early symptoms had been present and had escaped notice. He will note what prophylactic injections had been made, and if omitted, why they were omitted. When visiting the hospital where the case has occurred he will ascertain if the other wounded men are receiving prophylactic injections. He should see that sufficient notes of the case are being kept in order that the tetanus form can be filled up as fully as possible. For example, it is very seldom that the distinguishing marks on the bottles of serum are reported. If serum trouble arises it is evident that this information would be useful. He will forward an inspector's report to Surgeon-General Sir David Bruce, with as little delay as possible. The ordinary tetanus report will be filled in by the medical officer in charge of the case.

Officers in charge of hospitals will be responsible for the administration of the second and following prophylactic doses of antitoxin to all wounded under their care, unless reasons exist for withholding them. The administration of antitoxin will be recorded on the case-sheet. They will also, as heretofore, inform Surgeon-General Sir David Bruce, by telegram, of the occurrence of a case of tetanus, and on the death or recovery of the case forward the usual tetanus report in accordance with War Office instructions.

Any abnormalities of behaviour of antitetanic serum should be carefully noted and reported.

As the Tetanus Committee was appointed for the purpose of studying tetanus, it is greatly to be desired that every medical officer will co-operate in a collective investigation, and submit any evidence in his possession which may add to our knowledge of the disease and its treatment.

War Office, S.W.,
October 25th, 1916.

APPENDIX.

The Method of Performing an Intrathecal Injection.

The patient should preferably be under general anaesthesia, but the operation can be performed with local anaesthesia. The skin over the area of the fourth and fifth lumbar spines should be painted with iodine or cleansed with soap and water followed by an antiseptic. A spinal needle and 20 c.cm. syringe should be boiled in normal saline, *and the surgeon must observe throughout the most rigorous aseptic precautions.*

The patient is bent head to knees, so as to present as fully a curved back to the operator as possible, and the position of the fourth lumbar spine ascertained by drawing an imaginary line between the crests of the ilia.

The tip of the finger is placed on the supraspinous ligament connecting the summits of the spinous processes of the fourth and fifth lumbar vertebrae. The needle is inserted about three-eighths of an inch to one side of the middle line and directed forwards and slightly upwards and inwards. If the needle strikes the bone it should be withdrawn and a fresh attempt made. The canal is reached at a depth, on an average, of about 2½ inches. The trocar is withdrawn and about 20 c.cm. of cerebro-spinal fluid allowed to flow out into a measured vessel. The syringe is then fitted to the needle and the serum injected.

It is important that the serum be heated to the temperature of the body and the injection made very slowly.

The canal can also be reached by pushing the needle through the supraspinous ligament in the middle line half-way between the two spinous processes.

If several injections have to be made, it is well to choose fresh sites.

Blocking of the flow of the cerebro-spinal fluid by a blood clot may be overcome by reinserting and withdrawing the trocar.

The bed should be tilted at the foot and the pillow removed for an hour or two after the injections.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

TWO CASES OF ACUTE ILLNESS IN OLD MEN WITH VALVULAR DISEASE OF THE HEART.

A man aged 85, who was in the habit of taking frequent "nips" of any drink in which his friends would join him, was taken ill with pneumonia. Dr. Russell, of Birmingham, saw him with me in consultation on the fifth day of the attack, and we agreed that he had no chance of surviving, but the crisis came on the twelfth day, he made an uninterrupted recovery, and lived for two years afterwards. The patient had had a loud systolic bruit at the apex of the heart ever since I had known him, which was about eight years.

A man, aged 93¾, was operated on at the age of 79 for strangulated inguinal hernia, but his condition at the time was too serious to admit of a radical cure being performed. Latterly he omitted to wear a truss, with the consequence that the hernia again became strangulated. I was unable to reduce it after the application of an icebag, so I operated; I found about 10 in. of small intestine in the sac, and one coil was adherent to the lower part of the sac by a band about the thickness of the little finger. The intestine was of a dusky red colour, but not gangrenous; it was returned without resection. This patient also made an uninterrupted recovery. I do not know whether this constitutes a record, but I should think it did. He also has a loud systolic bruit at the apex of his heart.

The interesting point about both cases is the fact that both had a loud systolic bruit, and I think that probably

this had much to do with their recovery, as the arteries in both cases were very elastic, and there were no signs of high arterial tension.

Stratford on-Avon. WILLIAM F. BOX, M.B.Lond.

AN UNUSUAL CAUSE OF DUPUYTREN'S CONTRACTION.

I RECORD this case as it may be useful and instructive from more than one point of view.

The patient, a miner of about 40 years of age, had had asthma and bronchitis for over fifteen years to my knowledge. For the last five or six years the asthma attacks have been very severe—so bad, in fact, that he has not done any work for the last three years.

His chest is typically emphysematous (barrel-shaped) on account of the expiratory dyspnoea, and he has to bring all his extraordinary muscles of respiration into play. In order to do this he requires a fixed point to work from, which he gets by pressing his hands firmly on the bed. This pressure on the hands has caused the absorption of the palmar fat and the subsequent adhesion of the skin and fascia.

I have never seen a case of Dupuytren's contraction in a miner, although I have practised among them for the last fifteen years. These cases are common, I know, among carpenters, electricians, etc. For the asthma, I tried the usual remedies without much success, but the patient got most relief from potassium iodide and creosote mixture, together with an indiarubber jacket (the first was made out of the inner tube of a motor tyre), perforated, and put on tightly next the skin to assist expiration.

Wigan. ROBERT GIRDWOOD, L.R.C.P.Edin.

Reports of Societies.

THE CARE OF PREGNANT WOMEN.

AT a meeting of the Section of Obstetrics and Gynaecology of the Royal Society of Medicine on November 2nd, the President, Dr. G. F. BLACKER, being in the chair, Dr. S. G. MOORE M.O.H Huddersfield, opened a special discussion on the need for improvement in the care of pregnant women. The subject, he said, was of national importance, and should be dealt with on national and not local lines. In child-bearing, discomfort, disease, and death were, strictly speaking, abnormal. There were substantial reasons for the belief that part of the reduction of the birth-rate resulted from a fear of them. An average of 3,500 deaths occurred from childbirth each year in England and Wales. A far greater number endured preventable suffering and disablement. A compilation of the entries in the returns of deaths connected with pregnancy for Huddersfield from January, 1906, to October, 1916, showed that eclampsia caused 30 deaths; albuminuria and eclampsia, 3; albuminuria, 36; septic absorption, puerperal fever, and pneumonia, 32; *post-partum* and *ante-partum* haemorrhage and retained placenta, 24; conditions connected with parturition, Caesarean section, etc., 11; embolism, pulmonary and cerebral, 10; and intractable vomiting, 2; other causes connected with pregnancy accounted for only inconsiderable numbers. Some of the women with albuminuric conditions would not have died if they had been under proper care for two months; deaths from septic causes were entirely eliminable; how far deaths could be diminished in the remainder was uncertain. As a means of securing improvement of the conditions of pregnant women he advocated notification of pregnancy, since the majority did not come under a doctor's care until abnormal conditions had had time to become serious. He could see no objection to notification, since it was an honourable state which could not be concealed. On the receipt of the notification the woman could be examined and her surroundings considered by a duly qualified medical practitioner. The sanitary authority should take no action, but each case should be referred to the family doctor. Such a scheme had been in operation at Huddersfield during the present year, a fee of 2s. 6d. being paid to doctor or midwife for notification, which was only permissible with the woman's consent. All cases were referred to the family doctor. Help was obtainable from voluntary organizations, not from the sanitary authority. From January 1st to October 31st 1,536 births had been notified, and 156 pregnancies—that is, about 10.1 per cent. Of the pregnancies, 130 were uncomplicated, and 26 accompanied by complications. There were varicose veins in 7, exanthemata 6, vomiting 2, albuminuria 2, phthisis 2, serious domestic difficulties 2, haemorrhage 1, chicken-pox 1, diphtheria 1, sepsis 1, and prolapse 1. The birth rate was declining alarmingly; the death-rate had also fallen considerably, but could not be reduced much more. Not only had the deaths of the mothers and children to be considered, but the soundness of the surviving children. Steps must be taken to prevent the great wastage of maternal and infant lives if we were to avoid becoming a subject race.

Dr. AMAND ROUTH said that he agreed with almost everything contained in a recent paper by Dr. A. Donald (BRITISH MEDICAL JOURNAL, July 8th, 1916, p. 33) except his conclusions. Supervision of all pregnant women was not an unnecessary trouble, for experience had shown that women needing treatment did not present themselves voluntarily. The results attending such supervision were not likely to be small, since emergencies for Caesarean section and others with eclampsia continued to be admitted to hospitals. At Queen Charlotte's Hospital the number of cases of albuminuria admitted during 1914 was 557. With regard to the statement that there were much more important causes of fetal death, such as abortion and stillbirths during delivery, than the diseases of pregnancy, he would ask why were there 3 per cent. of stillbirths, and why were there so many macerated fetuses if stillbirths were so dependent upon delivery? During 1914 at Queen Charlotte's Hospital there were 100 stillbirths, of which 26 were of macerated fetuses. The large majority of macerated fetuses were due to syphilis, and Dr. Mott had indicated the prominent part which syphilis played in stillbirths and abortions. Spirochaetes were found in the placentae in the former, but not in the latter, yet women believed to be infected often had both abortions and stillbirths in a series of pregnancies. There had been no systematic antenatal work before 1911. Midwives should be encouraged by the Midwives Board to extend their care to the unborn child. The death-rate of unborn infants was probably greater than after birth when it was considered that there were 3 stillbirths to 100 ordinary births. More interest was now being taken in the unborn child, and there were now about 750 centres established in Great Britain and Ireland. The general practitioner must be able to supervise efficiently his patient, for with due supervision many conditions might be discovered and proper treatment applied. Prematernity beds were necessary in every hospital. He did not think that compulsory notification could be carried out at present because of ignorance and resistance on the part of the mother, who would postpone notification until the last minute. Research work was necessary, and pathological facilities should be provided. *Post-mortem* examinations should be made on stillborn children, and the *Spirochaeta pallida* should be looked for. Every pregnant woman should be seen by a doctor, and should then have such supervision as the condition required.

Dr. COMYNS BERKELEY said that the question of the "maternity centre" first came prominently before the medical profession on the passing of the Notification of Births (Extension) Act, 1915, when the Local Government Board addressed a circular to the county councils and sanitary authorities pointing out, among other things, that Section 2 of the Act enabled them to make arrangements for the care of pregnant women, and that the Government had agreed to finance any such scheme up to one-half of its cost by means of annual grants. The Board was careful to state that it would expect medical advice, and where necessary treatment, to be continuously and systematically available to the pregnant mother, and that to enable this to be done efficiently the local authorities must start maternity centres in populous districts. Every doctor and midwife would agree that a pregnant woman had a right to the greatest possible care and to the best possible treatment that medical science could give her during this important and trying time of her life, and this not only for her own sake but also for the sake of the nation and of her child. The British Medical Association had passed a resolution to the effect that it was entirely in favour of any scheme which would encourage prospective mothers to arrange in advance for their nursing and medical

Universities and Colleges.

UNIVERSITY OF LONDON.

MEETING OF THE SENATE.

A MEETING of the Senate was held on October 18th.

Sir Bertrand E. Dawson, K.C.V.O., C.B., has been elected Dean of the Faculty of Medicine.

The second examination for medical degrees, Part II, for internal and external students will commence on December 4th.

UNIVERSITY OF WALES.

THE Swansea Technical College Committee has adopted resolutions providing that, under suitable conditions, the Swansea Local Education Authority should levy a rate up to a maximum of one penny in the pound in aid of the Welsh University. One of the conditions was that, while safeguarding the authority of the University, the Treasury should make an increased contribution at least equal to the rateable contribution of the local education authorities in Wales and Monmouthshire from time to time.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE annual report of the Council for 1916 contains the list of names of Fellows and Members who are known to have been killed in action, or to have lost their lives from wounds or diseases contracted while on active service with His Majesty's forces, an analysis of which was published in the JOURNAL of October 21st, p. 576. It is proposed to compile at the end of the war a complete list of these names with short biographies, and Fellows and Members are invited to assist in making this catalogue as correct as possible. The report includes an abstract of the proceedings of the Annual Meeting of Fellows and Members in 1915, the usual official documents concerning Finance, the Annual Elections, the Museum, and the Library. The Jacksonian and Triennial prizes were not awarded, the Walker prize of £100 for the period 1911–1915 was bestowed upon Mr. W. Sampson Handley, F.R.C.S. Documents also included concern the Direct Representation of Members of the Council, the abuse of medical certificates, the prevention and treatment of venereal diseases, the motor licences for maimed persons, Poor Law medical officers' special fees, and the removal of Members. The President and Council have received from Mr. C. H. Golding-Bird a very complete annual report of the proceedings of the Central Midwives Board for the year 1915, which is published in full.

Obituary.

PROFESSOR JAMES JAMIESON, of Melbourne, who died recently at the age of 76, was born at Beith, near Glasgow. He studied at the University of Glasgow, graduating M.D. in 1862 and C.M. in the following year. Some years later he went to Australia and settled in Warrnambool where he practised for nearly ten years. In 1877 he migrated to Melbourne where he took the degree of M.D. in 1878. In 1879 he was appointed lecturer on obstetrics and diseases of women and children in the medical school. He held that post till the end of 1887 when he was elected to the chair of medicine. Two years before he had been appointed physician to the Alfred Hospital. In 1885 he was appointed health officer to the City of Melbourne, a position which he held for twenty-seven years. He resigned the chair of medicine in 1907 and retired from active professional life in 1912. In 1878 Dr. Neild resigned the position of editor of the *Australian Medical Journal* and was succeeded by Professor (now Sir Harry) Allen, who in turn gave place to Dr. Jamieson. The *Journal* was then a monthly publication, and Dr. Jamieson did not a little to establish its scientific reputation. As a health officer his activity brought about an extraordinary change in the hygienic condition of Melbourne. He was President of the Victoria Medical Society, since incorporated with the Victoria Branch of the British Medical Association. He was President of the Section of Medicine of the Australian Medical Congress which was held in Hobart in 1902. When "Wee Jimmie," as he was affectionately called, retired from his university and hospital work his students, past and present, showed their appreciation by founding a memorial in the form of an endowed scholarship in medicine.

PROFESSOR JOHN FERGUSON, who was for over forty years professor of chemistry in the University of Glasgow, died on November 2nd, after a short illness. He was well known to many succeeding generations of Glasgow medical students, and when he resigned his chair about a year ago the University Court recorded its high appreciation of the valuable services he had rendered to the university and to learning. He was much interested in the history of chemistry, and contributed many of the biographies of chemists in the *Encyclopaedia Britannica* and the *Dictionary of National Biography*.

DR. J. PICOT, sometime professor of clinical medicine in the University of Bordeaux, died on September 26th, aged 77. He was born in the department of Meurthe-et-Moselle, studied medicine at the old French University of Strasbourg, and in 1872 was appointed deputy professor in the Tours School of Medicine. While holding that post he wrote two volumes on clinical pathology (*Les grands processus morbides*) for which the Institute of France awarded him its Montyon prize in 1877. When the medical faculty of Bordeaux was founded in 1878 Picot was appointed professor of general pathology. A year later he succeeded Henri Gintrac in the chair of clinical medicine. He was very successful as a teacher and extremely popular with the students, who in their demonstrations used to cheer him under the affectionate nickname of "Père la Clinique." He was elected a corresponding member of the Institute in 1891, and in 1899 the distinction of the Legion of Honour was conferred on him. He was one of the founders of the *Gazette Hebdomadaire des Sciences médicales de Bordeaux*, in which he published a series of observations on diseases of the heart that attracted considerable attention.

PAUL VON BRUNS, professor of surgery in the University of Tübingen, who died recently, was the son of the famous Victor von Bruns, his predecessor in the chair, and was born on July 2nd, 1846. After serving in the war of 1870–71 he qualified as privatdozent at Tübingen in 1875. He was appointed extraordinary professor of surgery in 1877, becoming ordinary professor and director of the surgical clinic at Tübingen in 1882. He was president of the Deutsche Gesellschäft für Chirurgie in 1897. He was the author of writings on laryngotomy for the removal of growths in the larynx, gunshot wounds, the treatment of goitre, the radical operation for umbilical hernia, the treatment of fractures of the lower extremities, acute osteomyelitis, the temporary ligature of arteries, antiseptics in war, and many other subjects. In 1883 Bruns founded the *Beiträge zur klinischen Chirurgie*, which he edited up to the time of his death. He collaborated with Bergmann and Mikulicz in the *Handbuch der Chirurgie* and continued Bergmann's *Deutsche Chirurgie*.

DR. JOHN A. MCCORKLE, President of the Long Island College Hospital, Brooklyn, who died on August 15th, graduated at the University of Michigan in 1873, and after holding a resident post in the Long Island College Hospital, settled in Brooklyn. He was a member of the teaching staff of the hospital for forty years, and during a large part of that time he was professor of medicine and head of the department of medicine in the college. To his efforts was in great measure due the accumulation of the fund of £400,000 which now forms the endowment of the hospital and college.

COLONEL JAMES SUTHERLAND WILKINS, D.S.O., Bombay Medical Service (retired), died at Stayer House, Eye, on October 27th, aged 65. He was born on May 18th, 1851, took the diplomas of L.R.C.P.Lond. in 1873, and M.R.C.S. in 1874, and entered the I.M.S. as surgeon on March 31st, 1874. He became surgeon-major on March 31st, 1886, surgeon-lieutenant-colonel on March 31st, 1894, brigade surgeon-lieutenant-colonel on August 16th, 1897, and colonel on October 2nd, 1900, retiring on November 11th, 1905. He served in the second Afghan war in 1880, when he took part in the march from Quetta to the relief of Kandahar, receiving the medal; in Burma in 1886-87, when he was mentioned in dispatches, and gained the medal with two clasps, and the D.S.O.; and in South Africa in 1902, gaining the Queen's medal with three clasps. He also received the Kaisar-i-Hind medal, 1st class, on January 1st, 1901.

Surgeon-Major Robinson Boustead, Bombay Medical Service (retired), one of the few remaining veterans who served both in the Crimea and in the Mutiny, died at Hove on October 8th, aged 81. He was educated at Edinburgh University and took the M.R.C.S. in 1859, the L.S.A. in 1863, and the F.R.C.S.Edin. and M.D.St. Andrews in 1866. Entering the I.M.S. as assistant surgeon on July 23rd, 1858, he became surgeon on July 23rd, 1870, and surgeon-major on July 1st, 1873, retiring on February 5th, 1889. He had a fine record of war service. Before entering the I.M.S. he had served in the Crimea with the Turkish contingent, in medical charge of the Osmanli Irregular Cavalry, receiving the medal and the fifth class of the Order of the Medjidie. In the Indian Mutiny he served with the field force against the Rohillas, in the Central India campaign and pursuit of Tantia Topi, against the Bhils in Ahmadnagar district, and against mutineers on the Bhima-Krishna frontier, and gained the Mutiny medal with a clasp. He also served in the second China war of 1860; in the Abyssinian war of 1867–68, when he got the medal; and in the Eastern Soudan campaign in 1885, when he was present in the actions at Hashin, Tofrek, and Tamai, was twice mentioned in dispatches, and received the medal with a clasp and the Khedive's star. Surgeon-Major Boustead's death leaves only one survivor among the I.M.S. officers who served in the Crimea, Deputy Surgeon-General B. Williamson; but there are still about twenty-five I.M.S. officers living who were serving in India at the time of the Mutiny, nearly sixty years ago, and of these at least eight or ten took part in the campaign.

The Services.

EXCHANGES.

Captain R.A.M.C.(T.) in charge troops at a well-known golfing resort on the East Coast desires exchange with an officer doing hospital or recruiting duty in London or other large town.—Address No. 4450, British Medical Journal Office, 429, Strand, W.C.

Regimental Medical Officer attached to Camp, Eastern Command, Woolwich District, wishes to exchange with Medical Officer attached London Command (hospital preferred).—Address No. 4449, British Medical Journal Office, 429, Strand, W.C.

Medical News.

Sir Lauder Brunton left unsettled estate valued at £28,151, the net personalty being £26,457. Dr. W. W. Tate left estate valued at £26,414. Dr. Wharton Peter Hood left estate valued at £53,751.

The Act passed by the Michigan Legislature in 1913 permitting the sterilization of inmates of State institutions has been declared unconstitutional.

A paper on functional gastric disturbanccs in the soldier will be read by Colin McDowall, M.D., R.A.M.C. (temporary), at the quarterly meeting of the Medico-Psychological Association, to be held on Tuesday, November 21st, at 11, Chandos Street, Cavendish Square, W., at 2.45 p.m.

Dr. H. R. Kenwood, Professor of Hygiene and Public Health in the University of London and Lieutenant-Colonel R.A.M.C., will deliver a public lecture on hygiene—some lessons of the war, at University College, Gower Street, on Friday next, at 5.30 p.m. The chair will be taken by Sir Alfred Keogh, K.C.B., D.G.A.M.S. Those interested are invited to attend.

A course of lectures, to which members of the profession will be admitted on presentation of a visiting card, will be given by Dr. J. H. Sequeira on the early diagnosis and treatment of syphilis, at the skin department of the London Hospital, on Thursdays, November 23rd, 30th, and December 7th and 14th, at 11 a.m. Dr. J. McIntosh has arranged to give practical demonstrations of the examination for spirochaetes and of the Wassermann test.

The Council of the Edith Cavell Homes of Rest for Nurses (25, Victoria Street, London, S.W.) has received letters from Queen Alexandra and Lady Douglas Haig, strongly commending the project to provide homes of rest for nurses temporarily unable to carry on their duties owing to stress of work. Lady Haig says that officers who have benefited have expressed to her their desire that a channel might be provided through which both officers and those in the ranks could give practical expression to their gratitude according to their ability, and adds that the project to establish homes of rest for nurses affords to them an ideal opportunity for fulfilling their wish. Subscriptions may be sent to the honorary secretary at the address given.

The *Medical Record* states that, in accordance with the wishes of Mrs. Eddy, who in 1909 proposed that her followers should "establish and maintain a Christian Science resort for the so-called sick," the directors of the church have recently accepted a gift of twenty acres of land in Brookline, Mass., on which such buildings as may be necessary for the purpose will be erected.

At the annual meeting of the Japanese Red Cross, held recently at Tokyo, the young Empress was present, and there was a very large attendance. The society, which was formed in 1866, and was recognized by the Geneva Convention in 1877, has now a membership of about two millions and a capital of £4,000,000. It has twelve hospitals and two hospital ships. In co-operation with other Red Cross Societies, it has taken an active part in humanitarian work in the present war.

At the first meeting of the Chemical Society for this session a number of specimens of British-made synthetic chemicals were shown from the laboratory of Messrs. Boots and Co., Nottingham. They included chloralamide, chloramine-T, acetanilide, aspirin, paraldehyde, salol, adalin (bromdiethylacetylurea), phenacetin, hexamine, antipyrine, phthalic anhydride, and digitalin, all of them drugs made in Germany before the war. We are informed that these drugs are being manufactured in factories specially erected for the purpose at Nottingham since the outbreak of war.

The winter session of the Royal Society of Arts will be opened on Wednesday next, when Mr. Dugald Clerk, B.Sc., F.R.S., chairman of the council, will deliver an address at 4.30 p.m. on the stability of Great Britain. Among other lectures before Christmas is one by the Master of Magdalene College, Cambridge, on classical and scientific education, to be given on December 20th at 4 p.m. The Cantor lectures will be given during January and February by Professor A. Beresford Pite, F.R.I.B.A., on town planning and civic architecture.

A series of demonstrations has been arranged at the North-East London Post-Graduate College, Prince of Wales's Hospital, Tottenham, commencing on November 16th, when Dr. Murray Leslie will show selected medical cases. The other demonstrations arranged are: November 22nd, selected cases of children's diseases, by Dr. Whipham; November 28th, clinico-pathological methods in the diagnosis of disease, by Dr. G. G. Macdonald; December 7th, cases illustrating the treatment of (*a*) extensively splintered fractures, (*b*) consecutive osteomyelitis, by Mr. Howell Evans; and December 14th, screen demonstration of *x*-ray diagnosis of cardiac and pulmonary lesions, by Dr. J. Metcalfe. The demonstrations will be given at 3.30 on each day.

Dr. William Palmer Lucas, professor of paediatrics in the University of California, who was sent by the American Belgian Relief Commission to study health conditions in the conquered part of Belgium, has recently presented a report in which he states that the increase in the prevalence of tuberculosis seems to him to be mainly a result of lowered vitality due to underfeeding. Every sanatorium in Belgium is crowded, the waiting lists of all the institutions have increased, and the waiting cases are more acute. On the other hand, infant mortality has diminished and the health conditions of this class are better than normal, owing to its having been the object of great solicitude since the beginning of the war.

Mr. T. E. Wallis, B.Sc., has described to the Society of Public Analysts a method of quantitative microscopical examination for use in instances where chemical methods were inapplicable. Equal weights of the material under investigation and of a standard mixture for comparison, are separately mixed with similar weighed quantities of lycopodium spores. The mixed powders are suspended in a suitable fluid, and two slides are prepared from each suspension. Ten fields, selected according to a prearranged plan, are counted on each slide, and the average ratio of the number of particles of the substance to be determined to the number of lycopodium spores present is found, and reduced in each case, to the number corresponding to 100 lycopodium spores. The figures so obtained are proportional to the quantities of material present in the substance and in the standard mixture respectively. A simple calculation gives the quantity sought. The accuracy and utility of the method was shown by experiments with typical mixtures, including wheat flour, potato starch, and mustard, each mixed with corn-flour, wheat flour containing potato starch, white pepper adulterated with ginger and with rice starch, and gentian root with added cocoanut shell.