Flexner remarked that possibly the manifestations of serum disease were more frequent after the intrathecal than after the subcutaneous injection of serum; and from com-parison of the naval cases of cerebro-spinal fever with the reported incidence of serum disease in diphtheria the lecturer was at first inclined to this view, but further sifting of the evidence did not show that there was any proof of this.

Clinical experience showed that the severity of the rashes and other manifestations of serum disease varied directly with the amount of serum injected. The rash was usually urticarial, erythematous, or morbilliform, but it might be scarlatiniform. In rare instances it was haemorrhagic; this might occur in association with a sore throat or an infected wound or boils.

Quite commonly a serum rash appeared, faded, and about two days later again became prominent; the first might be erythematous and the second urticarial, and both extremely irritating. These might be regarded as phases of the same reaction. In rare instances two serum rashes appeared at such an interval as to justify the term double serum rash and to suggest two separate reactions, which might be supposed to be the result of injections on different

days. The occurrence of arthritic and other manifestations of serum disease was also detailed, and the appearance of symptoms pointing to seric meningism and meningitis when a relapse was suggested.

True anaphylaxis might occur in a patient who had some time previously had an injection of serum—for example, for diphtheria, or as a prophylactic against tetanus. Although in the case of ordinary subcutaneous injections of serum anaphylaxis was, as a rule, more interesting than serious in its manifestations, the effect of an intrathecal injection of serum in a sensitized person, though fortunately uncommon, might be very grave. The anaphylactic symptoms were severe collapse, fall of blood pressure, rapid and feeble pulse, pallor, vomiting, feeling of thoracic constriction, failure of respiration, rapid eruption of urticaria, or even a haemorrhagic rash. In order to counteract these symptoms, the injection of adrenin and atropine had been recommended.

Vaccines.

Curative vaccines had been employed mainly in subacute or chronic cases when serum appeared to be losing its effect, and in a number of cases had been followed by improvement and recovery.

Apart from meningococcic serum, and perhaps vaccines, other forms of treatment were of very subordinate im-portance, and, except when serum could not be obtained or was inert, as it appeared to be in this country in 1915, were mainly of historical interest.

The employment of surgical measures to secure permanent drainage of the spinal subdural space had proved disappointing. In conclusion, the lecturer gave an account of the use of soamin, hexamine, and helmitol as cerebrospinal antiseptics; they had not led to any strikingly good results.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

HUMAN SERUM IN INFLUENZA.

DRIVEN to it by the urgency of a case of influenzal pneunonia, I determined to adopt the Scandinavian plan of aking serum from a convalescent patient, and the results 10 amply justified the experiment that I have since used it n three more cases.

The technique, crude it is true, but simple and effective, was as follows: After preparing the arm with petrol and distending the vein by means of a sphygmomanometer band, I punctured the vein with a sterile serum syringe, and withdrew into the syringe 20 c.cm. of the mother's blood, she being just convalescent from influenza; it was quickly ejected into a sterile test tube and centrifugalized by means of a cradle of string; the supernatant serum was again drawn into the syringe, and 8 c.cm. injected into the abdominal tissues of the child. In six hours the temperature had fallen, the breathing was almost normal, and the toxaemic blueness had disappeared. The subsequent history of the case was uneventful, the child making a

rapid and complete recovery. The mother readily submitted, in view of this result, to act as donor for another case, whose condition was extreme. Here a dose of 15 c.cm. of serum was given; the result was as marked as in the child's case, and the contrast of the delirious raving and struggling to that of quiet sleep, which resulted in less than two hours, was marked indeed.

Serum was again obtained from her for the third case, in which its result was the same.

For the fourth case the blood was taken from a patient who had had a simple attack of influenza without pulmonary symptoms; it was injected into the abdominal issues of a patient suffering from pneumonia, and had the desired effect.

In the three later cases it was necessary to take the serum from one place to another; this was done by enclosing it in an old horse serum phial, which was sterilized by boiling, and the neck reclosed in the Bunsen flame.

As the immunity following an attack seems from clinical experience to be only some six weeks, it is necessary that the blood should be taken from a person who is just convalescent from influenza, and although I have not had the experience it would seem likely that the value of the serum would rapidly deteriorate on keeping. As there seems to be evidence of a fresh outbreak I publish these notes in the hope that some extensive preparation of serum will soon be made.

W. E. HUFF-HEWITT, M.B., Ch.B. Rhos, Colwyn Bay.

AN ABNORMALITY OF THE TENDON GROOVES OF THE RADIUS. I THINK it worth while to call attention to a condition

which I have recently observed in two or three cases. A lady who is in the habit of playing the piano frequently and for long periods at a time consulted me for a ganglion over the tendons of the extensor ossis metacarpi pollicis over the centons of the extensor ossis increasing points, and extensor brevis pollicis near the styloid process of the radius. The disability was so great that she could no longer play the piano. I removed the ganglion under a local anaesthetic. No benefit resulted from this. A skiagraph showed nothing abnormal. Under a general anaesthetic I then cut down on the tendons and found them running in a groove very much in excess of the normal depth. The depth of the groove was accentuated by a slight overgrowth of the normal raised edges of the groove. The groove was widened with a chisel, the tendons resecured in place with a couple of catgut stitches and the wound closed. Immediate relief resulted.

I have met a similar condition in hospital practice where the piano playing element could be excluded, and it is the piano playing element could be excluded, and 15 is possible that it is due to abnormal structure and not to any pathological state. I have adopted the same treatment with the same result. An anatomist friend has promised to investigate the point in the material at his disposal. P. JENNER VERALL, M.B., F.R.C.S., Chief Assistant, Orthopaedic Department, St. Bartholomew's Hospital, etc.

SHOT IN THE VERMIFORM APPENDIX REVEALED BY X RAY.

THE following case has, I think, some interest : C. P. H. V., a man aged 34, had since August last been subject to what he termed "bilious attacks." These had come on at intervals of about a fortnight and lasted from one to two days. They were associated with shivering, malaise, and occasional vomiting. As the attacks continued a bismutu meal was decided upon. He was accordingly seen by Dr. Ironside Bruce and the radiograms revealed the presence of what appeared to be two No. 6 shot, in the region of the appendix, which could be freely moved under the screen. The patient was thoroughly purged and a second skiagram showed the shot in the same position as the first. Colonel Gordon Watson removed the appendix a few days later and two No. 6 shot were found at the tip of the appendix, which showed signs of having been recently inflamed. The presumption is that the patient had swallowed the shot when eating game. He made an uneventful recovery and has had no further attacks.

W. B. AINGER, F.R.C.S. London, S.W.

Forensic Medicine. He contributed also to Knocker's Workmen's Compensation Act and to French's Differential Diagnosis. He was a referee under the Workmen's Compensation Act and examiner in forensic medicine at the Universities of Oxford, Leeds, and Birmingham. Among other appointments he held that of assistant physician to the Hospital for Diseases of the Chest, City Road, and at the time of his death was consulting physician to the City of London Dispensary and to the National Orthopaedic Hospital. He was much interested in the city medical society, the Hunterian Society, was at one time its scentury delyaced the annual continue to it in one time its secretary, delivered the annual oration to it in 1900, and was its president in 1904-6.

Dr. F. J. Smith was for many years an active member of the British Medical Association, and particularly of the Metropolitan Counties Branch; he was one of its secretaries from 1904 till 1907, and its president in 1914-15, when he delivered an address on modern vascular problems in which he ariticized some excent developments problems, in which he criticized some recent developments and asked some crucial questions about blood pressure. Dr. Smith was secretary of the Section of Medicine at the annual meeting of the Association in 1901 and vice-president of the same section in 1912; he was for some years a member of the Central Council, and was chairman of the Science Committee from 1912 to 1917. He was a member of the Medico-Legal Society, frequently took part in its discussions, and had been its president.

Dr. Smith was a sound, practical physician, careful in diagnosis, and possessed a knowledge of men and the world which disposed him to treat the patient and not to be misled by some terminological label. The constitution of his mind was critical, and in therapeutics he was ever ready to challenge accepted views, as was well illustrated by his persistent teaching with regard to diet in typhoid fever. As early as 1901 he spoke and wrote in favour of free feeding up to satisfaction of the appetite but starvation when the appetite was in abeyance, free supplies of plain when the appetite was in abeyance, free supples of plain water, and free evacuation by saline aperients, especially sodium sulphate. He had an offhand manner and a very colloquial way of expressing himself, which sometimes misled those who did not know him well; but to his friends "F. J.," as he was always called, was known as a man of wide knowledge and shrewd judgement, always disposed to take a charitable view, always ready to give of his best in any difficulty.

The funeral took place at Colyton, Devon, on May 5th. A memorial service was held on the same day at the London Hospital church, when Dr. Robert Hutchison delivered an address in appreciation of Dr. Smith's fine qualities. There was a large congregation, including Viscount Knutsford, chairman of the London Hospital, Viscount Knutstord, chairman of the medical and surgical and a number of members of the medical and surgical staffs, together with sisters, nurses, and students. Metropolitan Counties Branch was represented by Dr. M. G. Biggs, and Dr. A. D. Macpherson attended on behalf of the Council of the British Medical Association.

Dr. JOHN O'KEEFFE died at his residence, Griffiths Town, on April 25th. He came of a well known Waterford family, was a student of the old Irish School of Medicine, Dublin; he obtained the diplomas of L.R.C.S.I., 1881, and L.R.C.P.Edin. 1886. After acting as assistant to the late Dr. Davies of Ebbw Vale, he went to Griffiths Town as an assistant to Dr. R. Edmunds, and on the latter's death took over a considerable portion of the practice. Dr. O'Keeffe was held in high esteem by both colleagues and patients. A man of strong character who knew his own mind, and whose opinion was not in the slightest disguised. He took a great interest in the affairs of the Monmouthshire Division, served on many committees, and was its chairman elect at the time of his death. Dr. guised. O'Keeffe was a frequent attendant at the annual meetings of the Association; he visited Canada, and was present at the fateful 1914 meeting at Aberdeen. He was a man of strong physique, and his death at the comparatively early age of 62 must be attributed to the very heavy work of an arduous practice, combined with onerous duties at a military auxiliary hospital of 300 beds, and also a smaller heavier both of military heat both of military heat heat heat hospital of forty beds, both of which he attended without any help during the war. He was senior surgeon and trustee of the Pontypool Hospital, where he rendered willing and honourable service. He held many public appointments; he was M.O.H. of Panteg, medical officer Panteg Union Workhouse, and surgeon to Baldwin's works. His colleagues will greatly miss his hearty laugh and warm handshake. He leaves a wife and two daughters to mourn his loss.

DR. JOHN MARSHALL of Wickford, Essex, died on April 19th, aged 70, after a short illness. He was educated at Guy's Hospital, and took the diplomas of M.R.C.S. and L.S.A. in 1871. He was a district medical officer and public vaccinator of the Chelmsford Union, and a member of the Mid-Essex Division of the British Medical Association. He leaves a widow, two sons, and a daughter.

In the short obituary notice of Colonel ROBERT. CALDWELL, A.M.S. (ret.), published on April 26th, refer-ence to his service during the war was inadvertently omitted. He was officer in charge of the Alexandra Hospital, Cosham, and practically throughout the period of the war was responsible for the difficult duties connected with the V.A.D. hospitals affiliated to the Alexandra. His courtesy to those connected with the V.A.D. establish-ments won the esteem of all with whom he came in contact.

MAJOR MAURICE NASMYTH PERRIN, Royal Air Force, was killed in a flying accident on April 28th, on his 32nd birthday. He was educated at St. Bartholomew's Hospital and at Cambridge, where he graduated B.C. in 1913. He took a temporary commission as lieutenant in the R.A.M.C. on August 16th, 1914, in the first fortnight of the war, was promoted to captain after a year's service, and recently transferred to the Medical Branch of the Royal Air Force with the rank of major.

CAPTAIN PETER STURROCK, R.A.M.C., died at Waterloo, Liverpool, on April 19th. He took the Scottish triple qualification in 1887, and was in practice at Lenzie, near changer till be took Glasgow, till he took a temporary commission as lieutenant in the R.A.M.C. on September 1st, 1916, being promoted to captain on completion of a year's service.

Private Alexander Forbes Stuart, R.A.M.C., who died last month at: Noranside Sanatorium, Forfarshire, aged 21, from disease contracted on active service at Salonica, was the youngest son of the Rev. F. W. Stuart, of Gortly, and was a medical student prior to his enlist-ment. He was a younger brokher of Captain F. W. Stuart, R.A.M.C. (temporary), at present serving in Germany.

A West window light has been dedicated in All Saints Church, Helmsley, Yorks, to the memory of Lce.-cpl. Frederick Henry Dowker, 1st Sportsman Battalion, only son of the late F. W. Dowker, surgeon, who was killed in Delville Wood, July 27th, 1916. The window was put who was killed in Delville W in by his mother and sisters.

Aniversities and Colleges.

UNIVERSITY OF CAMBRIDGE. AT a congregation held on May 2nd the following medical degrees were conferred:

M.D.-E. A. Dyson. M.B., B.CH.-*R. H. O. B. Robinson, A. H. J. Smart,* J. V. Fidian. M.B.-H. G. Oliver. *Admitted by proxy.

QUEEN'S UNIVERSITY, BELFAST.

DR. THOMAS SINCLAIR, C.B., Professor of Surgery at Queen's University, Belfast, has been appointed the representative of the University on the General Medical Council for a period of three years.

The Services.

In the appointments to the Military Division of the Order of the British Empire, announced in our issue of April 12th, p. 469, the names of the following officers should have been given as Officers of the Order (O.B.E.): Surgeon Commander C. K. Bushe, R.N., Honorary Surgeon Lieutenant J. D. Pollock, R.N.V.R., and Surgeon Lieutenant E. D. Scott, R.N.

AT a meeting of the Paris Société de Pédiatrie, Méry Genevrier and Henyer stated that young children in the territories occupied by the enemies suffered much from the lack of milk, farinaceous, fatty, and albuminous sub-stances. For older children forced labour in all weathers, combined with inadequate clothing, parasites, and epidemic diseases, made the conditions of life most unfavourable. Growth and intellectual development were retarded by two to three years.

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Medical Aelus.

AT a meeting of the East Norfolk Division and of the East Norfolk Local Medical War Committee a resolution congratulating Sir T. Jenner Verrall on the occasion of his receiving the honour of knighthood was adopted.

DR. GEORGE HENDERSON (Kirn, Argyllshire) has been presented by his friends and patients with an address and a wallet containing £417 in commemoration of his return to practice after service in the war since 1914.

LIEUT.-COLONEL NATHAN RAW, M.P., who recently resigned the position of medical superintendent of the Mill Road Infirmary, Liverpool, which he had held for twenty-one years, has been presented by the staff of that institution with a five-light silver candelabrum as a mark of respect and esteem, together with a book containing the subscribers' names.

COLONEL GEORGE R. MURRAY, M.D., having relinquished the appointment of consulting physician to the Italian Expeditionary Force, has returned to Manchester.

COLONEL SIR RONALD ROSS, K.C.B., K.C.M.G., F.R.S., has been elected a Fellow of the Royal Society of Sweden (University of Upsala) in recognition of his researches in malaria.

HEREFORDSHIRE has appointed a rat-catcher for the county at a salary of £5 a week (£260 a year).

THE Paris Academy of Medicine has decided to erect within its precincts a stele in memory of French practitioners who died as victims to professional duty in the course of the war.

The senate of the University of St. Andrews has resolved to confer the honorary degree of LL.D. upon Dr. W. H. R. Rivers, F.R.S., F.R.C.P., Fellow of St. John's College, Cambridge.

THE late Dr. John E. M. Finch, medical superintendent of the Leicester Borough Asylum from 1869 to 1911, has bequeathed $\pounds 5,000$ for the endowment of a university college for Leicester, in remembrance of his long connexion with the asylum.

AT the annual general meeting of the Lebanon Hospital for Mental Diseases, near Beyrout, to be held at Sion College, Victoria Embankment, next Friday, at 3 p.m., the director, Dr. H. Watson Smith, will give an account of the war-time experiences of the hospital.

THE Norwegian Cancer Fund Committee has collected about £30,000 towards the establishment of a national hospital for the treatment of inoperable malignant disease by radiography and other therapeutic measures and for research on the subject. A special propaganda has been organized to raise additional funds.

DR. M. R. DRENNAN, who graduated in medicine at Edinburgh in 1910, and is a Fellow of the Royal College of Surgeons of Edinburgh, has been appointed professor of anatomy in the University of Capetown. He is an Ayrshire man, and served in the South African Medical Corps during the campaigns in South-West and East Africa.

ACCORDING to a recent article in the *Pioneer Mail* there are at present seventy-six asylums for lepers in India. The Mission to Lepers maintains forty-one of these institutions and gives grants in aid to eleven others. The Mission derives most of its money from Britain, but grants are also made by provincial governments. The total number of known lepers in India is said to be over 109,000.

DR. R. F. SHIELDS, of the University of Shantung, has recently finished a translation of Lewis and Strohr's *Histology* into Chinese. An abbreviated edition of Halliburton's *Physiology and Histology* had previously been available to Chinese students, but Dr. Shield's book appears to be the first in their language devoted entirely to microscopic anatomy.

THE Board of Trade has appointed a departmental committee to inquire into the business carried on by industrial assurance companies and collecting societies. The inquiry will not be concerned with life assurance for sums beyond £50, nor with insurance under the National Insurance Act. The chairman is Lord Parmoor, and one of the members is Sir Alfred W. Watson, chief actuary to the National Insurance Joint Committee.

A DISCUSSION on the problem of disablement, with especial reference to the combined treatment and training of injured ex-soldiers, will take place at a meeting of the Hunterian Society to be held at 1, Wimpole Street, W., on Tuesday, May 13th, at 8.30 p.m. Dr. Fortescue Fox will introduce the subject, and Dr. F. H. Humphris will read a short paper on the melted paraffin wax bath. All members of the profession interested are invited. DR. WILLIAM BROWN, Reader in Psychology in the University of London, begap a course of ten public lectures on pathological psychology, illustrated by cases of war neuroses seen in the field and at the base, at King's College on May 6th. Subsequent lectures of the course will be given on Tuesdays at 5.30 p.m.

LIEUT.-COLONEL SIR DAVID PRAIN, F.R.S., I.M.S., has been appointed chairman, and Lieut.-General Sir Alfred Keogh, G.C.B., and Sir Malcolm Morris, K.C.V.O., members, of a committee set up by the President of the Board of Agriculture to inquire into the steps that should be taken to render the work of the Royal Botanic Society of London as useful as possible from the scientific and educational point of view.

THE Committee of Management and the Medical Committee of the Hospital for Sick Children, Great Ormond Street, recently made presentations to Dr. George R. Pirie, of Calgary, Alberta, Canada, who throughout the period of the war has acted as resident medical superintendent, registrar, and casualty medical officer to the hospital. The one gift was a silver casket and the other a dressing case, both suitably inscribed. Dr. Pirie, in acknowledging the gifts, spoke of the great pleasure the work had given him.

THE President and Council of the Medical Society of London were "at home" on Monday evening, May 5th, to members of the Fellowship of Medicine, at the society's house, 11, Chandos Street. Medical members of the Overseas Forces now in London were also invited. After a reception of the guests by the president, Major A. F. Voelcker, R.A.M.C.(T.), Sir StClair Thomson delivered an address on "John Coakley Lettsom and the foundation of the Medical Society of London, 1773." Illustrations of the society's history were exhibited by the help of the epidiascope. At its conclusion an informal conversazione brought a successful evening to a close. About 150 guests availed themselves of the invitation.

HER HIGHNESS PRINCESS MARIE LOUISE visited the Summer Congress of the Section of Laryngology at the Royal Society of Medicine on May 3rd. She was received by Brigadier-General Birkett, C.B., C.A.M.C. (Montreal), Honorary President of the Congress; Dr. James Donelan, President of the Section of Laryngology; Sir Humphry Rolleston, K.C.B., President, Dr. W. Pasteur, Honorary Treasurer, and Mr. J. Y. W. MacAlister, Secretary of the Royal Society of Medicine; and by Dr. Irwin Moore, one of the Honorary Secretaries of the Congress. Her Highness was shown the models of plastic surgery for war injuries from the Queen's Hospital, Sidcup, exhibited by Major H. D. Gillies, R.A.M.C., and also a collection of manuscripts and instruments belonging to Sir Morell Mackenzie, presented to the Royal Society of Medicine by Mr. Mayer.

THE North of England Tuberculosis Association recently arranged a post-graduate course lasting four days, at the Lord Mayor Treloar Cripples' Hospital and College, Alton, Hants. Dr. Gauvain, medical superintendent, gave two lectures daily, each of an hour's duration, and demonstrated many procedures in the conservative treatment of surgical tuberculosis, including aspiration of tuberculous abscesses, a method which has yielded excellent results in spinal caries and hip disease; demonstrations were given also in the wards. Altogether those attending were occupied from 11 a.m. until 7.30 p.m. each day. It should be added that the various bodies defrayed the expenses of their officers attending the course. We are glad to see this evidence of their appreciation of the great importance of surgical tuberculosis as a cause of crippling deformities.

QUEEN ALEXANDRA'S HOSPITAL FOR OFFICERS, established by a committee of which Sir Alfred Mond was chairman, was erected on the southern slope of Highgate Hill, and accepted by the Army Council in March, 1915. The number of beds was originally 26, but this was raised to 33; with annexes at Portland Place and Melchet Court, a total of 57 beds was provided. The result of treatment amid the quiet surroundings and pure air of Highgate was that the number of days of hospital treatment was diminished by about 30 per cent. The good condition of patients after the administration of an anaesthetic was particularly noticeable, the rise of temperature was slighter, and there was greater freedom from bronchial irritation. This was especially the case after nitrous oxide gas and oxygen, which for three years was extensively employed by Captain H. E. G. Boyle; one of the honorary anaesthetists. Mr. Herbert J. Paterson, honorary surgeon in charge, informs us that the total number of officers admitted down to March 20th, 1919, was 839, and on that date 37 remained in the hospital. The number of operations was 581 and of x-ray examinations 855. The deaths numbered 8.