glass or celluloid, which in their turn are placed on the localizer.

The T-piece of the vertical scale is fixed from the surface of the localizer at a distance corresponding to the distance of the anticathode from the plate. This is easily done, as the vertical scale can be moved from the couch to the localizer, on account of its movable base. On either arm of the T is a notch, through which the threads going to the needles on the mice are passed. These two arms are 6 cm. apart, that is, the distance through which the tube is moved between the exposures. The points of the threads attached to the mice are placed one over each shadow, in such a way that the threads cross, the right thread of the T-piece going to the left shadow, and vice versa. All that now remains to be done is to read off the measurements on the vertical millimetre scale. This should be placed on one of the lines of the quadrant which contains the shadow of the foreign body. The upper pointer should be made to touch the intersection of the threads. This gives the depth and distance in one direction, while if the lower pointer, which is set at right angles, is slid along to the other line, the reading in the other direction is obtained.

The distance of the foreign body from two fixed lines has now been ascertained, and as these lines are marked on the patient, and the depth is also known, a record can be given to the surgeon, such as: Depth of foreign body, 3.6 cm.; north, 2.6 cm.; east, 4.6 cm. The calculation can be made rapidly once the plates have been developed, and, if the surgeon desires to do so, he may place the two plates in the stereoscope, which enables the observer to get a most realistic view of the relative position of the surrounding structures.

These, then, are some common methods at our disposal for estimating the exact position of foreign bodies.

This is not the place to criticize them. Each radiographer must make his own choice, based on his own experience, and guided by his own opinion, as to whether the method of right-angled planes or that of triangulation is the more accurate.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

A METHOD OF *X*-RAY LOCALIZATION.

LET me briefly describe the method of localization by *x* rays which I generally employ. Say, for example, that the foreign body is in the arm. If possible the arm is moved till the foreign body presents itself at the highest point—that is, nearest to the surface. If the part cannot be moved the tube is moved to obtain this information. When this highest point is determined, a metal pointer is pressed gently over the part, and presently an area is discovered when on pressure the foreign body will move. This spot indicates the nearest route to the foreign substance, and the depth can be easily estimated, a pencil mark made on the skin, and the necessary data given to the surgeon.

This method has proved of great value in the hands of Mr. Thring and Sir Alexander MacCormick, the two consulting surgeons connected with this hospital, and I feel sure is all that is necessary in 90 per cent. of the cases.

HERSCHEL HARRIS, M.B., Ch.B.Sydney.
Captain, R.A.M.C.
Australian Voluntary Hospital,
Wimereux, France.

AORTIC ANEURYSM: PARAPLEGIA: DEATH.

MY excuse for publishing the following case of aneurysm is that it was mistaken for an abscess by native attendants at the Union Poor House, Kingston. The length of time the patient lived after erosion of the bodies of the vertebrae is also a matter of interest.

The patient was a man aged 34. He had been a soldier in the West India Regiment. He was admitted with a very large circular tumour on the back, immediately below the left scapula. He suffered considerable pain for some months, during which time the tumour became somewhat smaller. Then, quite suddenly, he became completely paralysed in the lower limbs, and died three weeks later.

At the *post-mortem* examination, in which I was kindly assisted by Dr. Cato, of the Hospital, Kingston, it was found that the aneurysm extended from the arch of the aorta and occupied practically the whole thoracic aorta; three of the ribs were eroded through, and so were the bodies of the vertebrae, exposing the spinal cord for 2½ in. The sac was more than half-filled with laminated clot. The left lung was greatly compressed and was firmly adherent to the chest wall. The pericardium was half-full of fluid.

C. R. EDWARDS,
Halfway Tree, Jamaica. District Medical Officer.

LYMPHOCYTIC LEUKAEMIA.

A MARRIED man, aged 29, consulted me on October 14th, 1914, complaining of a sore throat. Both tonsils were slightly enlarged and injected. There were no other symptoms. A gargle and a mixture were prescribed and he returned after four days to say that he felt quite well. On October 21st he came again complaining of a sore throat. He appeared to be very ill; both tonsils were considerably enlarged, the right being larger than the left; both were inflamed. There was no exudate. The temperature was normal. I was struck by the appearance of the tonsils, which were gelatinous and "unhealthy-looking." I sent him home to bed. On the following day I painted both tonsils with tincture of iodine and gave him a mixture of liq. arsenicalis miv and potassium iodide gr.v. On the following day he was much better. A few small but tender glands could be felt at both sides of the neck. During the next nine days he improved in every way. He became stronger, and the throat symptoms disappeared. On November 5th he came to me again, complaining of a rash, consisting of spots covering profusely the front of the chest and abdomen; some were small petechial haemorrhages, but others were slightly-raised, irreducible, irregular, black patches, about the size of a fleabite. The tonsils were once again considerably enlarged, and had the unhealthy appearance previously mentioned. Both sides of the neck were swollen. Large and tender discrete glands were felt in both cervical regions. The liver and spleen appeared normal to percussion and palpation. There were no other physical signs apparent. The urine was normal.

I suspected a melanotic sarcoma with primary origin in the tonsils and secondary deposits in the skin. On November 12th I sent him to the Throat Hospital, Golden Square, where he was seen by Dr. Hope, who removed a gland from the neck and a piece of skin for microscopic examination. I understand that the patient bled profusely from the incisions. Dr. Hope kindly informed me that the pathological report suggested lymphadenoma with skin infection. It was arranged that the patient should see Dr. Hope at a later date in order to have his blood examined, but he became worse and was unable to keep the appointment.

From this time onwards until his death the symptoms became rapidly more serious and alarming. The tonsils suddenly increased in size and became black. The right tonsil ulcerated and fungated. A few days later the left tonsil went through the same morbid process. On seven occasions he lost a large amount of blood from the tonsils. The glands of the neck became more enlarged, painful, and tender, and large and tender glands could be detected in both axillae and groins. The rash spread to the back of chest and over legs, arms, gums, and the mucous membrane of the mouth. The spleen increased in size to approximately twice its normal dimensions. The liver was slightly enlarged. Sight and hearing remained unimpaired. There were no symptoms suggesting any morbid process proceeding in brain or kidneys. The patient died on December 13th in his sleep. At no time was he comatose.

A few days before death Dr. Bone of Luton, who met me in consultation, obtained a specimen of the patient's blood and very carefully worked out a blood count. The leucocytes were enormously increased, numbering 2,000,000 per cubic centimetre. The red cells numbered also approximately 2,000,000.

Luton. W. E. LEVINSON, M.R.C.S.Eng., L.R.C.P.Lond.

son of the Rev. William Robinson, at one time minister of the Bethesda Congregational Church, Runcorn, and the author of several devotional books of merit. Dr. Robinson was educated at St. Andrews University, where he took the degree of B.A. Afterwards he studied medicine at Edinburgh, and in 1860 was admitted L.R.C.P.Edin. and L.R.F.P.S.Glasg. He became assistant to Dr. Wilson, then a leading practitioner in Runcorn. Five or six years later the town suffered from a terrible visitation of typhus fever. Dr. Wilson and his assistant both worked night and day in fighting the disease, which both of them contracted. Dr. Wilson died, but Dr. Robinson recovered and carried on the practice, which became very large. Dr. Robinson impressed himself deeply on the life of Runcorn, although he never sought any kind of municipal honour. He was content to be known in his district as the "working man's doctor." He was a man of unconventional opinions and somewhat eccentric habits, but the soul of honour and uprightness. Since the passage of the Insurance Act he had to a large extent retired from the active pursuit of his profession, but he kept himself in touch with all matters affecting its interests and scientific advance. He was a good classical scholar, and read some Greek every day.

It is with great regret that we announce the death of Professor G. R. Mines, who was recently appointed to the chair of physiology at McGill University. Last winter was spent in Toronto by Professor Mines as temporary assistant to Professor Brodie, and it was only a few months ago that he commenced work in Montreal. His tragic death occurred on a Saturday afternoon, November 7th. He was engaged on a research on respiration and the heart, and his death was the result of an experiment he was performing upon himself, alone in the medical college. Professor Mines, who was born at Bath twenty-nine years ago, was educated at Bath College and the Grammar School, King's Lynn; he gained an entrance scholarship to Sidney Sussex College, Cambridge, in 1904; in 1909 he was elected to a Fellowship of his College, and became Praelector in 1911, in which year he took a first-class in the Natural Science Tripos (Parts I and II). He was additional demonstrator of physiology in the University of Cambridge from 1911 to 1914, and director of physiology in the Balfour laboratory from 1910 to 1913. Endowed with a passion for music, Mines at first thought of entering upon a musical career. His liking for natural science, however, was stimulated by Dr. P. M. Chapman, of Hereford, and it was in the development and interpretation of exact methods of recording heart action that Mines made his mark. To pursue his studies upon the hearts of lower animals, he spent months at the marine zoological stations at Plymouth, Rostock, and Naples. At the Marey Institute he mastered the technique of the cinematograph, of which he recognized the value as a record of animal movements. Possessed of great personal charm, Professor Mines had already established himself in the hearts of his associates at Montreal, and the deepest sympathy is felt for his young widow and her two little children.

Dr. James Leslie, of Hamilton, Ontario, died on October 18th, 1914. He was born at New Pitsligo, Aberdeenshire, on September 23rd, 1832. He was educated at Aberdeen, and graduated M.B. in 1858 and M.D. in 1860. Dr. Leslie spent some time as surgeon on vessels in the Arctic regions, and subsequently went into practice at New Deer, Aberdeenshire. In 1872 he went to Canada, and commenced to practise in Hamilton, where the last thirty years of his life were spent. His son, Dr. Norman V. Leslie, is now with the Canadian Expeditionary Force.

Dr. Jules Auguste Barde of Geneva, who died not long ago, was born in 1841 and studied medicine at Berlin, where he took the degree of doctor in 1863 with a thesis entitled *De syphiliticis renum affectionibus*. He then devoted himself to the study of diseases of the eye under Albert von Graefe. Afterwards he went to Paris, and was assistant to Dr. Meyer. On his return to Geneva in 1869 he established a private ophthalmological clinic. In a report published in 1873 on the first three years' work of the clinic he pointed out the need of an eye dispensary for poor patients in Geneva. His wish was fulfilled in an unexpected manner. Barde was called in to remove a foreign body from the eye of Baron Adolphe de Rothschild, and the operation was so successful that the Baron became keenly interested in ophthalmology, and in 1874 founded a private institute for the gratuitous treatment of sufferers from eye diseases. Barde became chief medical officer to the institute, and retained that position to the end of his life. He was offered the chair of ophthalmology, which was founded in Geneva in 1876, but preferred to retain his appointment at the Rothschild Institute, which developed into a teaching centre of great reputation. Barde's reports contain a large amount of valuable scientific material. He was one of the organizers of the Ophthalmological Congress held at Lucerne in 1904. He was an enthusiastic musician, and was a member of the first committee founded at Geneva for the organization of concerts in the new theatre.

Brigade Surgeon Henry Atkins, Bombay Medical Service (retired), died at Weston-super-Mare on November 1st, aged 84. He was born in 1830, received his medical education at St. George's, and after taking the diplomas of M.R.C.S. and L.S.A., was for two years house-surgeon of Southampton Infirmary. He entered the Indian Medical Service as assistant surgeon on January 24th, 1855, passing in at the first competitive examination held; became surgeon on January 24th, 1867, and surgeon-major on July 1st, 1873, retiring with a step of honorary rank on December 31st, 1885. Though he was in India at the time of the Mutiny, the *Army List* assigns him no war service. On November 7th, 1856, he became surgeon to the Rajkot Political Agency, and on October 29th, 1857, to that at Bhuj, and on June 2nd, 1858, joined the Indian navy. In 1860 he was agency surgeon at Kelat in Baluchistan, in 1861 civil surgeon of Thana, and on February 6th, 1863, was posted to the 4th Bombay Native Infantry, with which he served till he took furlough in 1869–71. In 1872–75 he was again civil surgeon of Thana, and from 1876 to 1882, when he again went on furlough, residency surgeon of Baroda. On his return he was posted to military duty till he retired.

Lieutenant-Colonel Richard Careless Sanders, Bengal Medical Service (retired), died at Farnham, on December 31st, 1914. He was born on July 13th, 1845, educated at the London Hospital, and took the M.R.C.S. and L.S.A. in 1867; he also graduated M.D.Durh., and took the F.R.C.S.Edin. in 1882. Entering the Indian Medical Service as assistant surgeon on April 1st, 1869, he became surgeon on July 1st, 1873, surgeon-major on April 1st, 1881, and brigade surgeon-lieutenant-colonel on October 4th, 1893, retiring on July 13th, 1900. The *Army Lists* assign him no war service. Most of his early service was spent in civil employ in the North West, now the United Provinces, where he attained a considerable reputation as a surgeon, especially in lithotomy and cataract. This was before the days of litholapaxy. When the late Deputy Surgeon-General H. Cayley, professor of ophthalmic surgery in the Calcutta Medical College, and ophthalmic surgeon to the College Hospital, went home on leave prior to retirement, in 1884, Sanders succeeded him in these posts, which he held till the end of his service. During his tenure of office a new ophthalmic hospital, the Shama Charan Laha eye hospital, was built in the grounds of the College Hospital, for the reception of eye cases, which had formerly been accommodated in one of the wards of the main building.

Deaths in the Profession Abroad.—Among the members of the medical profession in foreign countries who have recently died are Dr. W. H. Baker, of Boston, organizer of the department of gynaecology in the Harvard Medical School, aged 69; Dr. A. Geyl, of Delft, well known as an authority on the history of medicine, aged 61; Dr. James Sullivan Howe, of Boston, Mass., professor of dermatology in the Tufts College Medical School, aged 56; W. Taylor Johns, professor of physiology and serology in the St. Louis College of Physicians and Surgeons, aged 39; Dr. George W. Lasher, for twenty-five years professor of surgery in the University of Southern

California, Los Angeles, aged 69; Dr. C. W. McMurtry, instructor in dermatology in the College of Physicians and Surgeons, Columbia University, New York, aged 42; Dr. Winfield S. Smith, a former president of the Massachusetts Medical Society, and professor of operative surgery in Boston University; and Dr. José Lopez Villalonga, of Havana, a specialist in nervous diseases, who was assassinated by a lunatic in his consulting-rooms, aged 60.

Medico-Legal.

WORKMEN'S COMPENSATION ACT.

Capacity of a One-eyed Stone Cutter.

AN interesting case was decided in the Sheriff Court at Aberdeen regarding the working capacity of a man who had lost one eye by an accident.

The claimant while engaged as a stone cutter was struck in the left eye by a small splinter of steel from his chisel, and thereby lost the sight of his eye, and was totally incapacitated for work. Liability for compensation was admitted by the respondents, Messrs. Coutts and Younie, and this compensation was paid for eight months. At the end of this time the respondents offered to take the claimant back at the rate of 6½d. an hour, which was an advance of ½d. an hour on his previous wages. This offer the claimant declined. An action was raised to reduce the amount of compensation. Sheriff Young, in delivering judgement, stated in connexion with the offer of the respondents to take back the claimant at even a slight advance of his previous wages was an element in the case and might seem to indicate that they were at all events prepared to give him a trial, but just as the circumstances that a workman had been taken back by his employers at wages equal to what he had before the accident was not conclusive as to his ability to earn the amount (Malcolm *v.* Bonhill Coal Company, 1910, S.C. 447) as also his declinature of such an offer did not terminate his right to compensation, and was no bar to his claim; the fact of his capacity or incapacity must be otherwise established. After making some remarks regarding the fitness of one-eyed workmen to continue in their former employment, the Sheriff stated that full vision was necessary in fine stone-cutting work, and he was not able to affirm that the claimant's capacity was now as it was, and that he was fit for his former work either as regards its quantity or quality, and thus able really to earn his former wages. To this the Sheriff added two considerations which he thought relevant. The first was the particular form of labour to which the claimant would require to address himself if he were able to accept the respondents' offer would necessarily put a greater strain on the eye that remained, and subject it to extraordinary fatigue, while, at the same time, there was reason to suppose that its vision was somewhat short of normal. The second point, which the Sheriff considered had been proved, was that unless his former employers were to favour him, the claimant's chances of getting such work would not be rosy; if employed and then discharged by them, he would not easily get employment elsewhere; and he would, in the ordinary labour market, be at a disadvantage with other workmen possessed of normal sight. The Sheriff added that, assuming it could be said that incapacity due to the accident was now truly at an end, it would be of no avail for the claimant to oppose the respondents' application with the plea that he was afraid to incur, and desired to avoid, the risk of losing his remaining eye. This was clear on the authority of Hargreave *v.* Haughead Coal Company, 1912, S.C. 70.

Medical News.

DR. FREDERICK WOLVERSON, of Walsall Wood, has been appointed a Justice of the Peace for the County of Stafford.

MR. H. G. PLIMMER, M.R.C.S., F.R.S., pathologist to the Zoological Society, will begin a course of three lectures on modern theories and methods in medicine, at the Royal Institution, Albemarle Street, W., on Thursday next, at 3 p.m.

DURING the month from November 17th to December 17th the work done through the Central Medical Office of the Dundee Emergency Medical Service was as follows: Average number of consultations per night, 96; number of cases at patients' own homes, 823; maternity cases, 16.

THE Japanese Red Cross Society has dispatched a unit to England to assist the British Red Cross Society. It is composed of two doctors—Surgeon-Inspector J. Suzuki and Dr. T. Oshima—twenty-two nurses, and two clerks. The unit is due to arrive at Liverpool, travelling via America, on January 21st. Similar units have been sent to France and Russia.

IN reply to a question by Lord Tenterden in the House of Lords on January 7th, Viscount Haldane said that inoculation against typhoid fever was not compulsory in the army, and that men might go to the front who had not been inoculated, but the authorities were convinced of its benefits and placed such stress upon it that the man who wished to see active service was at an advantage if he elected to be inoculated.

THE meeting of the Medical Society of London, at 8.30 p.m., on Monday, January 25th, will be devoted to *x*-ray demonstrations connected with the war by Dr. Ironside Bruce, Sir James Mackenzie Davidson, Dr. Humphris, Dr. Harrison Orton, Dr. A. Jordan, and others. On February 8th Sir Victor Horsley will open a discussion on gunshot wounds of the head.

THE National Association for the Prevention of Infant Mortality and for the Welfare of Infancy has arranged an advanced course of lectures on infant care for voluntary health workers, mothers, and nurses. The course will be given at the Royal Society of Medicine, 1, Wimpole Street, W., and will commence on February 1st. Particulars can be obtained from the secretary of the association, 4, Tavistock Square, London, W.C.

THE fifty-ninth course of lectures and demonstrations for sanitary officers arranged by the Royal Sanitary Institute will begin on February 1st, that for school teachers and others entering for the examination in school hygiene on February 22nd, and that for meat inspectors on April 9th. Further particulars can be obtained on application to the Secretary, Royal Sanitary Institute, 90, Buckingham Palace Road, S.W.

THE secretary of All Saints' Hospital for Genito-Urinary Diseases, Vauxhall Bridge Road, Frederick Richard Panter, was charged at the Westminster Police Court, on December 19th, with embezzlement and other offences. On January 10th the prisoner, according to the report in the *Daily Telegraph*, pleaded guilty to the charge of embezzlement, the other charges being withdrawn. The alleged defalcations amounted to £500. The magistrate sentenced him to six months' imprisonment with hard labour.

As was mentioned at the time, the Executive Committee of the British Dental Association on August 6th addressed letters to the Admiralty and War Office offering to assist to provide dental surgeons to supplement the civilian dental surgeons employed by the navy, and to serve with the army (Regular and Territorial). Many offers of assistance were received from dentists in all parts of the country. The object of the movement has been to ensure that recruits otherwise suitable should not be refused simply on account of defective teeth. In London a great deal of work has been done at the Royal Dental Hospital, Leicester Square; the National Dental Hospital, Great Portland Street (dental department of University College Hospital); and at other hospitals. A Soldiers' Dental Aid Fund has now been established, and is supported by the presidents of the two hospitals mentioned. Communications should be addressed to the operating honorary secretary, Miss Ada Elizabeth Fletcher, 36, Leicester Square, London, W.C., to whom also subscriptions may be sent.

A SUPPLEMENT entitled "St. Bartholomew's and the War" has been published with *St. Bartholomew's Hospital Journal* for January. It contains the names of those connected with the hospital or medical school who are serving in the Navy, Army, and Territorial Force in the present crisis. It begins with a roll of honour, containing the names of two officers, R.A.M.C., and one, I.M.S., who have been killed; of one officer who was lost in H.M.S. *Good Hope*, of four officers wounded, of one missing, of three officers of the R.A.M.C. prisoners of war, of one surgeon, R.N., interned in Holland, and of two officers (one of them of the R.A.M.C.) reported wounded and prisoners of war. It also contains four more pleasing entries, the names of four officers, R.A.M.C., who have been mentioned in dispatches. Thereon follows a list of 36 surgeons in the medical service, R.N., of 41 temporary surgeons, of 17 surgeon probationers, and of one sub-lieutenant of the Air Service. In the Army Medical Service there are three surgeon-generals and three colonels, besides Sir Wilmot Herringham and Sir Anthony Bowlby, who are consulting physician and surgeon respectively with the Expeditionary Force. There is a long list of officers of the R.A.M.C., temporary lieutenants, R.A.M.C., and of officers attached to general hospitals abroad and at home, and to field ambulances. It appears that 16 past or present students have received commissions in the Regular or Territorial Army, and that 19 are, or were, serving in the ranks. The list of officers in the Indian Medical Service is a long one. The publication also contains the names of former nurses and also of employees of the hospital and medical school in connexion with the war.