Stromeyer. Subcutaneous osteotomy, however, had been practised in Germany long before the date at which Adams applied this method to the hip-joint.

THE LAW OF LIGAMENT.

When we examine the principles and practice of Stromeyer, Little, and Adams, all of them pioneers in orthopaedic surgery, we are struck by the importance they attach to ligaments in the production and treatment of deformity; ligaments seemed to them almost as important as muscles. Even now the essential function of ligaments is misunderstood, and so long as this is the case we cannot hope to effect an object which is quite as important as the rectification of deformities — namely, their prevention. Hunter's teaching as regards the respective functions of muscles and ligaments in the mechanism of the human body is very definite. Muscle is the only tissue of the body which can be applied for the continued support of parts without undergoing elongation. A ligament cannot perform that function because it is composed of living passive tissue which must stretch when it is submitted to continued tension. Nature never uses ligaments either for the purpose of passive support or of active maintenance of parts in position; she uses them only for the purpose of limiting movements when the muscles which guard and surround a joint are forced beyond the compass of their normal reach.

This law can be best illustrated at the shoulder-joint. In paralysis of the shoulder muscles, or when a patient is deeply anaesthetized, the head of the humerus drops away from the glenoid cavity under the weight of the arm; the shoulder-joint can then be moved far beyond its normal limits; the ligaments become then the sole agents which limit movements, and are subject to direct stress. If in the dissecting room we strip the muscles from the shoulder and leave the humerus attached merely by its ligaments, we can see then that in all normal movements they never become taut until the usual limits are exceeded. The real ligaments of the shoulder-joint, as of every other joint in the body, are the active defensive contractile muscles.

Now man's upright position has made him more dependent on the ligamentous function of muscles than any other animal. His shoulders, when he stands up or sits up, have to be steadily supported by muscles—every one of the twenty-four vertebrae of his backbone has to be kept continuously balanced one upon the other; the contents of his abdomen have to be constantly braced by the contraction of the muscles of the abdominal wall and thus prevented from falling down. Ligaments are useless for such purposes; Nature never employs them for such ends. We see the same principle applied in the maintenance of the joints of the lower extremities. We cannot stand without the muscular braces of our hip, knee, and ankle joints coming into continuous action. It is easy to demonstrate that the maintenance of the plantar arch owes nothing to ligaments; that can be demonstrated in the living foot and leg, and also in the dissected parts.

It is quite clear that ligaments are passive parts; their elongation is not a cause but a consequence of the deformity. In short, in all static deformities of the human body the cause has to be sought for, not in ligamentous changes, but in the disordered action of the muscles, and we shall never succeed in preventing or mending static deformities until the truth of this law of the function of ligaments is clearly realized.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

PROFLAVINE IN SEPTIC WOUNDS.

THE following short notes of five cases of septic gunshot wounds of limbs treated with proflavine at the Kineton Auxiliary Hospital may prove of interest to others engaged in military surgery:

CASE I.

Pte. P. Gunshot wound of right shoulder on July 12th; large wound on back of shoulder, through deltoid muscle. Exposed bone felt with probe. X rays showed fractured scapula below glenoid cavity running into the joint. Piece of metal present in upper third of arm. The wound was operated on at the casualty clearing station and Carrel treatment used. On admission here on July 25th the wound was very septic and discharging. There was slight rise of temperature at night. Sinus leading to bare bone of scapula plugged with gauze saturated with proflavine (1 in 1,000 in normal saline); dressing covered with protective tissue. Dressed daily for a week. There was a marked decrease in amount of discharge. The wound became healthy and granulating; temperature normal, and the patient doing well.

CASE II.

Pte. O., aged 22. Gunshot wounds of both legs on April 11th. Perforated left tibia; large lacerated wound of left leg, tibia exposed, piece cut away. May 25th, wound very septic; profuse discharge. Wound redrained under A.C.E. and several sequestra removed. Cavity packed with bipp paste. Temperature varying between 101° and 98°. On admission here on June 9th wound still very septic. Eusol irrigations and dressings used, and wound improved to a certain extent, becoming cleaner. Proflavine was tried, irrigations of the solution (1 in 2,000 in normal saline) through drainage tubes, and gauze packings through sinus on inner side of tibia; the wounds were then covered with gauze saturated in the solution (1 in 1,000), and covered with protective. Dressed daily for ten days, then small vesicular rash appeared on surrounding skin. Saline dressings only were then applied. Previous oedematous condition of leg greatly improved, sensation and movements of the limb returning on August 10th; sequestra separating. Temperature slightly raised at night, but patient's whole condition improved.

CASE III.

Pte. F., aged 28. Gunshot wound of left leg on April 27th; large wound of inner side of left calf. Aponeurosis of deep muscles exposed. Wound excised in France. On admittance to Farnborough V.A.D. Hospital, temperature 103° at night; oedematous swelling on inner side of left ankle. This was excised and a quantity of pus removed, and gauze saturated with carbolic 1 in 20 passed through from upper to lower wound. These wounds were also syringed daily with carbolic solution.

On July 15th patient was transferred to Kineton Hospital, and an incision was made above ankle sinus leading to an abscess in front of tendo Achillis. Cavity irrigated with proflavine (1 in 2,000 in saline solution), and then packed with gauze saturated in solution 1 in 1,000. After a week's treatment, cavity quite clean and ready to heal. Wound now healed, and man sent to Medical Board.

CASE IV.

Cpl. C. Multiple wounds of scalp, right arm, right thigh, leg and buttock; wounds dirty and bone exposed. Transferred from France June 2nd, 1917; admitted Kineton Hospital (stretcher case) June 7th, 1917; wounds still very dirty and several pieces of shell imbedded in wounds of leg. Tibia exposed middle third of shaft. Eusol dressings applied for four days. Flavine gauze applied to leg wound. After two days' treatment the wound started to heal at the edges and was so clean that no swabbing was required. Flavine gauze with protective used for ten days, after which the wound completely healed with saline gauze on fourteenth day.

CASE V.

Pte. C. Gunshot wound of right thigh on September 15th, 1916; compound fracture of femur, middle third. Admitted Southampton Hospital September 28th, 1916. Was transferred to convalescent camp May 16th, 1917. Healed and went on furlough end of May, 1917. Reported sick on June 6th, 1917, admitted Birmingham University Hospital. Abscess opened and bone scraped on June 8th. Transferred to Kineton Hospital (stretcher case) on June 16th with large open wound 5 in. in length (unstitched) exposing shaft of femur. Discharge copious. Bone very painful to press from 1 in. above knee to neck of femur. Packed with eusol gauze and fomented every four hours. Temperature high from June 28th to July 7th. Flavine packing and gauze with protective applied July 7th. About a week later the sinus commenced to heal, and on August 22nd packing was discontinued.

FRED. V. ELKINGTON, L.R.C.P., L.R.C.S.,
Surgeon to Kineton Auxiliary Hospital.

PROLONGED CATHETERIZATION.

A PATIENT, aged 76, has just died after having catheterized himself regularly for fifty-seven years.

At the age of 19 he was a very keen oarsman at Cambridge, and after great exertion in rowing had an attack of what was probably transverse myelitis. His legs were completely paralysed, and he was utterly unable to pass water. The legs gradually recovered so that he could walk with two sticks. The bladder never recovered, and for fifty-seven years he passed a catheter regularly twice a day. He had repeated attacks of orchitis and cystitis. He told me that the urethra had grown so hard that no lubricant was wanted, and that he never used any disinfectant.

Yattendon, Berks. F. A. BRODRIBB, M.R.C.S., L.R.C.P.

BULLET IN POSTERIOR MEDIASTINUM.

PRIVATE G. H. H., Australian Imperial Force, was wounded at the landing at Anzac Cove, Gallipoli, April 25th, 1915. A rifle bullet entered between the first and second ribs on the left side. He was sent to the 1st Australian General Hospital, Cairo, Egypt, and rejoined his unit at Gallipoli on June 6th, 1915. The diagnosis given was "Bullet in chest." When discharged from hospital he had no embarrassment of respiration and no cardiac symptoms.

He returned to Egypt after the evacuation of Gallipoli, and subsequently went with his battalion to France. He was again wounded on July 24th, 1916, at the capture of Pozières, when the index finger of his left hand was partly shot away; the remains were subsequently amputated. After his discharge from hospital he passed into a training battalion in November, 1916, and remained there until admitted to No. 2 Australian Auxiliary Hospital on June 30th, 1917, for "breathlessness and debility."

On admission, an antero-posterior skiagraph showed a bullet apparently lying in the outer wall of the left ventricle. On a screen examination, the bullet moved synchronously with the apex beat. A lateral radiograph showed the bullet lying in the posterior wall of the pericardium. Localization was done by Mackenzie Davidson's method and the bullet found to be 12½ cm. beneath a point on the anterior wall of the chest 2 cm. above the apex beat. The patient being rather a thin subject, this corresponded with the lateral radiograph and made the bullet lie in the posterior mediastinum.

The interest of this case is in the fact that the patient was returned to the Gallipoli front and was able apparently to carry out all the arduous duties which are the lot of a private in an infantry battalion for nearly two years.

The patient's condition on admission to this hospital may be gauged from the medical officer's notes on his medical history sheet, which were as follows:—April 25th, 1915: Bullet in chest. July, 1916: Wounded index finger left hand. July, 1917: Complains of pains in shoulders, and on exertion of shortness of breath. Nothing abnormal found clinically. The patient subsequently went before a medical board, and was recommended for discharge and return to Australia.

A. T. H. NISBET,
Captain A.A.M.S.

Reports
ON
MEDICAL AND SURGICAL PRACTICE IN HOSPITALS AND ASYLUMS.

SHEFFIELD ROYAL HOSPITAL.

STRANGULATED OBTURATOR HERNIA.

(By GORDON F. STONES, M.B., Ch.B., Captain R.A.M.C.(T.), Resident Surgical Officer.)

MISS C. T., aged 50 years, was admitted on October 17th, 1917, with a history of pain in the lower part of the abdomen, commencing on October 10th and gradually getting worse. Vomiting commenced on October 11th, and since that date she had vomited seven or eight times during each day. For the last two days the vomit had been "like motions." The bowels had not been opened since October 10th. On several occasions during the last two years she had noticed a "pricking, burning sensation" in the right iliac region, striking down the right thigh. This sensation generally lasted for one or two days and was not accompanied by any signs or symptoms of obstruction. The bowels had always been constipated. She had also suffered from palpitation and shortness of breath for the last three or four years. She had been losing flesh for the last year.

The patient was thin and emaciated, with sunken features and anxious countenance. She referred the pain to the lower part of the abdomen, but did not localize one point of maximum intensity. The abdomen was distended and tympanitic. No definite rigidity could be ascertained. The liver dullness was present, although tympanitic distension of the intestines reduced its area. On rectal examination nothing definite could be felt owing to extreme tenderness on the right side of the pelvis. The radial pulse was markedly intermittent and the beats were irregular both in force and time; rate 80. The rate at the heart was 160. No murmurs were heard. Temperature 96.6°. The external hernial rings were all free from protrusions. A simple enema was given, but no result was obtained.

Operation was performed three-quarters of an hour after admission. An incision was made through the middle line below the umbilicus. On opening the peritoneal cavity about half a pint of straw-coloured fluid escaped. The small intestine was much distended and plum-coloured. On tracing this towards the ileo-caecal junction it was found to enter the right obturator canal, and the collapsed distal loop to continue on to the ileo-caecal junction. Gentle traction was first tried to reduce the intestine from the hernial sac, but this was unsuccessful. The upper fibres of the thyroid membrane were then torn by the tip of the finger. This, aided by firm pressure on the inner side of the right thigh, effected reduction. It was then found that the free border only of the small intestine was involved in the strangulation, and that the mesentery had not entered the hernial sac (Richter's hernia). The gut recovered under bathings of normal saline, and peristaltic waves were observed to pass along the intestine. The patient's condition was rather critical, and the gut was returned, half a pint of saline being poured into the peritoneal cavity. One pint of saline was given into the axillae during the operation. The anaesthetic consisted of open ether, which the patient took fairly well.

The patient recovered from the operation, but vomiting persisted, and death took place thirteen and a half hours later.

A *post-mortem* examination revealed a sac about the size of a pigeon's egg, behind the right pectineus muscle, and to the outer side of the adductor longus. The obturator artery and nerve ran on the outer and posterior aspect of the neck of the sac.

I am much indebted to the kindness of Captain J. B. Ferguson Wilson, F.R.C.S., R.A.M.C.(T.), under whose care this case was admitted, for allowing me to operate, and to publish these notes.

Reviews.

HOW TO AVOID TUBERCULOSIS.

POPULAR handbooks on medical subjects, written by doctors, but addressed to the public generally, are not as a rule to be commended. In so far as they deal with treatment they are distinctly objectionable, but if employed for the purpose of aiding prevention of disease such works may be of real service not only to the public but also to the doctor by whose advice preventive measures are undertaken. In the attempt to stay the progress of tuberculosis all classes of persons are concerned, and it is essential to success that every one should become acquainted with the main principles involved.

Within the small compass of a pocket volume on *Tuberculosis*,[1] Dr. CLIVE RIVIERE has endeavoured to compress all the essentials of modern knowledge with respect to the incidence and spread of tuberculosis and to point out the means by which the individual may be protected from infection and from the further progress of the disease. The different periods of life are considered in order and the relative danger, as shown by age death-rates, is fully discussed. The extreme susceptibility of the infant under nine months of age renders it necessary to sterilize all milk, if the child be not breast-fed, but after a year, Dr. Riviere advocates the use of mixed raw milk in order that the inevitable introduction of the bovine type of bacillus may take place in a very diluted form. This counsel rests upon the basis that almost everyone becomes infected in youth and that a mild dose of bovine bacilli, while it may induce a moderate degree of lymphatic inflammation for a time, does in fact protect the recipient from the attack of the human form of the organism later in life. The precautions that should be taken to avoid such later attacks are fully enumerated and discussed. Many of these precautions, although most easy to observe, are commonly ignored, and the adoption of wiser methods will doubtless

[1] *Tuberculosis.* By Clive Riviere, M.D., F.R.C.P. (Methuen's Health Series.) London: Methuen and Co., Ltd. 1917. (Fcap. 8vo, pp. 127. 1s. net.)

useful (mostly for its advertisements) I have decided to withdraw my resignation.

The miserable have no other medicine
But only hope.

—I am, etc.,

December 13th. TRULY RURAL.

RURAL PRACTICE.

SIR,—In the obituary notices of a medical man I read an appreciation by a colleague, which began thus: "Though only a country practitioner . . ." suggesting that rural practice is always chosen from inability to compete with our town friends. It is strange that the country doctor is so often regarded as of an inferior type. My experience is quite the contrary. Having served at sea and in large practices, I can say that none have taught me more than my country colleagues, and nowhere is self-reliance implanted so firmly.

Take, for example, a difficult midwifery case miles from any help, with no friendly practitioner round the corner to give a hand. Here the responsibility has to be faced alone. Perhaps it will not be amiss to quote my midwifery record during the past year: There were thirty-five cases, and of these eleven were normal. Among the twenty-four complicated cases of labour twelve needed forceps; in one I had no one to give chloroform. There was one case of *ante-partum* eclampsia; three genuine cases of painless labour, in each of which turning was performed; one case of impacted breech; three occipito-posterior cases; one shoulder case with cord presenting; one peculiar case of cardiac dropsy in which the size of the abdomen remained practically unchanged after delivery; one case of persistent fainting attacks; and, finally, a case of difficult delivery, the infant having an enormous syringomyelocele. In two of the cases I had the kind help of Dr. Welsford of Tiverton. Town colleagues say we should not attempt these difficult cases alone, but the fact is we must, "though only country practitioners." I often think of the couplet:

Luckless is he whom hard Fates urge on
To practise as a country surgeon.

The much advertised inducements of fishing, shooting, golf, etc., seldom, indeed, come our way. Seldom even are we able to attend our local British Medical Association meetings. Here may I say that what strikes me about recent discussions in the JOURNAL is the lack of unity among medical men. I am sure our position would be far better if we did but pull firmly together, headed by our British Medical Association representatives.

So long as this inability to unite continues we shall remain public slaves. Take the infectious notification fee. My last diphtheria case cost me in stamps much more than the miserable shilling. Such is our reward for safeguarding the public with risk to ourselves and our families. Lastly, as to panel work, I may quote one of many such cases. I recently paid twenty visits to a man some six miles or more from my home—one visit at midnight—over the roughest lanes, and this for 11s. a year. With petrol 4s. a gallon, and drugs so expensive, how can it be done?

Need I say that the object of this letter is not to eulogize myself, but to point out a few of the trials and troubles of the country doctor.—I am, etc.,

DAVID H. VICKERY,

Cheriton Fitzpaine, Nov. 24th. Surgeon R.N. (invalided).

Obituary.

THE death occurred, on December 7th, of Dr. FREDERICK EDWARD WALKER, of Uxbridge, at the early age of 43 years. After studying medicine at Guy's Hospital he qualified M.R.C.S., L.R.C.P. in 1889, and three years later he took the M.B., B.S. degrees of the University of London. He served as civil surgeon during the South African war, and received the Queen's medal with three clasps. He afterwards settled in practice at Uxbridge. In 1912 he became medical officer to the Uxbridge Rural District Council, and during the war acted as medical officer to the urban district and to the Uxbridge Union. He was a member of the Urban District Council, and captain of the local fire brigade. The very large number of organizations represented at his funeral showed the respect in which he was held. He leaves a widow and two young children.

Dr. THOMAS FISHER, of Great Eccleston, who died on December 1st, was the son of the late Mr. John Fisher of St. Michaels, and was educated at Alston College and St. Thomas's Hospital. After taking the diplomas of M.R.C.S.Eng., and L.S.A. in 1876, he settled in practice at Great Eccleston. He was a J.P. for the county of Lancaster, a member of the Blackpool Division of the British Medical Association, M.O.H. for the Garstang Rural District, and medical officer to the Joint Small-pox Hospital, Elswick. In 1916, owing to the great calls on the medical profession caused through the war, Dr. Fisher accepted the appointment of acting medical superintendent of the Lancashire County Council Sanatorium at Elswick. He leaves three sons and one daughter, two of the former being members of the medical profession.

BRIGADE SURGEON WILLIAM NOLAN, Bombay Medical Service (retired), died suddenly at Wallington, Surrey, on December 11th, aged 75. He was educated at Trinity College, Dublin, where he graduated B.A. in 1864, M.B. in 1865, M.D. in 1868, and M.A. in 1883; he took the diploma of M.R.C.S. in 1866. He entered the I.M.S. as assistant surgeon on April 1st, 1867, became surgeon on July 1st, 1873, surgeon-major on April 1st, 1879, and retired with a step of honorary rank on September 24th, 1887. He served in the Abyssinian war in 1868 and received the medal.

ASSISTANT SURGEON THOMAS PARKER SMITH, formerly of the Army Medical Department, died at Reigate on December 4th, aged 81. He was educated at Owens College, Manchester, and graduated M.B.Lond. in 1858 and took the diplomas of M.R.C.S. and L.S.A. in the same year. He entered the army as assistant surgeon on March 31st, 1862, but after six years' service, spent partly on the staff and partly in the Royal Munster Fusiliers, retired on half-pay on December 12th, 1868, nearly half a century ago. Before joining the army he had held the post of house-surgeon to the Staffordshire General Infirmary. He translated from the German, for the New Sydenham Society, several volumes, *German Clinical Lectures*, part of *Billroth's Surgery*, and Senator's *Albuminuria in Health and Disease*.

The Services.

HALF-PAY FOR SURGEON-GENERALS.

AN Army Order has been issued providing that a Surgeon-General of the Army Medical Service promoted to that rank after the date of the Order (December 20th) shall be placed on half-pay at the rate of £1 15s. a day after four years' service in that rank.

EXCHANGES.

M.O. attached Northern Command would like to exchange with M.O. attached London Command.—Address, No. 4349, BRITISH MEDICAL JOURNAL Office, 429, Strand, W.C.2.

Medical officer serving in the Northern Command would like to exchange with one serving in the London Command.—Address, No. 4200, BRITISH MEDICAL JOURNAL Office, No. 429, Strand, W.C.2.

Universities and Colleges.

UNIVERSITY OF CAMBRIDGE.

THE following candidates have been approved at the examination indicated:

THIRD M.B., B.C.—*Part I, Surgery and Midwifery:* I. de B Daly, R. Frerich, A. R. Hargreaves, C. E. Kindersley, J. G. Lawn, H. Morrison, F. P. Nicholas, A. G. Shurlock, E. B. Verney, C. H. Vernon.

UNIVERSITY OF MANCHESTER.

THE following candidates have been approved at the examinations indicated:

FINAL M.B. AND CH.B.—C. F. J. Carruthers, J. Charnley, J. C. T. Fiddes M. C. Paterson, R. S. Paterson, Elizabeth C. Powell. *Forensic Medicine:* T. Colley, S. E. Critchley, F. L. Whincup.

THIRD M.B. AND CH.B.—*General Pathology and Morbid Anatomy:* Nooman Abdoh, Elizabeth C. Davies, Kathleen Doyle, Georgiana M. Duthie, Olive M. Gimson, F. G. Hamnett, A. Harris, S. Kelly, J. N. Laing, J. G. Nolan, Olga G. M. Payne, F. L. Pickett, Efime Ratner, W. Reikan, Annie G. Thompson, Doris M. R. Tompkin, Ruth A. Wilson. *Pharmacology and Therapeutics:* R. J. Allison, Mary E. Boullen, P. Fildes, A. Harris, A. E. H. Sadek, Ethel D. Willis, J. Yates. *Hygiene:* R. J. Allison, A. M. Cotes, E. B. A. Edelston, A. E. H. Sadek, Ethel D. Willis, J. Yates.

UNIVERSITY OF LONDON.

THE following candidates have been approved at the examinations indicated:

M.D.—*Branch I (Medicine)*: Dorothy Chick, H. J. O. Ewing (University Medal), Mary E. Joll, G. W. Lloyd. *Branch V (State Medicine)*: P. Smith.

M.S.—*Branch I (Surgery)*: W. E. Tanner.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AN ordinary Council was held on December 13th, when Colonel Charters Symonds, Vice-President, was in the chair.

Issue of Diplomas.

The diploma of Fellowship was granted to Mr. H. E. Griffiths, M.R.C.S., L.R.C.P., of St. Bartholomew's Hospital, who qualified at the recent examination.

Diplomas of the Licence in Dental Surgery were granted to twenty-two candidates found qualified.

Appointment of Representatives.

The following representatives of the College were appointed: Sir Berkeley Moynihan to the Court of Governors of the University of Birmingham, Mr. D'Arcy Power to the Court of Governors of the University of Bristol, Mr. W. G. Spencer to the Central Council for District Nursing in London.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH.

THE following gentlemen, having passed the requisite examination, have been admitted Fellows: A. F. Cole, Subodhchandra Datta, S. Forsdike, J. Geoghegan, W. M. W. Shepherd, R. Tennent, N. J. Wigram.

The Liston Victoria Jubilee Prize of £100 has been awarded to Mr. D. P. D. Wilkie, F.R.C.S.E., for his valuable work and contributions with special reference to abdominal surgery.

Medical News.

THE King has conferred the Order of Mercy on Colonel R. J. Blackham, C.I.E., D.S.O., M.R.C.P.E., who is now serving as A.D.M.S. of a Division in Italy.

PROFESSOR F. DE QUERVAIN has been appointed to the chair of surgery in the University of Berne in succession to the late Professor Kocher.

OFFICERS of the United States Army Medical Service while stationed in Dublin or in its neighbourhood are invited by the Royal College of Physicians of Ireland to make use of its library.

THE American periodical *Pediatrics* has been incorporated with the New York *Medical Review of Reviews*, the editor, Dr. W. E. Fitch, having been called up for service in the army.

THE Cuban Red Cross is equipping a hospital unit with one hundred beds for active service on the Western front in France. It is staffed by Cuban doctors and nurses. A fund of £200,000 is being raised for the purpose by Cuban women. A national Red Cross day has been arranged for all parts of the Republic.

As the Viennese medical practitioners have to rely mainly on the electric trams for getting to their patients, and as the trams are often overfilled, it is proposed that the conductresses should be instructed to give practitioners establishing their identity a first claim to a seat.

SIR AUCKLAND CAMPBELL GEDDES, M.D., M.P., Minister of National Service, was sworn a member of the Privy Council on December 21st. As at present arranged, he will introduce the new amending Military Service Bill—the fourth of the series—on the reassembly of Parliament on January 14th. It is not probable that it will affect the medical situation in any way.

THE Department of the Seine intends to expend a sum of £40,000 on the establishment of tuberculosis dispensaries, which will be provided with nurses and health visitors of both sexes. The provision is made in accordance with a law which came into force in April, 1916.

THE annual congress of the Ophthalmological Society of the United Kingdom is to take place in London on May 2nd and two following days. Discussions will be held on the plastic surgery of the eyelids and on contagious diseases of the conjunctiva, and a number of demonstrations will be given. A museum, including a special exhibition of perimeters, is being arranged. Communications on this subject may be addressed to Dr. A. C. Hudson, 50, Queen Anne Street, London, W.1.

AT the seventh clinical Congress of Surgeons of North America, held in Chicago October 22nd to 26th, Surgeon-General Braisted stated that whereas there were formerly 394 medical officers in the United States Navy there were now 828, the full authorized strength, and, in addition, over 700 in the naval reserve corps. The navy had twelve hospital units organized under, and in conjunction with, the Red Cross, and five small naval stations. In the four naval hospital corps training schools there were sometimes a thousand men. Two ships were now being converted into hospital ships, and one now in course of construction would be from the keel up of a new type.

IN response to medical representations, the Prussian Minister for the Interior has put the muzzling order again into force in greater Berlin. While it was in force very few people were bitten by rabid dogs, but in 1912, after its repeal, 26 cases occurred, and the average annual number of dog-bites notified by the police was about 100 a year.

BY order of the Surgeon-General of the United States army an officers' school of oral and plastic surgery has been established for the training of a limited number of the medical reserve and dentists in the care of wounds of the face and jaws. The school is planned for the training and placing of a number of officers sufficient for the care of the face injuries among a million men in hospitals, and eventually a section of the staff will be established in every base and evacuation hospital. The first school has its headquarters at the Washington Medical School (St. Louis), which on the entry of the United States into the war offered to the Government the use of its new laboratories, hospitals, and clinics, and the services of its faculty. The instructors have been chosen chiefly from the faculties of Washington and St. Louis medical schools. The latter offers intensive work in anatomy, operative surgery, anaesthesia, and dentistry. The first course began on October 15th.

THE annual report of Livingstone College for the past year states that the reasons for the temporary discontinuance of the courses of study are, if possible, more urgent now than in August, 1915, when the college was transformed into an auxiliary military hospital. During the past twelve months over 99 per cent. of the beds had been fully occupied, and the admissions since the hospital was opened exceed 1,500. No attempt is made to forecast the programme of the college when it becomes once more a school for the training of missionaries in the elements of medicine, surgery, and hygiene, but the committee believe that, as a result of experiences during the war, a great impulse will be given to the work of Livingstone College.

IN the city of New York during 1915 there were about 15,000 cases of diphtheria with nearly 1,300 deaths, nearly 10,000 of scarlet fever with 291 deaths, over 38,000 of measles with 630 deaths, and only 174 and 95 cases respectively of cerebro-spinal meningitis and acute poliomyelitis. Three quarters of the patients with diphtheria and scarlet fever were treated in their own homes. A great deal of anti-tuberculosis work is done; 33,000 patients were under treatment at the various tuberculosis clinics during the year, under the charge of 67 special physicians and 41 volunteer physicians. As regards venereal disease, the department gives advice freely but undertakes no treatment at all; there are "Wassermann clinics" and a medical adviser, the former dealing with nearly 17,000 patients, the latter with 3,721. Deaths from rabies numbered 22 in the three preceding years; in 1915 only one occurred, though 279 patients were treated at the "Antirabic Clinics," and 103 rabid dogs (laboratory confirmation) were dealt with. There were 3,648 cases of dog-bite reported; 404 of these dogs were muzzled, 440 were on the leash, and 263 were both muzzled and leashed. The American S.P.C.A. collected and destroyed 35,537 dogs during 1915.

AFTER retelling in a singularly interesting manner the story of Burke and Hare, who in 1828 made a vocation of murdering the unprotected waifs and strays of Edinburgh to provide themselves with a livelihood and the dissecting rooms with subjects, Dr. C. W. Burr of Philadelphia discusses (*Annals of Medical History*, New York, 1917, i, 75–82) the psychology of murder. He first clears the ground by ruling out killing in self-defence, in a sudden access of passion, and by the insane; and this done, defines the murderer from the psychological point of view as the man who, without any temporary change in his usual psychical condition, can coldly contemplate and leisurely plan the killing of another for his own apparent benefit; such a one is psychologically a murderer, whether or not he ever kills, if, after planning the deed, he drinks to give himself the necessary courage, or if he hires another to carry out his plan. The one quality lacking in all sane murderers is the moral sense or the realization of a duty towards others who have an equal right to live; the murderer is colour-blind to morals, and never feels remorse or grief on account of his victim. The cause of this want of moral sense we no more know than we know what produces it; it is independent of intellect and environment. The murderer is born not made, and comes of a type apart and distinct from all other men.