

the abdominal wall. If the operation is ever to be successful, it must be undertaken before the patient has one foot in the grave; when his powers are not weakened by emaciation consequent upon starvation, when he is, humanly speaking, not likely to sink at once from exhaustion, and not in a condition favourable to chest complications.

In analysing the fifteen gastrotomies, I find the cause of death to be in seven, peritonitis; in six, exhaustion; in one, broncho-pneumonia; and in one "the operation had nothing to do with the death;" so that more than half died of causes quite independent of peritoneal inflammation, a condition of hope that a more careful selection of cases, and an earlier submission to the operation, may in the future give us success, and so the efforts of the enterprising surgeon may not go unrewarded.

Yet, there can be no doubt in this operation the surgeon starts heavily weighted, for he has not, as in ovariectomy, to deal with a peritoneum which by contact and friction has become altered, thickened, accustomed to pressure, and with its sensibility blunted, but with a membrane in the full glow, as it were, of its pristine sensitiveness ready to burst forth into an inflammatory blaze, which ceases not to kindle until it is put out by death.

The problem is not yet solved, for the contest is still going on. Pathology up to now has conquered surgery; and we have yet to learn whether surgery can overpower pathology.

REVIEWS AND NOTICES.

PRINCIPLES OF ANIMAL MECHANICS. By the REV. SAMUEL HAUGHTON, M.D. (Dubl.), D.C.L. (Oxon.), F.R.S., Fellow of Trinity College, Dublin. London: Longmans and Co. 1873.

THE critic who attempted to review this remarkable book would require to possess various knowledge such as we cannot pretend to have. It is a monument of varied erudition and research, full of original results which enrich science and do honour to English physiology. Briefly, we may state, this book is an attempt to complete the work commenced by Borelli in his book *De Motu Animalium* (1680), and to reduce the actions of the muscles and limbs of animals to strict mathematical and mechanical principles.

The book contains a brief description of the nature of muscular fibres and of their contraction; and a discussion of the statical and dynamical work done by muscles, followed by an estimate of muscular force in absolute measure per unit of cross section. This is followed by a digression on the comparative anatomy of the tendons of the flexor muscles in the hand and foot and their mechanical uses; and by an investigation of the mechanical work done by the human heart, and by the muscles employed in parturition.

The principal section of the book contains the classification of muscles, according to the arrangement of their fibres; and the mathematical discussion of their various modes of doing work, illustrated by numerous examples from the comparative anatomy of the muscles of vertebrate animals. This discussion leads to many interesting results, among which may be mentioned the theory of ellipsoidal muscles, the axes of maximum instability and minimum stability in the wings of birds, and the theory of quadrilateral and skew muscles, illustrated by an application of Ptolemy's theorem, and the proof that skew muscles are "supplemental contrivances" to produce a line of force between two points outside the muscle, and already occupied by other structures.

Having fully discussed the classification of muscles and their mode of action, the author discusses the problem of the hip-joint in detail, and shows that the centre of the acetabulum is so placed as to allow each single muscle in the combination to do the maximum of work. This and similar facts are considered by the author as proofs of his teleological postulate, which is as follows.

"The Framer of the Universe has constructed all muscles on the principle that each shall perform the maximum of work possible for it under the given external conditions."

The book concludes with three applications of the general principles of animal mechanics, viz.: 1. The theory of muscular type; 2. The arrangement of the fibres of the heart; 3. Economic applications of the laws of muscular action.

The theory of muscular types is illustrated by the dissections of many rare animals, including the Gorilla, Chimpanzee, "Master Mac-Grath," the great Carnivores, the Struthionidæ, Swimming and Flying animals, including some rare Bats.

The arrangement of the fibres of the heart forms a distinct problem; and it is shown to be such as to produce the maximum of work for a given weight of muscle.

The economic applications of the science of animal mechanics are summed up in four laws, viz.: 1. Borelli's Laws; 2. Law of Constancy of Work; 3. Law of Fatigue; 4. Law of Refreshment. These laws are demonstrated from the experiments of Borelli, Stanley Jevons, Nipher, and those made by the author with the assistance of Professor Macalister and other friends.

EXERCISE AND TRAINING: THEIR EFFECTS UPON HEALTH. By R. J. LEE, M.D. London: Smith, Elder, and Co.

THE absence of any scientific work on exercise and training for the guidance of athletes is to us no matter of surprise. Experience has built up a system of training which, although in some respects, so far as diet is concerned, open to improvement by the application of scientific knowledge, is on the whole probably much more correct than would be the programme recommended by the whole body of our savants in Council. When, however, we come to the effects of training and exercise on the health of the body, we are at a loss to point to a work which in any but the most meagre way deals with the question. The barrenness of medical literature on the subject is singular, and the imperfectness of our knowledge of the various questions involved was well exemplified at the recent discussion at the Clinical Society on Overstrain of the Heart and Aorta. In the small work before us Dr. LEE does not attempt to present exhaustively a scientific method of training, or to show in any detail the evil effects of exercise. He limits himself very shortly in the first chapter to the consideration of exercise physiologically considered and its practical benefits; he points out the general character of the injuries resulting from over-exertion, and avails himself in discussing the latter question of the experience of several of the most distinguished speakers at the discussion already referred to. In the second chapter he offers a few remarks on the mode of training, on diet, sleep, air, bathing, clothing, and on medical treatment. A general system for the guidance of those training is given at the end of the book. But it is to be understood that the author's programme is intended only "to suit five o'clock hall." Dr. Lee appears fully to represent that amusing character—the typical "Varsity" man—who is possessed of a definite and fixed idea that Oxford and Cambridge are the undisputed centres of the universe, for it is only on second thoughts that it occurs to him that any other men beyond these universities are in the habit of engaging in athletic pursuits. But, although Dr. Lee's book is thus particularly impregnated in some of the minor details with the requirements of athletes at Oxford and Cambridge, and the author is a little unsound in the application of hot and cold baths in training, he has succeeded in producing a very useful and interesting little work, which we can confidently recommend athletic men to peruse. He has collected in a general way many of the important and hitherto scattered physiological and pathological truths bearing on athletics, and has thus placed in our hands a very intelligible and useful guide, which forms, we hope, a preliminary to more exhaustive future works of a similar kind.

SELECTIONS FROM JOURNALS.

SURGERY.

LIGATURE OF THE MIDDLE MENINGEAL ARTERY.—Vogt, in an article in the *Deutsche Zeitschrift für Chirurgie* (1872, vol. ii), proposes, in cases where there are indications of wound of the middle meningeal artery, in the form of symptoms of cerebral compression coming on rapidly after injury of the part, to trephine over the course of the vessel and apply a ligature to it. Hüter has performed this operation in one case; but the man died in six hours.—*Centralblatt für die Med. Wissensch.*, April 26th.

INJECTION OF ALCOHOL INTO TUMOURS.—C. Schwalbe, who has already advocated the treatment of bronchocele by the injection of tincture of iodine and of alcohol into the areolar tissue, describes in Virchow's *Archiv*, vol. lvi, part 3, a case of lipoma successfully treated by the same plan. In the course of eleven weeks, he made eighteen injections of alcohol into the tumour. The result was, that it became reduced to one-half of its original size, and hardened. Finally, Schwalbe induced suppuration by injecting caustic potash with the alcohol. On this, however, the patient ceased attendance. He concludes that atrophy of lipomata may be produced by cicatricial contraction, although more slowly, and perhaps less constantly, than in strumous swellings; and he suggests that, in cases of large and very vascular lipoma, the injection of alcohol may be employed as a means of reducing the size of the tumour and diminishing the risk of hæmorrhage

when an operation is performed for its removal. The good effects that have been ascribed to the injection of ergotin in cases of aneurism and varix he believes to be due not so much to any action of the ergotin, as to the contraction of the cicatricial tissue resulting from the inflammation; and hence, he believes, alcohol is a more efficient remedy in such cases than ergotin.—*Wiener Medizin. Wochenschr.*, April 19th.

INJURY OF A NERVE: EPILEPSY.—In an account of the reserve-lazareth at Düsseldorf during the war in 1870-71, Dr. E. Graf gives the history of a case in which a gun-shot wound of the soft parts an inch and a half above the right elbow was followed by anæsthesia and paresis of the first three fingers. The wound was very painful, and the patient had symptoms of traumatic delirium (without fever) and formation in the injured limb. The cicatrix remained tender. Fourteen days after the healing of the wound, the patient suddenly had a paroxysm of epilepsy, and soon afterwards another. The attacks returned several times daily for several days, and were accompanied with violent pain passing from the cicatrix to the neck. The median nerve, which was involved in the cicatrix, was laid bare, and a very indurated portion, an inch and a half long, was excised. After this, the pain and epileptic attacks altogether and permanently ceased. The thumb had some power of motion, and its sensibility was not quite lost. The index and middle fingers remained without motion or sensation.—*Wiener Medizin. Wochenschrift*, April 19th.

TREATMENT OF PARAPHIMOSIS.—Dr. Mauriac, in an interesting monograph on Paraphimosis lately published, arrives at the following conclusions. 1. In cases of paraphimosis not complicated with simple chancres, reduction should always be attempted, whatever may be the degree and the period of the accident. 2. Division by a long median and superior incision is only indicated in cases of paraphimosis when the tightness of the constriction coincides with shortness of the prepuce. 4. When the paraphimosis is complicated with auto-inoculable chancres, any operation with a cutting instrument must be strictly avoided. If reduction be possible, it should only be performed after the virulence of the chancres has been destroyed by energetic caustics, such as the chloride of zinc. 4. Blenorrhagia, primitive syphilitic ulcerations, simple balanoposthitis, and mucous papules, do not contraindicate either reduction or operations with a cutting instrument. 5. If adhesions, gangrene, phlegmonous inflammation of the prepuce and sheath, phlebitis, abscesses, etc., render reduction impossible, paraphimosis must be left to its natural course—always taking care, by the aid of appropriate means, to combat the complications, to hasten the resolution of the preputial swelling, and the cicatrization of the solution of continuity produced by the strangulation. 6. In irreducible paraphimosis complicated with chancres, the treatment of the former should be delayed until the cure of the latter. 7. Paraphimosis unreduced almost always leaves behind it a subpreputial tumour, constituted by hypertrophy and chronic œdema of the lower half of the prepuce. 8. This tumour must be removed by means of an inferior demi-circumcision, to complete the superior demi-circumcision produced by the ulceration of the strangulation. 9. Complete circumcision, performed behind the glans, in irreducible paraphimosis, is only applicable to cases where the prepuce is very long. It should only be done in the phase of resolution and of the ulceration of the strangulation, and if the ulceration of the strangulation has only produced an insufficient superior demi-circumcision.

PLUGGING THE TRACHEA IN OPERATIONS ON THE MOUTH AND THROAT.—The method proposed by Dr. Trendelenburg, of opening the trachea and plugging the larynx in operations on the mouth and throat, has been followed in ten operations in Langenbeck's practice; viz., seven cases of resection of the upper jaw (one osteoplastic), one case of extirpation of a tumour from the mouth, one attempted extirpation of a tumour of the pharynx with osteoplastic resection of the lower jaw, and one case of laryngeal fissure. Three of the patients died. In one, there was suppuration of the areolar tissue of the neck along the course of the trachea and œsophagus; it originated at the operation-wound, and could not, Dr. Trendelenburg says, be attributed to the tracheotomy. The same occurred in a second case. In the third, there was suppurative inflammation of the connective tissue around the wound in the trachea, reaching to the mediastinum; and also purulent deposits in the neighbourhood of the operation-wound. In performing the operations, tracheotomy was performed during anæsthesia, immediately above the thyroid body; and then, the wound being held open, the patient was again anæsthetised through it, the cannula and plug were introduced, the latter inflated, and the principal operation performed. It is necessary to induce anæsthesia before the introduction of the plug, on account of the irritation to which this latter

proceeding gives rise; this is a disadvantage of the proceeding. The plug is removed when the patient has recovered from the anæsthesia; any blood that has collected above it is then coughed up. In a case where Trendelenburg's plan was employed prior to the removal of growths from the larynx, the operation was proceeded with without interruption; it was, however, necessary to close the glottis with a sponge to prevent the entrance of saliva. Trendelenburg advises that the opening in the trachea should not be closed immediately, but that a cannula should be worn for some time. He believes that thus the frequency of attempts at swallowing is diminished.—*Archiv für Klin. Chirurgen*, vol. xv; and *Wiener Med. Wochenschrift*, May 3rd.

REPORTS AND ANALYSES AND DESCRIPTIONS OF NEW INVENTIONS IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

REFLEX ACTION PAD FOR UMBILICAL HERNIA.

This ingenious invention, which has been registered by Messrs. Matthews Brothers, of Portugal Street, Lincoln's Inn, attached to a suitable belt, is intended for the relief of umbilical hernia.* It consists of two distinct pads, the outer of which, in the shape of a ring, communicates with the inner. The outer pad, being both both thicker and higher than the inner one, when *in situ*, reflects the action of the abdominal muscles on to the inner or middle pad by its compensating



action; the principal pressure being applied, on Mr. Wood's principle, round the margin of the opening, and the centre part being only slightly in action during any movement of the abdominal walls. A glance at the illustration will at once illustrate the important feature of the pad, the great advantage of which is that it is perfectly self-acting. The invention has been in use some little time, and has been found perfectly effective in cases of obesity complicated with umbilical rupture, as well as in simple and infantile cases. The pads are filled with water or air.

THE AUTOMATIC SUPPLY OF NITROUS OXIDE.

In the *Transactions of the Odontological Society of London*, an apparatus is described and figured, with tabulated results obtained by its employment. The ingenious inventor is Mr. Warwick Hele, of Carlisle. Mr. Palmer, in a previous number of the same journal, describes a method of administering nitrous oxide so as to produce what is equivalent to an atmosphere of the anæsthetic. Mr. Hele's improved system is founded upon that described by Mr. Palmer. The action and contrivance of the coal-gas governor is to convert pressure into steady and uniform delivery. The purpose of the nitrous oxide governor is to convert pressure into varying pressure, and to provide a rapid "shut off." The action of the governor is as follows. When the amount of gas driven over from the large gasometer exceeds the quantity inhaled by the patient, it raises the bell of the governor, and in so doing gradually closes and finally shuts the inlet tube by means of the sextant levers and stop-cock thereby revolved, thus preventing waste. But the quantity of gas within the bell of the governor being exhausted by the next inspiration, the way is again opened by the depression of the bell reversing the stop-cock. In this manner, the acts of respiration and the patient's breathing capacity regulate the supply according to need. As with the bag-regulator, so here; the patient has two free sources of supply, viz., the gas accumulated in the bell of the governor, and that flowing along the pipes. These supply the gas at a proper expansion, the core or head of the three-wayed tube being of such an increased diameter as to allow for this purpose. The automatic supply of nitrous oxide is thus insured. Additional details regarding the action and construction of the governor are

* The inventors reserve the right of adapting this pad for other forms of hernia, etc.

—Dr. DICKINSON asked how far the distribution of pyæmic abscesses was dependent on the lymphatics or on the arteries. It might be clearly maintained that pyæmia was essentially a condition of embolism in which the embola had pernicious properties. He had been able to trace collections of pus-corpuscles along the course of the arteries of the kidney, where the vessels of the cones were obliterated by embola.—Dr. SANSOM remarked that Dr. Sanderson had said that bacteria might be the carrier of poison, though they were not actually the poison itself; while in his former researches he had shewn that the poison of infecting liquids was particulate, and not soluble. If it were not soluble, he (Dr. Sansom) did not understand how bacteria could be the carriers of it and not themselves be the infecting bodies. It might be that the properties of bacteria varied according to their cultivation. Another question of difficulty arose from the production of conditions resembling those following the injection of animal fluids, by the injection of inorganic matters into the pleura and peritoneum. The source of the bacteria here was a question of great interest. He would not like to come to the conclusion that spontaneous generation was concerned in the matter.—Mr. SAVORY failed to see in what direction Dr. Sanderson's paper carried our knowledge of infection. He understood that fluids not the result of inflammation, when introduced into the circulation, might induce changes similar to those met with in pyæmia or septicæmia. But it was already a familiar fact that inflammatory fever was one means of inducing pyæmia. Might not the organic fragments—bacteria, etc.—instead of being the causes of the disease, be rather coincidences?—Dr. PAYNE asked whether there were any means of distinguishing the bacteria of infective fluids from those arising from simple putrefaction, or whether there were any means of distinguishing between the bacteria met with in different diseases. He had found in *post mortem* examinations of cases of pyæmia, collections of yellow matter containing scarcely anything that could be called pus, with very few cells, but with a large amount of granular or amorphous matter. Had Dr. Sanderson come to any conclusion as to the period during which the infective power was retained after death?—Mr. HULKE asked how far the researches described threw any light on the frequency with which secondary abscesses occurred in the joints in pyæmia.—Dr. SANDERSON, in reply, said that his paper was not to be regarded as an attempt to settle the question of pyæmia, inflammation, etc., but as a contribution towards the natural history of the subject. In his communication to the Pathological Society, he had endeavoured to show that the fever arising from secondary abscess was identical with that of septicæmia; it was not dependent on the introduction of matter from without, but on the products of inflammation. With regard to what might be called the reflex influence of the septic poison on other processes going on at the time, he remarked that the introduction of septic poison caused acute changes to occur in any part which might be the seat of chronic disease. Again, the same injury which had no effect on a sound animal, would give rise to destructive inflammatory changes in one already diseased. He had lately seen an experiment of M. Chauveau of Lyons, in which inflammation and gangrene was induced by the preliminary injection of septic fluids, in the testes of horses subjected to the operation of passing the organ under the skin of the groin—the manner in which castration is done in France, and which ordinarily is followed by simple atrophy. The property of microzymes as carriers of infection depended on the circumstances in which they were placed. The activity of infective fluids was greatest immediately after death, after which it diminished. In conclusion, he acknowledged the assistance which he had received from Dr. Klein in his researches.—Dr. KLEIN said that Dr. Sanderson's researches showed that infective matter was carried by the lymphatics; but, after having passed from there into the blood-system, it might be carried on by this.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL: NOTICE OF MEETING.

A MEETING of the Committee of Council will be held on Friday, the 30th instant, at the Office of the Association, 37, Great Queen Street, London, at 3 o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary*.
37, Great Queen Street, May 15th, 1873.

EAST YORK AND NORTH LINCOLN BRANCH.

THE seventeenth annual meeting of this Branch will be held at the Hull Infirmary, on Wednesday, May 28th, 1873; J. MORLEY, Esq., President, in the Chair.

The title of any paper which members may wish to read, must be forwarded to me on or before Wednesday, the 21st instant.

ROBERT H. B. NICHOLSON, *Honorary Secretary*.

YORKSHIRE BRANCH.

THE annual meeting of this Branch will be held at the Museum of the Yorkshire Philosophical Society, York, on Wednesday, May 28th, 1873, at 2 P.M. precisely.

The members will dine together at the Station Hotel, at 5 P.M.

Gentlemen intending to bring forward communications, or to join the dinner, are requested at once to communicate with the Secretary.

W. PROCTER, M.D., *Local Secretary*.

York, May 12th, 1873.

SOUTH MIDLAND BRANCH.

THE annual meeting of this Branch will be held at the Council Chamber at the Town Hall, Northampton, on Thursday, June 5th, at 1 P.M.; Dr. BRYAN, President, in the Chair.

Dinner at the George Hotel, at 4 P.M. Charge, 5s. 6d., exclusive of wine.

Gentlemen who intend to read papers, and those who wish to dine, are particularly requested to communicate, as early as possible, with the Honorary Secretaries.

J. M. BRYAN, M.D. } *Honorary Secretaries*.
WM. MOXON. }

Northampton, May 6th, 1873.

SOUTH-EASTERN BRANCH: WEST SUSSEX DISTRICT MEDICAL MEETINGS.

THE next meeting of the above district will be held at the Board Room of the Infirmary, Chichester, on Friday, June 6th, at 2.45 P.M. precisely; Dr. TYACKE in the Chair.

The dinner will take place at the Dolphin Hotel, at 4.45 P.M. Charge, 5s., exclusive of wine.

All members of the South-Eastern Branch are entitled to attend, and to introduce friends.

Papers have been promised by Dr. Fussell of Brighton and Dr. Paxton of Chichester.

Any other member desirous of reading papers or bringing forward cases, is requested to communicate forthwith with the Honorary Secretary.

WM. J. HARRIS, *Honorary Secretary*.

13, Marine Parade, Worthing, May 19th, 1873.

EAST ANGLIAN AND CAMBRIDGE AND HUNTINGDON BRANCHES.

THE combined annual meeting of the above Branches will be held at the Town Hall, Great Yarmouth, on Friday, June 20th, at 2 P.M.; J. C. SMITH, Esq., President, in the Chair.

Dinner at the Royal Hotel, Great Yarmouth, at 5.30 P.M. Tickets, 12s. 6d. each.

Members wishing to read papers, or to join the dinner, are requested to communicate, as early as possible, with one of the Honorary Secretaries.

B. CHEVALLIER, M.D., Ipswich. } *Honorary Secretaries*.
J. B. BRADBURY, M.D., Cambridge. }
J. B. PITT, M.D., Norwich. }

May 19th, 1873.

LANCASHIRE AND CHESHIRE BRANCH.

THE annual meeting of this Branch will be held at Warrington, on Tuesday, June 24th, at One o'clock; CHARLES WHITE, Esq., President, in the Chair.

Gentlemen having papers or cases, etc., to communicate, are requested to forward the titles or particulars to the undersigned, without delay.

A. B. STEELE, *Honorary Secretary*.

54, Rodney Street, Liverpool, May 1873.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE annual meeting of this Branch will be held at the Great Western Hotel, Birmingham, on Tuesday, June 24th, at 3 P.M.

An address will be delivered by the President, FURNEAUX JORDAN, Esq., F.R.C.S.

The annual dinner will be held at 5 P.M., for the convenience of country members.

Dinner tickets, including waiters and dessert, 7s. 6d. each.

Members intending to be present at the dinner, are requested to communicate with the Honorary Secretaries on or before June 20th, in order that suitable arrangements may be made.

T. H. BARTLETT, F.R.C.S. } *Honorary Secretaries*.
BALHAZAR W. FOSTER, M.D. }

Birmingham, May 20th, 1873.

MEDICAL NEWS.

ANNIVERSARY OF THE PHARMACEUTICAL SOCIETY.

THE annual meeting of this Society was held on Wednesday the 21st, at the Society's house, 17, Bloomsbury Square. The proceedings were opened by an address from Mr. Haselden, the President, who, after congratulating the members on the steady prosperous condition the Society had maintained and upon the esteem in which it was held abroad, went on to speak of the examinations, the conduct of which now constitutes one of the most important functions of the Society. His remarks in several respects suggested the desirability of making this more exclusively its business, and of leaving the practical work of education to other hands.

In the Report of the Council, satisfaction was expressed at the advantages of the more representative constitution of the executive body and of reporting its proceedings. The financial condition of the Society was referred to as exhibiting an advance, and it was shewn that the members of the Society had largely increased. Among the other incidents of the past year, the rectification of the *Register* and the increase in the Benevolent Fund were referred to.

The subjects which chiefly occupied the attention of the meeting were the question as to the admission of women into the Society, and an alteration of the Society's bye-laws affecting the conditions under which candidates were to be admissible to the examinations requisite for obtaining legal qualification to carry on the business of chemist and druggist.

As regards the former subject, Mr. Hampson, a member of the Council of the Society, had given notice of a motion to the effect that the refusal to admit into the Society female persons who conformed to the legal tests of the examiners, was contrary to the plain intention of the statutes.

After a long discussion, it was decided to take a vote on an amendment, proposing that the further discussion of the subject should be adjourned *sine die*, which was carried.

The changes proposed by the Council to be made in the regulations applying to the Society's examinations, were intended to give greater security that persons admitted to registration, and thereby certified as being fit to carry on, on their own account, and to practise pharmacy, should have had practical experience of their business. The amendments of the regulations were originally suggested by the Board of Examiners; they provided that no person should be admitted to the examination who had not attained the full age of twenty-one years, and that no person should be allowed to pass the examination who had not been for three years either registered as a student, or otherwise practically engaged in the translation and dispensing of prescriptions.

In the discussion which took place on the proposition that these amendments should be adopted, several speakers addressed the meeting on both sides of the question, but eventually they were carried by a large majority. It now only remains for the Privy Council to confirm these new regulations, as provided by the Pharmacy Acts (1852 and 1868).

MEDICAL VACANCIES.

THE following vacancies are announced:—

- ALNWICK RURAL SANITARY DISTRICT—Medical Officer of Health: £50 per annum, and fees.
 BILLERICAY, CHELMSFORD, and MALDON RURAL SANITARY DISTRICTS, combined—Medical Officer of Health: £800 per annum. Applications to W. W. Duffield, Esq., Chelmsford.
 BILLESDON, BLABY, HINCKLEY, and LUTTERWORTH Rural Sanitary Districts, and Melton Mowbray Urban Sanitary District, combined—Medical Officer of Health: £450 per annum; to be increased, if other districts join: maximum, £800.
 BRIGHTON AND HOVE DISPENSARY—Two Resident House-Surgeons: £100 per annum, furnished apartments, coal, gas, and attendance.
 COUNTY DOWN INFIRMARY—Resident Registrar and Assistant-Surgeon: 60 guineas per annum, board, apartments, and washing.
 COUNTY OF CARMARTHEN INFIRMARY—House-Surgeon: £100 per annum, lodging, coal, and candles.
 DENBIGH URBAN SANITARY DISTRICT—Medical Officer of Health: £50 per annum.
 DONCASTER UNION—Medical Officer for the Doncaster East District: £35 per annum.
 DRIFFIELD UNION, Yorkshire—Medical Officers and Public Vaccinators for the Kilham and Wetwang Districts: £25 and £21 per ann., and fees, respectively.
 DURHAM, County of—Public Analyst: £100 per annum, and 6s. for each analysis. Applications to John Watson, Esq., North Bailey, Durham.
 ELY UNION—Medical Officer for District No. 5 and the Workhouse: £51 per annum, and fees.
 FYLDE UNION—Medical Officer of Health: £500 per annum, to include travelling and all other expenses.

- GRANARD UNION, co. Longford—Medical Officer for the Street Dispensary District: £100 per annum. Applications to John Kenny, Esq., Lissanure, Edgeworthstown.
 GRAVESEND and MILTON INFIRMARY and DISPENSARY—Surgeon.
 GREAT YARMOUTH HOSPITAL—House-Surgeon: £100 per annum, furnished apartments, coal, gas, and attendance.
 HAMBLEDON UNION, Surrey—Medical Officer of Health: £50 and fees for one year. Applications to F. Ferdinand Smallpiece, Esq., Guildford.
 HUDDERSFIELD INFIRMARY—House-Surgeon and Assistant House-Surgeon: £80, increasing to £100, and £40 per annum, board, lodging, and washing, respectively.
 INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST, Margaret Street, Cavendish Square—Visiting Physician.
 KELLS UNION, co. Meath—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Moynalty Dispensary District: £120 per annum, and fees. Applications to John Keating, Esq., Moynalty.
 KING'S COLLEGE, London—Professor of Anatomy.
 LAMBETH—Dispenser: £90 per annum and extras.
 LINCOLN UNITED FRIENDLY SOCIETIES DISPENSARY—Medical Officer: £150 per annum, to commence, house, gas, etc. Applications to E. Lascelles, Lincil Bank, Lincoln.
 LONDON TEMPERANCE HOSPITAL—House-Surgeon: £70 per annum, apartments, and board.
 MAGHERAFELT UNION—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Bellaghy Dispensary District: £100 per annum, and fees. Applications to John Hill, Esq., the Castle, Bellaghy.
 METROPOLITAN ASYLUM DISTRICT ASYLUM FOR IMBECILES AND HARMLESS LUNATICS, Haverstock Hill—Resident Medical Superintendent.
 MIDDLESBROUGH URBAN SANITARY DISTRICT—Medical Officer of Health: £150 per annum.
 NORTH LONDON CONSUMPTION HOSPITAL—Physician.
 NORWICH DISPENSARY—Resident Medical Officer: £120 per annum, £12 for coal, etc., and residence. Applications to Robert Chamberlin, Esq., Catton House, Norwich.
 SALISBURY URBAN SANITARY DISTRICT—Medical Officer of Health: £60 per annum.
 SHEFFIELD GENERAL INFIRMARY—House-Surgeon: £140 per annum, board, lodging, and washing.
 SHEFFIELD PUBLIC HOSPITAL and DISPENSARY—Physician.
 SPENNYMOOR URBAN SANITARY DISTRICT—Medical Officer of Health: £25 for one year.
 WESTMINSTER HOSPITAL—Assistant-Surgeon.
 WHITEHAVEN UNION—Medical Officer for the Harrington District: £45 per annum.
 WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL—House Governor, Secretary, and Collector: £120 per ann., board and residence.
 WORCESTER INFIRMARY—Resident Surgeon, Dispenser and Secretary: £150 per annum, furnished apartments, coal, gas, and attendance.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

MCLEAN, Allan, M.B., appointed Medical Officer and Public Vaccinator for the Portland District of the Weymouth Union; Admiralty Surgeon and Agent; Surgeon to the Royal Portland Dispensary; Surgeon to the Dorset County Club; and Surgeon to the Foresters' and Odd Fellows' Clubs.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the communication.

BIRTH.

THOMPSON.—On the morning of May 20th, at Glyndon House, Cradley, near Brierley Hill, the wife of Wesley H. Thompson, L.R.C.P.Ed. & L.R.S. Ed., of a son.

MARRIAGE.

BODINGTON—BELL.—On May 5th, at South Place Chapel, Finsbury, by Moncure D. Conway, Esq., Minister, *G. F. Bodington, M.D. M.R.C.P., of Ashwood House, Kingswinford, Staffordshire, to Mrs. Bell, eldest daughter of F. C. Brooke, Esq., of Ufford, Suffolk, and granddaughter of the late Charles Allix, Esq., of Willoughby, Lincolnshire.

DEATHS.

ALLOTT, James R. L., Esq., Surgeon, of Hoyland Nether, aged 54, on May 6th.
 DINGLEY, Thomas Kerslake, Esq., Surgeon, at Winkleigh, Devon, on April 24th.
 FALKNER, Alfred, A.B.T.C.D., L.R.C.P.Ed., at Longford Terrace, Kingstown, Dublin, aged 33, on May 8th.
 HODSON, Thomas, Esq., Surgeon, late of Deva Villa, Clifton Road East, at Brighton, aged 54, on May 8th.
 KNIGHT, Gustavus Irwin, Esq., Surgeon, at Dorking, on May 11th.

DR. FRANCIS T. BOND.—At the meeting of the Committee of the Hartley Institution, Southampton, last week, the following resolution was passed: "That this Committee, on the retirement of Dr. Bond, desires to place on record the high sense they entertain of the great services which Dr. Bond has rendered to the Hartley Institution as its Principal; and, while they offer him their cordial congratulations on his appointment to a position of great trust and responsibility, regret that the institution over which they preside should lose the services of one who bears so high a reputation as a man of science, a thorough man of business, and a private gentleman, and who has done so much to advance the interests and reputation of the Hartley Institution." Dr. Bond was present, and returned thanks.

OPERATION DAYS AT THE HOSPITALS.

MONDAYMetropolitan Free, 2 P.M.—St. Mark's, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.

TUESDAYGuy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.

THURSDAYSt. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.

FRIDAYRoyal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.

SATURDAY.....St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.—East London Hospital for Children, 2 P.M.—Hospital for Women, 9.30 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M.—Royal Free, 9 A.M. and 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Dr. Greenhow, "Case of Abdominal Aneurism successfully treated by Proximal Pressure of the Aorta"; Dr. George Johnson, "On the Etiology of Albuminuria"; Dr. Wilson Fox, "On Temperature, Pulse, and Respiration, in Phthisis and Acute Tuberculosis of the Lungs."

NOTICES TO CORRESPONDENTS.

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

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

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

COMMUNICATIONS respecting editorial matters should be addressed to the Editor; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 37, Great Queen Street, W.C.

MR. G. ASHTON'S letter has been forwarded to Mr. Eassie.

THE Reports on Sanitary Engineering have not been republished. The JOURNALS in which they are published can be obtained on application to the General Manager, Mr. Fowke, at the office.

MR. F. LOWNDES (Liverpool).—We do not file the *Ohio Clinic*, and have not retained the number of December 28th, referred to in our notice. It could probably be obtained by writing direct to the publisher, Cincinnati, U.S.A., or by order through Trübner and Co., Paternoster Row, London.

GOOD MORALS BUT BAD ENGLISH.

WE have received from Mr. Acton, some "Moral Reasons which may influence public opinion in preventing the repeal of the Contagious Diseases Acts," which is apparently a broadsheet intended for general circulation. Its object is good, and its statements are not without force. We are sorry to observe that it is written in a very illiterate fashion, and that very few of its sentences parse. Either Mr. Acton did not write this discreditable jumble of bad English, or some one else must have written his books, which are for the most part couched in clear and vigorous language, and are in places remarkable for picturesque effect. The members of a learned profession ought to be able to write with tolerable correctness their native language; and a document such as this exposes its author to ridicule, and discredits the educational status of the profession to which he belongs. Ludicrous blunders of meaning, style, form, and parsing occur in every paragraph and almost every line, and we must protest against a gentleman who thus offends constituting himself the literary champion of a good cause. Mr. Acton does not, like Mr. Bryant, effect the marvels of plucking "cotton-wool from the sheep," or cutting off two legs at once, or only occasionally passing his own urine; but grammatically construed, his language would habitually convey a meaning directly opposite to that which he intends to convey, and we should have to admire "sanitary and moral consequences" of prostitution, to admit that it has "beneficial sanitary results," and that the action of the Contagious Diseases Acts, as a deterrent is "to immorality"—that since the passing of the Act the prostitute has become immortal, for society will not "let her die," and now usually disease follows "death." We give Mr. Acton credit for excellent intentions; but he is hardly likely to achieve any good object by so absurd an utterance. If the document is to have an extensive circulation, a second and revised edition is desirable. These are grand results, and if communicated to the House of Commons in time, might have altered the views of some of those who voted last night; but it is difficult to suppose that Mr. Acton really meant to set them forth.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 37, Great Queen Street, W.C., and not to the Editor.

MIDWIFERY ORDERS.

A CORRESPONDENT writes:—I am one of the Medical Officers of the Clun Union, and in September last, I received an order signed by the two overseers of a parish in my district, to attend a midwifery case. It was of a very urgent nature, very complicated, requiring instrumental aid, and constant attendance for ten days subsequently. The Board of Guardians have refused to pay my fee of two sovereigns, stating as a reason that the husband is in a condition to pay himself. I am therefore compelled to appeal to the *County Court*, and should be much obliged if you would kindly give me your opinion as to whether I ought to sue the *Board of Guardians* or the *Overseers who gave the order*, as I am anxious to avoid being non-suited by putting the saddle upon the wrong horse.

* * In Glen's *Poor-Law Orders*, it is provided by Art. 182-3 that the fee to be paid for the case in question is £2, and from note (b), it would appear that the Overseers are responsible, and not the Guardians. The best course to adopt would be to apply to the Overseers for payment, and should they refuse, then to lay the case before the Local Government Board, asking their direction in the case.

Mrs. HOLMES COOTE would remind those who have so generously promised to support her son, Henry Lennard Coote, for "The Medical Benevolent College," that the election will take place on Thursday, May 29th, at the Hanover Square Rooms, between the hours of twelve and three o'clock; and that she will be thankful to receive votes, on or before the above date, for her son.

4, Colerheine Road, Redcliffe Gardens, West Brompton, May 20th, 1873.

ERRATUM.—In Dr. Hughlings Jackson's paper, May 10th, 1873, page 532, col. 1, line 31, for "special", read "striking". In fourth line of foot-note, page 533, for "lacteal", read "tactical".

MEDICAL PRACTICE IN SPAIN.

SIR, —I see by the JOURNAL of the 10th instant, just received, that you are pleased to refer to me for information regarding medical matters here, on behalf of a young member. With pleasure I hasten to reply to each query. 1st. A British or any other diploma is recognised in Madrid (I cannot answer for the provinces), by the holder presenting himself at the office of the Minister of Fomento (corresponding to that of Public Instruction), and filling up a form stating that he intends commencing a "Nueva Industria," or new branch of industry, and paying a quarterly tax in advance of about £2 10s. 2nd. A Spanish diploma can be obtained by the holder of any foreign diploma presenting himself with £31 in his hand, and paying it over to the rector of the University, which of course would qualify him to practise in the provinces, as well as in the Spanish colonies, which are now very few. 3rd. In reference to the last inquiry, "where information could be got as to the present state of Medicine in Spain?" I have only to reply there is no work on the subject, or office where such can be had, and that any gentleman wishing it, must come and search and see for himself. I shall be happy to give a hearty and hospitable Scotch welcome in my own house to the member, as long as he pleases to remain, and where he will have an opportunity of seeing from a hundred to a hundred and fifty per week, of the diseases most prevalent in Spain. As I intend to be present at the meeting of the British Medical Association this year, in London, it may suit the Young Member to come over here at once, and remain a couple of months, and get all he desires, at the same time filling my post during a month's absence.

1, Calle Magdalena, May 16th, 1873.

I am, etc.,
W. JELLY.

FEMALE PROFESSIONAL EDUCATION.—The new law admitting female students to the full rights of the Zurich University, has (says the *Pall Mall Gazette*) been recommended by the Cantonal Government for adoption, and the popular vote is to be taken on it on the 18th instant. Zurich seems to be considerably in advance of the rest of the world in this matter of female education, for the number of lady students has steadily increased since the courses were first opened to them informally six years since; and there are now reported to be one hundred and nineteen of these "girl-graduates" who have actually matriculated under the existing university rules which it is proposed to legalise.

WE are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Liverpool Weekly Albion, May 17th; The Manchester Guardian, May 21st; The Aberdeen Daily Free Press, May 17th; The Bath Express, May 17th; The Birmingham Daily Post, May 21st; The Birmingham Daily Mail; The Hull Packet; The Daily Bristol Times and Mirror; The City Press; etc.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. George Johnson, London; Mr. T. H. Bartleet, Birmingham; Dr. Reginald Southey, London; Dr. B. W. Foster, Birmingham; Mr. Redwood, Rhymney; Mr. E. S. Davis, Mountain Ash; Mr. Clegg, Epping; Dr. Britton, Driffield; A Member; Dr. Bright, Forest Hill; Dr. F. C. Calvert and Co., Manchester; The Secretary of the Royal Medical and Chirurgical Society; Dr. Stanley Haynes, Malvern; Mr. J. R. Roe, Bridgnorth; Mr. Falkner, Dublin; Dr. F. J. Brown, Rochester; Dr. Henry Bennet, Mentone; Dr. Procter, York; Dr. Ralfe, London; The Registrar-General of England; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; Mr. Wanklyn, London; The Registrar of the Medical Society of London; Mr. J. W. Langmore, London; The Secretary of the Pathological Society; Dr. G. H. Philipson, Newcastle-upon Tyne; Our Dublin Correspondent; Dr. Lancaster, Croydon; Mr. Poole, London; The Secretary of the Obstetrical Society; Dr. De Renzy, Lahore; Dr. J. W. Moore, Dublin; Mr. Eddowes, Shrewsbury; Dr. MacCrea, Belfast; Dr. Pitt, Norwich; Our Paris Correspondent; Dr. Gidley, London; Mr. Farr, Swinton; The Secretary of the Clinical Society; Dr. Gray, Armagh; Dr. Burney Yeo, London; Dr. T. Clifford Allbutt, Leeds; Scrutator; Dr. J. M. Crombie, London; Dr. J. Ford Anderson, London; Mr. W. Johnson Smith, London; Captain Trotter, Gosport; Dr. Murchison, London; Mr. Kesteven, London; Mr. D. Dalrymple, M.P., London; Dr. Burdon Sanderson, London; Mr. Erichsen, London; etc.