doubt about the catheter being in the bladder it should be withdrawn and on no account should any water be injected

through it.

This is a brief description of the steps of the operation l recommend for the immediate and complete relief of bad cases of stricture, but of course for such a variable form of disease all kinds of modifications are frequently necessary. I would lay great stress upon the importance of not being in a hurry to pass small instruments into the bladder; they may be satisfactorily through the stricture, but may be arrested beyond by reason of their very smallness, for although it is certain that on the bladder side of the stricture the urethra is roomy enough, still its walls are sure to be irregular owing to rupture or to fistulous openings, and in these the fine point of a small sound will easily become caught. It is well, therefore, to dilate the stricture gradually with sound after sound, and then taking a smaller one, which will be loosely held by the stricture, pass it carefully into the bladder. In some cases, owing to the fixation of parts by infiltration of tissues, no rigid instrument can be passed into the bladder. In such cases the stricture should be divided; and in a few days, after the parts have drained, and the urine come by the urethra, an instrument can be passed properly into the bladder. It is, however, impossible, in a short paper like this, to go fully into every complication and difficulty. I am content to submit the principles of the procedure for consideration.

MEMORANDA

MEDICAL, SURGICAL, OBSTETRICAL, THERA-PEUTICAL, PATHOLOGICAL, ETC.

ON THE DIAGNOSIS OF EARLY ECTOPIC GESTATION.

The following case serves to illustrate Dr. Edis's paper in the BRITISH MEDICAL JOURNAL of October 22nd, and brings out very prominently the important point in the diagnosis of this dangerous condition, namely, sudden attacks of severe

pain, recurring at intervals.

Mrs. G., aged 26, had one child only, seven years ago; her periods were regular up to July 18th, 1892; this was a normal period, and ended on July 24th. No period occurred in August, but she had the ordinary symptoms of early pregnancy. There was no period in September, but she was proposed to the second of the seized suddenly with a very severe attack of abdominal pain on September 10th, which lasted two hours and a-half; there was no discharge of blood from the vagina. She had severe pain again on September 20th, lasting two days; it was dispain again on september 20th, lasting two days; 11 was distinctly paroxysmal in character, but there was no discharge of blood. She had pain again on September 24th, lasting ten hours, but no discharge of blood. Pain recurred on September 26th, accompanied by a slight discharge of blood, and on September 27th she passed a membranous-looking clot. After this the pain, which had continued from the morning of Santember 26th was easier. On October 1st she had spotter September 26th, was easier. On October 1st she had another very severe attack of pain which continued until October 4th, when I saw her for the first time. I found her very pale; there was a marked line of resistance in the right groin, and a swelling in front and to the right of the uterus. My diagnosis, founded on the history and the local examination, was ruptured tubal gestation sac, and I advised immediate operation. For this purpose she was taken to the Bristol General Hospital on October 5th. She had another severe pain on October 6th, and on October 7th I opened the abdomen, and found a large amount of fluid and clotted blood and a ruptured right Fallopian tube, which gave distinct evidence of pregnancy. I washed out the abdomen, tied and removed the damaged tube, inserted a glass drainage tube, and finished the operation. The patient is now (October 24th) practically well except for some inflammatory trouble on the right side

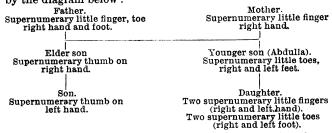
I have now operated on six cases of ectopic gestation, with four recoveries, and in all of them the first symptom was pain and not hæmorrhage, and in most of the cases the pain recurred several times before the hæmorrhage set in. My im-

pression is that this latter symptom, coincident with the shedding of the lining of the uterus, does not, as a rule, appear while the ovum is still capable of developing, but does come on very soon after its death. Dr. Edis has done good service in bringing the subject forward in such a practical paper. I would only add a short sentence with which I concluded my paper in the Bristol Medico-Chirurgical Journal of June, 1892:— "The whole diagnosis may be summed up in a few words. When a previously healthy woman misses one or more periods and is taken with acute abdominal pain and fainting, and these symptoms recur at short intervals, and the vaginal examination reveals a periuterine hæmatocele either extending or not up into the abdomen, it is imperative to open that abdomen without delay.'

A. E. Aust-Lawrence, M.D., Physician-Accoucheur Bristol General Hospital. Clifton, Bristol.

REMARKABLE CASES OF POLYDACTYLISM.

A MOHAMMEDAN servant, recently in my employment, one-day complained to me about his right foot. I found that he had a supernumerary toe—quite distint and separate—growing out from the outer border of his right foot at the root of the control of t the little toe. This supernumerary little toe was attached by dense fibrous tissue, but contained what appeared to be a nodule of bone, upon the extremity of which a healthy nail was supported. He informed me that he had been born with another similar supernumerary toe on the opposite side—but when a child it was removed on account of injury. This statement was probably true, there being a scar in the situation. This man was about 40 years of age, and presented no other abnormality. He informed me that his daughter had four supernumerary digits, that is, two little fingers and two little toes on both hands and feet, springing from the bases of the digits; also that his nephew, a little boy of 1 year old, had a supernumerary thumb on the left hand; these two children I saw subsequently, and can vouch for the veracity of his statements. Further, he told me that his father and mother both were born with similar deformities, namely, the father had a supernumerary little toe and finger on the right hand and foot respectively; that his mother also had one supernumerary little finger on the right hand, growing from the base of the natural one, but quite separate; and finally that his elder brother had a supernumerary thumb on the right hand. This was the father of the child above mentioned who had a supernumerary thumb on the hand a supernumerary thumb on the hand also had a supernumerary thumb on the hand also had a supernumerary thumb on the hand also had been supernumerary. but on the opposite side to that of his father; this was a distinct thumb provided with a nail and not a bifid digit. Theredo not appear to have been any instances of any other abnormalities having occurred—not even webbed fingers. Therefore we have instances of this kind of congenital deformity occurring in three successive generations, and affecting the same fingers and toes all through, as will be seen at a glance by the diagram below:



The wives of the two sons were stated to be quite free from deformity; so it was apparent that it was inherited by the children from the male side. Unfortunately the man has been lost sight of now, otherwise it would have been interesting to go more into this case and gain some more information. I read with interest the article and case bearing on this same subject, in the British Medical Journal of September 17th by Dr. Mill and it is not a maintain to see the second of the secon tember 17th, by Dr. Mill, and it is not my intention to refute the somewhat ingenious theory advanced by him as to the cause of these deformities, nor do I intend to advance one of my own, but I certainly think with him that "maternal impression," so called, may be put out of the question; but should the theory of "dichotomy of the cells of the ova" be

true, is there any reason why children should not be born with duplicity, and in some cases multiplicity of limbs H. E. DRAKE-BROCKMAN, F.R.C.S.E., Surgeon-Captain, I.M.S.

Mirzapore, N.W.P.

POISONING BY PRUSSIC ACID.

The following account of the after death appearances in a recent case of suicide by prussic acid may interest your readers as showing some variation from the descriptions given in textbooks on poisons.

The body was first seen by me about five or six hours after death. It was that of a short stout man, aged 54, lying on his back in bed with the bedclothes drawn up to his chin. The face was pale and composed as in sleep, with the eyelids closed. On these being raised the eyes looked bright, and the pupils were only moderately dilated, giving the appearance of life. The lips were closed, with no froth about them; the jaws were firmly clenched, and the gums were remarkably white. On the bedclothes being turned down, the arms were seen lying close to the sides, and one leg crossed easily over the other. The trunk was quite warm, and there was no rigidity of the limbs. There were already many livid spots on the neck and arms; and the fingers, which were not flexed, and the nails were of a deep violet colour, as were also the more dependent parts of the body. There was no perceptible odour of prussic acid anywhere, but a small empty phial labelled "Hydrocyanic Acid," and with the cork in it, was found on a chest of drawers in the room, and in one corner nearest the foot of the bed lay the fragments of a broken tumbler, one of which still held a few drops of a clear colourless liquid smelling of the poison. The necropsy was made some hours later, and when the chest and abdomen were opened these cavities exhaled a vapour smelling strongly of prussic acid. There were no unusual appearances, except some venous congestion, in the organs examined. The stomach was removed for the purpose of an analysis of its contents, and when laid open showed but slight vascularity. It contained only a few ounces of a thickish dark-brown liquid, which furnished abundant proof of the presence of prussic acid on the application of the ordinary tests.

Guildford.

HENRY TAYLOR.

TWO CASES OF FOREIGN BODY IN LUNG.

CASE I. Pipe-stem.—A man, in attempting to drive round a sharp corner in April, 1891, was thrown from his trap. At the time of the accident he was smoking a pipe. After the accident he was picked up insensible and found to have sustained a somewhat severe wound of the face. The pipe he had been smoking was searched for, but only part of it was found, and it was seen that a portion of the vulcanite stem was broken off. The patient was conveyed home and medically attended, having had in the meantime a sharp hemorrhage, presumably from the lungs. In due time he was able to resume his duties, but at times complained of pain and dis-comfort in the right lung. He always pointed to one spot in the front of the chest, and fancied he must have been bruised there. Careful examination with and without the stethoscope gave negative results. He also complained of a distressing spasmodic cough, sometimes lasting two hours, and on these occasions he said he felt as if a fly or something was tickling his throat. On one occasion he coughed up a plug of tough mucus, roundish and about one and a half inch This circumstance was related to his medical advisers, but did not lead to anything. His case was diagnosed as gouty bronchitis. One day, nearly nine months after the accident, he coughed up a piece of pipe-stem, which proved to be the piece broken of the pipe at the time of the accident.

CASE II. Mutton Bone.—This second case occurred in the

practice of Dr. George Hunter of Edinburgh. He has kindly written to me, and I cannot do better than quote his words. "Mr. J. M., while partaking rather heartily of mutton broth, felt something suddenly 'go the wrong way,' which caused some choky cough, but, as nothing was seen, the incident, trivial in itself, passed by, and received little further attention. Some time subsequently he began to cough, and a patch of dulness, with increased fremitus, followed by moist sounds, was detected in one interscapular region. There was also hemoptysis of considerable amount during the course of ligament, and had caused destructive disease in the hip-joint

the illness. Forgetting, or perhaps laying but little stress on the choking incident, which I think was mentioned to me, I began to fear that my patient was suffering from a pneumonic patch of tuberculous origin, when one day the symptoms resolved themselves by the appearance of a piece of mutton bone in the expectoration, which proved to be the fons et origo mali. I never published the case." Mr. J. M. tells me he retained the bone in his lang case. retained the bone in his lung one year.

These two cases, I think, seem to point to non-interference in the way of tracheotomy, etc., where foreign bodies are taken into the lungs; in each case the substance inhaled was large, jagged, and caused distressing symptoms. Both patients are alive and in good health.

W. J. MIDELTON, M.R.C.S.Eng., etc. Harston, Cambs.

REPORTS

MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

BRISTOL CHILDREN'S HOSPITAL.

TWO CASES OF PRIMARY NECROSIS OF THE PUBES. (Reported by C. A. Morton, F.R.C.S., Surgical Registrar and Pathologist.)

NECROSIS of the pelvic bones in association with advanced disease of the hip-joint is not uncommon, but in one of these cases the hip-joint was normal, and in the other the disease in the pubes was primary, and the hip-joint disease occurred later, probably from pus finding its way into the joint. Primary necrosis of the pubes is not described in surgical textbooks, hence it seems desirable to record the following cases.

CASE I. Primary Necrosis of Pubes with Secondary Arthritis of Hip. (Under the care of Mr. J. Ewens, Surgeon to the hospital.)—A baby, aged 11 months, was admitted on March 23rd, with a large swelling in the left thigh, which had been first noticed a week before, but the baby had seemed to suffer great

pain on movement for a longer period. There was no history of any injury, and no tuberculous family history.

On examination under chloroform two fluctuating swellings

were discovered in the upper part of the left thigh, one below the outer half of Poupart's ligament, external to the vessels, the other behind and below the trochanter, with fluctuation between them. Rotation in the hip was free and unaccompanied by grating. No swelling was felt in the iliac fossa, though thorough examination was possible from the complete relaxation of the abdominal muscles. There was no excurvation of the spine. An incision was made just behind the trochanter, and several ounces of pus were evacuated. The head of the femur was out of the acetabulum, but the only

head of the femur was out of the acetabulum, but the only roughness on it was where the ligamentum teres had been attached. The upper end of the femur was lying in an enormous abscess cavity which seemed to pass up over the pubes. In it was discovered a small sequestrum.

The abscess cavity discharged profusely, but the temperature, which was 102° before the abscess was opened, remained normal until April 5th, when it rose to nearly 102°, and remained between 102° and 104° for two days. At this time dulness, feeble breath sounds, and small râles after coughing, were found over the back of the right lung. The infant was very anæmic, with numerous petechiæ, and enlarged spleen and liver. The temperature again went up to 103° on April and liver. The temperature again went up to 103° on April 13th, and remained between 102° and 103°, until the child's death on April 21st. The condition of the right lung remained unchanged, and more marked purpuric condition came on, and with the extreme feebleness there was possibly unconsciousness towards the end, but no convulsions or vomiting. The condition of anæmia was extreme.

Post-mortem Examination.—The horizontal ramus of the pubes was much thickened, and contained a carious cavity from which the sequestrum removed at the time of the operation had come, as it was the only carious cavity found. was the centre of an enormous abscess cavity, which extended into the psoas sheath for a short distance above Poupart's

NOTIFICATION OF CASES SEEN AFTER DEATH.

Dr. CECIL H. PIGGOTT.—The wording of the Act seems to point only to diagnosis made during life, and probably the other contingency was not thought of. We think, therefore, that, strictly speaking, the certificate was not legally necessary, and that a fee could not legally be claimed. Nevertheless, it appears to be an attempt to comply with the spirit of the Act, by giving the earliest possible information of the diagnosis, and it might be well to accept it as such.

NEGLECTED SEWAGE WORKS.

A CORRESPONDENT asks what can be done to enforce attention to an intolerable nuisance caused by neglect and mismanagement of sewage tanks at Barton-under-Needwood, near Burton-on-Trent. Repeated complaint has been made to the sanitary authority, but in vain.

** The usual course is to appeal to the Local Government Board; but if we are right in supposing that the village in question is in Staffordshire, it would be well to call the attention of the county medical officer (Dr. Reid, Stafford) to the facts.

 $_{**}$ The suggestion of unfairness and giving undue power to one man is quite unfounded. The medical officer of health has official need of the statistics which the registrar compiles, and the latter occasionally goes astray for want of medical knowledge, but the Registrarship is very rarely held by a medical man. That the public vaccinator should be a district medical officer is usual and proper, but the Local Government Board often raise objection to the district medical officer being also medical officer of health.

PENSIONS TO POOR-LAW MEDICAL OFFICERS.

Union Medical Officer writes to ask if the same rule applies to England as Ireland with regard to a union surgeon signifying his intention to resign in order to obtain a pension. He says surely it is sufficiently hard for pensions to be made permissive only, without an officer being compelled to resign before he has obtained his pension.

** In England no pension can be granted to a Poor-law medical officer till after resignation of appointment, or till formal notice of intended resignation has been given.

NOTIFICATION OF SYSTEMATIC INSPECTION.

DR. F. P. ATKINSON (Surbiton) writes: I am glad to have an opportunity afforded me of replying to your arguments.

First, I do not say that you question the advantage of sanitary inspection, but that you do not urge it to be carried out in so systematic a manner as you do notification. This you virtually admit to be correct, when you say you comment upon neglect of inspection, whenever it is brought to your notice. Sir Charles Cameron, at the last Sanitary Congress held at Dublin, said: "There are hundreds of towns and villages in these islands which are still unprovided with proper arrangements for drainage and filth disposal, and which are dependent on scanty supplies of water, often of bad or inferior quality." If this be really the case, why should we wait to get this state of afairs altered till you have the opportunity of commenting strongly upon them? For all insanitary areas are starting points of disease both for men and beasts, and unless there is some regular and systematic inspection, years must elapse before these can be put into a proper state, though notification may be fairly well carried out. Notification at the present time may in certain instances be the means of limiting the extent of a particular outbreak, but if the primary cause is allowed to remain, another will occur sooner or later, when the conditions are again favourable. Mr. Fowler, President of the Local Government Board, at the dinner given to Sir Walter Foster on October 28th, said improved sanitary conditions had materially reduced the death-rate of the country, and deaths from zymotic disease had in the last five years declined 50 per cent. I cannot find that he gave much credit for the altered state of things to notification. Dr. Dudfield, the Medical Officer of Health for Kensington said, a short time back, he thought provision should be made in London for not less than 5,000 beds for the isolation of scarlatina and diphtheria, leaving out of account those which would be required for en

. Dr. Atkinson's reply scarcely attempts to meet the points adwanced in the note to which he refers, except one. As regards case

mortality among hospital and home patients respectively, he stated in his former letter that "one knows that the death-rate is higher there (that is in hospital) than when the cases are treated at home." Of this theory he offers no proof, and indeed now appears disposed to argue that proof either way is impossible, and therefore that any contradiction of his own dictum is "mere assertion." Nevertheless there are means of comparing the results of the two lines of treatment, and the results are not confirmatory of Dr. Atkinson's paradoxical theory.

UNIVERSITIES AND COLLEGES,

UNIVERSITY OF CAMBRIDGE.

DEPARTMENT OF BOTANY.—Mr. F. Darwin, M.A., M.B., of Christ's College, has been appointed Deputy Professor of Botany for Professor Babington, of St. John's, who is at present incapacitated from lecturing by reason of severe illness.

UNIVERSITY OF EDINBURGH.

ADDITIONAL EXAMINERS.—At the meeting of the Court last week the Court determined to advertise for additional examiners in anatomy, chemistry, and laboratory work for the First B.Sc. Examination in Public Health, Midwifery, Practice of Physic, and Botany.

CLASS RETURNS.—The class returns of the University professors and recognised medical lecturers for 1891-92 were remitted to a committee for

consideration and report.

FEES FOR PROFESSIONAL EXAMINATIONS.—The Court resolved that the FEES FOR PROFESSIONAL EXAMINATIONS.—The Court resolved that the fees for the professional examinations for the degrees of M.B. and Ch.B. under the new ordinance in medicine shall be apportioned as follows: The fee for the First Division to 28 68. Candidates who avail themselves of the option to appear in any two subjects to pay 23 3s. for the first two, and the same fee for the second two. The fee for the Second Division to be 23 6s. Candidates who avail themselves of the option to defer the examination in materia medica and therapeutics to pay 24 4s. for the first stage and 22 2s. for the second stage. The fee for the Third Division to be 24 4s., and for the Fourth and Final Division 26 6s. Candidates who fail to pass either in the whole or in one or more of the subjects in any division of the examination to pay 21 1s. for each subject in which they have failed before they can be readmitted to examination in that subject. Candidates who, under the proviso in Sect. x1 of the Medical Ordinance, are exempted from the First Division are still required to pay the fee belonging to that division before they can be admitted to the degrees of Bachelor of Medicine and Bachelor of Surgery.

REPORTS.—The names of the members of a joint board of examiners were submitted. Copies of reports by committees of the General Council of the University were submitted.

STUDENTS' REPRESENTATIVE COUNCIL.—The following gentlemen were

were submitted. Copies of reports by committees of the General Councit of the University were submitted.

STUDENTS' REPERSENTATIVE COUNCIL.—The following gentlemen were last week elected representatives of the Medical Faculty on the Students' Representative Council:—First year: A. G. Allen, G. L. Chiene, J. Prentice, M.A., and J. G. Ross. Second year: W. E. Gibbons, G. Henderson. H. Cardale. A. Steele, C. M.Taurin, E. Arkwright, J. O. Cuthbertson. and D. Waterston. Third year: H. H. Balfour, J. R. Muir, J. A. Laing, G. F. H. Cunningham, J. D. C. Howden, H. J. F. Simson, D. M. Hutton, and H. O. Hobson. Fourth year: W. J. Garbutt, R. W. Briggs, J. G. Walker, R. H. Makgill, T. A. Glover, C. J. R. M. Fadden, G. R. Ruston-Harrison, and A. P. Steavenson. Flith year: A. A. Scot-Skirving, J. G. Cattanach, A. M. Easterbrook, S. J. Aarons, O. H. Isard, E. M. Skeete, C. St. C. Thom, and R. Hutchison. At the first meeting, held on November 19th, the following office-bearars were appointed for the ensuing year:—Presidents: A. Scot-Skirving; D. Milne Watson, M.A.; C. R. Gillies-Smith, M.A. Secretaries and Treasurers: R. D. Melville; J. Y. Simpson. Executive Committee: Divinity, C. E. Stuart, M.A. Law, H. W. Gibson, M.A., LLa, F. J. Thomson, M.A. Medicine, J. G. Walker; S. J. Aarons; J. A. Laing; L. G. Irvine, M.A., M.B. Arts, J. Gregory Nicolson; A. J. Herbertson; M. Campbell.

SOCIETY OF APOTHECARIES OF LONDON.

Pass List, November, 1892. The following candidates passed in:

Surgery.—C. K. Batchellor, Queen's College, Birmingham; W. E. Barker,
Owens College, Manchester; S. A. Clarke, Middlesex Hospital; H. E. Cooper, St. Thomas's Hospital; H. S. Elliott, St. George's Hospital; N. Elrington, St. George's Hospital; V. P. Foote, Charing Cross Hospital; W. E. Gibbs, Durham; F. G. Hargraves, London Hospital; C. S. Lewis, St. George's Hospital; O. H. A. Maggs, Charing Cross Hospital; A. Marshall, St. Thomas's Hospital; G. H. Nowell, Cambridge University and Westminster Hospital; M. Richards, London Hospital; E. Smallwood, Liverpool.

Medicine, Forensic Medicine, and Midwifery.—A. Baldwin, Edinburgh; H. A. Beetham, Yorkshire College, Leeds; R. Herd, Cambridge University and Manchester; G. C. Jeaffreson, University College; E. G. G. Little, St. George's Hospital; G. Martyn, King's College; G. H. Nowell, Cambridge University and Westminster Hospital; A. B. S. Stewart, Yorkshire College, Leeds; A. T. Todd White, Guy's Hospital; G. W. Wickham, St. Bartholomew's Hospital; S. Wimbush, St. Bartholomew's Hospital. pital.

Medicine and Forensic Medicine.—B. E. Church, St. Bartholomew's Hospıtal.

pital.

Forensic Medicine and Midwijery.—H. W. Joyce, King's College; H. E.

Mortis, Charing Cross Hospital.

Forensic Medicine.—F. A. P. Arnold, London Hospital; A. H. Hardcastle, Yorkshire College, Leeds; W. E. S. Jones, Guy's Hospital.

Midwijery.—J. E. Bailey, University College; W. Handcock, YorkshireCollege, Leeds; J. J. Powell, Cambridge University and St. Thomas's
Hospital; A. L. Roper, Cambridge University and Guy's Hospital;
J. D. Willis, Owens College, Manchester.

¹ British Medical Journal, October 29th, p. 978.

To Messrs. Arnold, Bailey, Baldwin, Batchellor, Dorey, Elliott, Elrington, Foote, Handcock, Hargraves, Jeaffreson, Lewis, Maggs, Mortis, Nowell, Powell, Richards, Wickham, Wimbush, and Willis was granted the diploma of the Society entitling them to practise Medicine, Surgery, and Midwifery.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

DENTAL EXAMINATION.—The following gentlemen having passed the necessary examination have been admitted Licentiates in Dental Surgery of the College:

E. Catt (Santageneral)

E. Catt (Scarborough) and L. B. Eskell (Bath).

INDIA AND THE COLONIES.

CAPE OF GOOD HOPE.

REGISTRATION WITHOUT DIPLOMA. - Dr. C. Lawrence Herman, President of the Cape of Good Hope Branch of the British Medical Association, has addressed a letter to the Colonial Secretary protesting against the action of the Government in placing upon the Medical Register the names of several other persons under the clause in the Medical Act giving the Colonial Secretary power to register the names of persons engaged in the practice of medicine for twenty years. This clause, it is stated, was the practice of medicine for twenty years. This clause, it is stated, was inserted to meet the case of two gentlemen who had petitioned against the Bill of 1891; it was hoped that the cases would not be made a precedent, and it is felt that the action of the Colonial Secretary is contrary to the promise made to deputations while the Bill was under discussion. The continued exercise of powers under the Section referred to must lead to there being placed on the Register persons of whose training and skill there is no guarantee, and of whose capabilities and qualifications the Government is not a satisfactory judge. It is pointed out that the same clause gave power to place on the Dental Register persons who could show that they had been practising dentistry for three years, but that the power has not been exercised. It is pointed out, further, that the provision of this special power is not extended to chemists. The following resolution was unanimously adopted at a recent meeting of the Cape of Good Hope Branch of the British Medical Association: "That this Association records its earnest and final protest against the placing of the names of certain unqualified persons upon the roll of medical practitioners, and that steps be taken to bring the action of the Government in this matter to the notice of the public and the profession in this country and in England." No such power as that conferred on the Colonial Secretary by the recent Cape Colony Act exists, or ever has existed, in Great Britain, where the preparation and custody of the Medical Register was from the first confided by the Legislature to the General Medical Council, by whom alone the regulations as to requirements from candidates have been administered.

CEYLON.

THE TREATMENT OF ANCHYLOSTOMIASIS.—Dr. Kynsey, Principal Civil Medical Officer, Ceylon, has issued recently a short but very useful memorandum on the subject of anchylostomiasis — so prevalent in that island—in which, after briefly describing the symptoms of this very grave helminthiasis and the life-history of the parasite, he indicates the best means of bringing about its expulsion, remedying its defects, and, also, of securing a reliable prophylaxis. He describes the treatment by thymol. The plan he advocates is, after mild purgation, to administer 30 grains of powdered thymol rubbed up with an equal quantity of sugar of milk, and shaken up in water; the dose should be repeated two hours afterwards, the first dose being given in the early morning on an empty stomach. If eight days afterwards the stools are still found to contain ova, the medicine must be repeated. Extract of male fern may be used much in the same way in one or two drachm doses. We may remark that thymol may be given in much larger doses than those recommended by Dr. Kynsey. As he points out, it must not be given in solution, for, if absorbed in any considerable quantity, it is highly toxic. Although thymol has been in use as an anthelmintic for a good many years, and has over and over again been proved to be specially serviceable in anchylostomiasis, strange to say there is no mention of it in this connection in most of our English works on therapeutics and materia medica. We trust systematic writers will take note of this, and that the English reader who turns to their pages for assistance when brought face to face with anchylostomiasts in tropical countries will not turn to their future editions in vain. Dr. Kynsey remarks: "It has been erroneously asserted lately fu India that the larvæ (of the anchylostoma) become sexually mature, and are capable of reproducing themselves indefinitely in the free state." We presume this remark refers to Giles's recent and very elaborate work on the anchylostoma in Assam, and that Dr. Kynsey does observer has taken up.

MEDICAL PRACTITIONERS IN ITALY.—From the official return of the Director-General of Direct Taxes in Italy it appears that the medical profession occupies the lowest position of all the professions in point of income. The notaries come first, advocates next, engineers and architects are a good third, and last of all come, longo intervallo, the doctors, with an average of professional earnings of little more than half that of the notaries.

HOSPITAL AND DISPENSARY MANAGEMENT.

APPLICATION FOR A CHARTER FOR THE ROYAL BRITISH NURSES' ASSOCIATION.

THE Privy Council sat on November 21st to hear the petition for the grant of a charter for the incorporation of the Royal British Nurses' Association. Their lordships present were Lord Hobhouse, Lord Oxenbridge, the Marquis of Ripon, and Lord Hannen. Lord Sandhurst was also present, but took no part in the proceedings. The petition was presented by Her Royal Highness Helena, Princess Christian of Schleswig-Holstein, as President of the Royal British Nurses' Association, for a grant of a charter of incorporation to the petitioner and the members of the said association, under the title of "The Royal British Nurses' Association,

members of the said association, under the title of "The Royal British Nurses' Association,"

For the petitioners there appeared Sir H. Davey, Mr. Muir Mackenzie, and the Hon. W. H. Cross.

There was a petition also presented in opposition by the Council of the Nightingale Fund, and like petitions were presented from the following hospitals: St. Thomas's, the London, Westminster, King's College, St. Mary's, Charing Cross, the Seamen's (Greenwich), and Guy's; also the following infirmaries: St. Marylebone, Paddington, St. Pancras, and Whitechapel. Like petitions were also presented from Edinburgh, Glasgow, Dublin, Leeds, Liverpool, Manchester, Bristol, and other provincial towns, as well as by the Army Medical Department, and from many smaller general hospitals and special hospitals both in London and the country. Like petitions were also presented by the Metropolitan Nursing Association, by the East London Nursing Society, the Liverpool Nursing Society, and many other institutions in London, the provinces, Scotland, and Ireland for providing trained nurses for the sick poor.

There appeared for the petitioners, against the granting of the charter Sir R. Webster and Mr. L. S. Bristowe.

The Council Chamber was crowded with ladies and gentlemen interested in the matter before the Council.

Sir H. Davey opened the case for the petitioners. He said the Royal British Nurses' Association was formed about four years ago for the following objects: (1) To protect the public, the medical profession, and trained nurses by establishing a system of registration for trained nurses in the practice of their profession, and in times of adversity, sickness, and old age; and (3) other objects beneficial to the profession of trained nurses in the practice of their profession, and in times of adversity, sickness, and old age; and (3) other objects beneficial to the profession of trained nurses in the training of nurses, and the nurses hemesles, were opposed to the granting of the charter. He said he appeared on behalf of a large an

GLAMORGAN COUNTY LUNATIC ASYLUM.

This large institution at the close of the year 1891 contained 970 patients, compared with 940 at the end of the previous year. The total number under treatment during the twelve months covered by the annual report was 1,248. The total number of cases discharged or died was 278, while the admissions numbered 308, which is the largest number that has been admitted in any one year direct from the unions since the asylum was opened. In this asylum, as in so many others, want of increased accommodation occupies a prominent place in the report, and tenders will shortly be invited to carry out plans which will provide space for 104 patients, together with additional workshops, etc.

Among the numerous admissions mentioned above we should mention that no fewer than 103 seemed to have had as a predisposing cause an inherited tendency, while 53 were suffering from general paralysis. The usual ratio of general paralytics to other admissions is 9 per cent. The recovery rate was 30 per cent. Among the recoveries were a husband and wife who were admitted within a few days of each other, and were discharged well three months later.

Dr. Pringle points out that the ratio of lunatics in Glamorgan to the population is only 1 in 535, whilst England and Wales has 1 in 383. If, therefore, the ratio of lunatics to the population of Glamorgan was up to the average of England and Wales, it would mean an annual expenditure of £16,000 a year.

With regard to the new Lunacy Act. Dr. Pringle states that he has no

the average of England and Wales, it would linear at similar expenditure of £16,000 a year.

With regard to the new Lunacy Act, Dr. Pringle states that he has no hesitation in saying that, as a working measure to protect the insane or promote their recovery, he looks upon it as a failure, and he adds: "I believe I am correct in saying that in the framing of this Act experience and knowledge were regarded as disqualifications, and the counsel of those best able to give it was ignored." Dr. Pringle is not alone in that

JAMES MURRAY'S ROYAL ASYLUM, PERTH.

The total number of patients under treatment during the year ending March 31st last was 147, and the average daily number on the books was 107. In addition to these, 4 men and 3 women reside voluntarily in the institution, and at the close of the year 10 were at Kincarrothie, a branch establishment. The general condition of the patients admitted—numbering 41—was favourable compared with late years, and the recovery rate was a little higher, namely, 38.59 per cent., calculated upon the total number of admissions. The death-rate was high, being 12.84, calculated on the average number resident; but this high mortality was not the result of imperfect hygienic conditions, but of the character of the cases

under treatment. There were 10 actively suicidal cases under care, and these are the cases which test the vigilance of the officials; it is even easier, says Dr. Urquhart, "to bear with the abuse of an actively insane (maniacal) patient than to keep up constant warfare with the destroying angel of dementia." He also makes some pertinent remarks upon the inmediatement of insanity—not of the ancient type, the unintelligent imprisonment of a lunatic in the least desirable room of the house, but the rational adoption of means that have been approved in the best hospital experience. And he advocates the plan of a central hospital with succursal houses. "Our experience," he remarks, "has been all in favour of this principle"—a practical principle which cannot be too strongly insisted upon, and which is in complete accord with our repeatedly expressed opinion that our public institutions should be made homes for the chronic and incurable cases, with hospitals for the recent, acute, and curable in connection with them, and not separated from them as some theorists have suggested. It is well that such institutions as this over which Dr. Urquhart so ably presides should lead the way in developing this principle.

MEDICAL NEWS,

On November 19th the Duchess of Teck opened a bazaar at Enfield in aid of the funds of the Enfield Cottage Hospital.

THE Royal Microscopical Society will hold a conversazione in the banquetting saloon of the St. James's Hall Restaurant on Wednesday, November 30th, at 8 p.m.

UNIVERSITY OF COIMBRA.—The total number of students in the Medical Faculty of the University of Coimbra entered for the present academic year is 141. Of these, 42 are first year, 17 second, 27 third, 25 fourth, and 30 fifth year students.

PRINCE HENRY OF BATTENBERG has promised to preside at the forty-eighth anniversary dinner of the German Hospital, which will take place at the Hôtel Métropole on Wednesday, May 10th, 1893.

Dr. LAWRENCE, of Chepstow, has upon the recommendation of the Lord Lieutenant, his Grace the Duke of Beaufort, been placed by the Lord Chancellor on the Commission of the Peace for the county of Monmouth.

THE dinner of the Past and Present Students of the National Dental Hospital and College will be held to-day (Friday) in the Royal Venetian Chamber of the Holborn Restaurant, at 6.30 for 7 o'clock; Sir James Crichton-Browne, M.D., F.R.S. in

PROFESSOR ERNST LUDWIG, Rector Magnificus of the University of Vienna, has been created a life member of the Austrian House of Lords, in the room of the late Professor Brücke, the distinguished physiologist. Dr. Ludwig is Professor of Chemistry in the Medical Faculty of the University.

THE Prussian Government has decided to make the use of the Centigrade thermometer general throughout Prussia, where the Reaumur scale is still employed in some places. No further Reaumur thermometers are to be issued to public

THE German Emperor has sent a bronze bust of himself, with a congratulatory telegram, to Professor von Helmholtz, on the occasion of the fiftieth anniversary of the eminent scientist's graduation as Doctor of Medicine, which fell on November 2nd.

THE death is announced of Dr. Gilpin, medical officer of health to the Stratford-on-Avon Corporation, and also medical officer to the rural sanitary authority, who died from an attack of typhoid fever contracted in the discharge of his duties. Dr. Gilpin was 27 years of age, and had held the appointment only two years.

MISS MAIDA STURGE, M.B.Lond., has been appointed one of the assistant resident medical officers at the Fever Hospital, Stamford Hill, under the Metropolitan Asylums Board. Miss Sturge is one of the most distinguished students of the London School of Medicine for Women, having been awarded the Helen Prideaux prize last June.

GREAT NORTHERN HOSPITAL, HOLLOWAY ROAD.—It is intended to hold a festival dinner early in next spring in aid of the funds for the completion of the buildings. The Duke of York has consented to preside on the occasion. The cost of the extensions, with furniture and fittings, will be at least £27,000, towards which sum only £8,000 has been promised or received.

THE TREATMENT OF INEBRIETY IN RUSSIA.—The local auhorities at St. Petersburg have under consideration a proposal for the establishment of a sanatorium for inebriates in that The Odessa Society for the Suppression of Drunkenness is also engaged in the preparation of a similar scheme.

LEPROSY IN RUSSIA.—It appears that leprosy is more widespread in Courland, one of the Baltic provinces of Russia, than official statistics previously published had led people to believe. According to these, the number of lepers in that province was 40 in 1886, 57 in 1887, and 41 in 1888. In 1889 a thorough search was made by order of the Governor, with the result that 87 lepers (44 males and 43 females) were discovered. In 1891 a further search led to the discovery of several additional cases. The disease appears to be practically confined to the districts adjoining the coast, the other parts of Courland being almost entirely free. On the initiative of the medical men of the affected districts steps have been taken to establish a lazaretto, and a society for the suppression of leprosy has been founded.

SHORTHAND WRITING .- Mr. T. A. Reed, the well-known shorthand writer (who has acted in that capacity for the BRITISH MEDICAL JOURNAL for very many years) was on November 24th presented by his brother phonographers throughout the country with a testimonial on the occasion of his shorthand jubilee, 50 years having elapsed since he first as a lad began the study of his art, in which he has gained a world-wide reputation. The presentation, which was made at the Memorial Hall by Mr. Isaac Pitman, the venerable inventor of the art. consisted of an illuminated address and a purse of 200 guineas. A number of letters were received, including one from the Earl of Albemarle, congratulating Mr. Reed on the occasion and expressing high admiration of his personal and professional qualities, and several addresses were delivered to the war effect. The medical profession was represented by Dr. W. R. Gowers, Dr. Gray (of Oxford), and Dr. Norman Kerr, themselves accomplished phonographers.

Alcoholism and Insanity in Chili.—Dr. Becca, of Santiago (Chili), has recently called attention in the Revista Medica de Chile to the increase of insanity due to alcoholism in that country, especially among the "proletarian" class. Of 328 men admitted to the "Manicomio," or public lunatic asylum, of Santiago in 1890, in 187, or 57 per cent, the mental dispersion of the country of order was directly traceable to the abuse of alcohol, and in many others there was reason to suspect that drink was a more or less important etiological factor. In 1891, the number of admissions was 355 (227 men and 128 women). these the insanity was due to alcoholism in 154, or 43.5 per cent.; of the 154, 135 were men and 19 women. Taking the men alone the percentage of alcoholic cases was 59.5, showing an increase of 2.5 as compared with the previous year. Dr. Becca states that the dates of admission show that times of public excitement or festivity-patriotic festivals, noche buena Christmas Eve), the New Year, Easter, etc.—have a powerful influence in determining the onset of insanity, largely owing, as he believes, to the drunkenness which prevails on such occasions.

LITERARY INTELLIGENCE.—Professor August Hirsch, of Berlin, has completed the History of the Medical Sciences, on which he has been engaged for several years past, and the work is now in the press. It will form part of the series entitled, *History of the Sciences in Germany*, which is to appear under the editorship of a historical committee appointed by the Munich Medical Academy. Professor Virchow had originally undertaken to write the history of medicine in recent years for this series.—The first Russian medical journal came into existence just a century ago. This periodical, which bore the title of St. Petersburger medicinische Zeitschrift, had but a short life, the first number having appeared on November 2nd, 1792, and the last on July 1819. 1793.—Dr. Leonzio Capparelli, of Naples, a well-known physician and writer on medical subjects, who died in March last, published some years ago before his death a novel entitled Dr. Pietra, which attracted a great deal of attention in Italy and evoked a chorus of praise from the critics. Dr. Capparelli's daughter has found among her father's papers the manuscript of a novel entitled *In Illo Tempore*, which will shortly be published at Florence. The period of the story is the time when King Bomba held sway at Naples.

PLYMOUTH MEDICAL SOCIETY.—The annual meeting took place on November 16th, Mr. Leah (Stonehouse), the retiring President, taking the chair. The following office-bearers were elected: President: Thos. Leah, M.R.C.S., Stonehouse. Honorary Treasurer: J. Elliot Square, F.R.C.S. Honorary Librarian: C. E. Russel Rendle, M.R.C.S. Honorary Secretary: R. H. Lucy, F.R.C.S. Library Committee: The President, Honorary Treasurer, Librarian, and Secretary, ex officio, and Messrs. R. Rendle and Woollcombe. New Members: Messrs. J. H. S. May, G. F. Aldous, R. S. Thomas (Plymouth), J. H. Gough (Horrabridge), R. B. Mole (Callington). It was decided to admit members residing beyond five miles from Plymouth on payment of the annual subscription only. Twenty-three members and four guests subsequently dined together. The Society has acquired a library and a reading room of its own in Athenaum Chambers, George Street, in which during the winter session fortnightly meetings will be held, alternately "clinical" and for papers with discussion thereon.

MEDICAL VACANCIES.

The following vacancies are announced:

- BANBURY FRIENDLY SOCIETIES MEDICAL ASSOCIATION.—Surgeon. Salary, £200 per annum and widwifery fees, residence, and rates and taxes paid. Applications to Henry R. Webb, 7, New Land, Banbury, by December 1st.
- BIRMINGHAM AND MIDLAND EYE HOSPITAL, Church Street, Bir-mingham.— Assistant House-Surgeon. Salary, 250 per annum, with apartments and board. Applications to the Chairman of the Medical Board by December 8th.
- BRIGHTON, HOVE, AND PRESTON DISPENSARY.—House-Surgeon to the Western Branch, unmarried, doubly qualified. Salary, £140 per annum (less board at 8s. per week), with furnished apartments, coals, gas, and attendance. Applications to the Assistant Secretary by December 15th.
- CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—House-Physician. Board, residence, and allowance for washing provided. Appointment for six months. Applications to the Secretary at the Office, 24, Finsbury Circus, E.C., by Decem-
- DEVON AND EXETER HOSPITAL, Exeter.—Assistant House-Surgeon; doubly qualified; unmarried. Salary, £40 per annum, with board and lodging. Applications to G. A. Townsend, Secretary, by November 26th.
- ENNISCORTHY UNION.—Medical Officer to Oulart Dispensary. Salary, £125 per annum, and fees. Applications to Mr. Laurence Kelly, Honorary Secretary, Castle Ellis, Ballaghkeene. Election on November 29th.
- ENNISKILLEN UNION.—Medical Officer to Holywell Dispensary. Salary, £135 per annum, and fees. Applications to Mr. Phibbs Nixon, Honorary Secretary, Thornhill House, Gortahill. Election on November 26th.
- vember 26th.

 FARRINGDON GENERAL DISPENSARY, Bartlett's Buildings, Holborn Circus, E.C.—Resident Medical Officer. Salary, £100 per annum, with apartments and attendance. Applications to .W. K. Taunton, Honorary Secretary, by December 5th.

 GENERAL HOSPITAL, Barbadoes, West Indies.—Junior House-Surgeon. Salary, £200 per annum, and quarters. Appointment for three years. Applications to the Secretary by December 1st.

 GENERAL HOSPITAL FOR SICK CHILDREN, Pendlebury, Manchester.—Junior Resident Medical Officer; doubly qualified. Salary, £80 per annum. Applications to the Chairman of the Medical Board by November 30th.
- November 30th.
- GLASGOW POLICE COMMISSIONERS.—Physician Superintendent at the Hospital, Belvidere, not over 40 years of age. Salary, £400 per annum, with house accommodation, board, and attendance. Applica-tions to J. Lang, Clerk to the Commissioners, City Chambers, Glas-gow, by November 26th.
- HUDDERSFIELD INFIRMARY.—Senior House-Surgeon, doubly 'qualified. Salary, £80 per annum, rising £10 yearly to £100, with board, lodging, and washing. Applications to Joseph Bate, Secretary, by December 2nd.
- December 210.

 LONDON THROAT HOSPITAL, 204. Great Portland Street, W.—Pathologist. Applications to Edward Low, Secretary to the Medical Committee, by December 2nd.

 METROPOLITAN HOSPITAL, Kingsland Road, N.E.—Assistant Physician. Applications to Charles H. Byers, Secretary, by November 28th.
- MIDDLESEX HOSPITAL, W.—Clinical Assistant to the Out-door Department for Diseases of the Skin. Applications on forms to be obtained of F. Clare Melhado, Secretary-Superintendent, to be sent in by December 2nd.
- MONKSTOWN HOSPITAL, County Dublin.—Resident Medical Officer. Salary, £40 per annum, with board, apartments, gas, and coal. Applications to the Honorary Secretary by November 14th. Election on December 1st.
- NOBLE'S ISLE OF MAN GENERAL HOSPITAL AND DISPENSARY, Athol Street, Douglas, Isle of Man.—Resident House-Surgeon; doubly qualified; unmarried. Salary, £100 per annum, with apartments. gas, coal, and laundry free. Applications to F. Browne, Honorary Secretary, by December 3rd.

- NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney Road, N.E.— Junior House-Surgeon; doubly qualified. Salary. 260 per annum. Applications to Alfred Nixon, Secretary, 27, Clement's Lane, E.C., by
- NORTHERN INFIRMARY, Inverness.—House-Surgeon and Dispenser. Salary, £75 per annum, with board, etc. Applications to the Honorary Secretary, Mr. Duncan Shaw, W.S., by November 26th.
- rary Secretary, Mr. Duncan Shaw, W.S., by November 26th.

 NORTHUMBERLAND COUNTY LUNATIC ASYLUM, Morpeth.—Assistant Medical Officer; unmarried. Salary, £120 per annum, increasing £10 yearly to £150, with furnished apartments, and board and lodging. Applications to Dr. McDowall at the Asylum by December 15th.

 PARISH OF BIRMINGHAM WORKHOUSE INFIRMARY.—Assistant Surgical Officer. Salary, £100 per annum, with furnished apartments, rations, coals, gas, and attendance. Applications (on printed form to be obtained from the Clerk) to W. Bowen, Clerk to the Guardians, Parish Offices, Edmund Street, Birmingham, by November 30th.

 QUEEN CHARLOTTE'S LYING-IN HOSPITAL, Marylebone Road, N.W.—Resident Medical Officer. Appointment for four months. Salary at the rate of £80 per annum, with board and residence. Applications to the Secretary by December 2nd.

 ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Election to the

- ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Election to the Court of Examiners. Applications to the Secretary by November 30th.

 ROYAL INFIRMARY OF EDINBURGH.—Superintendent, must be member of medical profession. Salary, £500 per annum, with free house and gas. Applications to Mr. James S. Trainer. Treasurer and Clerk, by December 5th.
- ST. MUNGO'S COLLEGE, Glasgow.—Chair of Anatomy. Applications to Henry Lamond, Secretary, by December 1st.

 SAMARITAN HOSPITAL FOR DISEASES OF WOMEN, Lisburn Road, Belfast.—Two Honorary Attending Physicians. Applications to the Secretaries by December 5th.
- STRAND DISTRICT OF THE CITY OF LONDON.—Medical Officer of Health; not more than 45 years of age. Salary, £400 per annum. Applications, marked outside "Medical Officer's Appointment," to be sent to the Offices of the Board, 5, Tavistock Street. Strand, W.C., by November 28th.
- V.Croria Hospital, Burnley.—Honorary Ophthalmic and Aural Surgeon. Applications, endorsed "Ophthalmic," to the Honorary Secretary, Joshua Rawlinson, J.P., by December 6th.
- WESTLONDON HOSPITAL, Hammersmith Road, W.—House-Physician; appointment for six months. Board and lodging provided. Applications to R. J. Gilbert, Secretary, by December 7th.

 WEST LONDON HOSPITAL, Hammersmith Road, W.—House-Surgeon; appointment for six months. Board and lodging provided. Applications to R. J. Gilbert, Secretary, by December 7th.
- ESTMINSTER GENERAL DISPENSARY, 9, Gerrard Street, Soho.— Resident Medical Officer. Appointment for one year. Applications to J. J. Johnson, Secretary, by December 15th.

MEDICAL APPOINTMENTS.

- ATKEY, P. J., L.R.C.P., M.R.C.S., reappointed House-Surgeon to St. Thomas's Hospital.
- ATKINSON, J., M.B., C.M., appointed Assistant Resident Medical Officer to the North-West London Hospital.
- BAILEY, S. H., M.D. M.B., C.M., L.S.A., appointed Medical Officer to No. 5 District of Nottingham Union, vice E. C. Buckoll, M.R.C.S.Eng.
- BANKS, A., L.R.C.P., M.R.C.S., reappointed House-Surgeon to St. Thomas's Hospital.
- BARTON, Wm. E., L.R.C.P.Lond., M.R.C.S., appointed Medical Officer for the Wyeside Sanitary District of the Weobley Union.
- Burden, H., L.R.C.P., M.R.C.S., reappointed House-Surgeon to St. Thomas's Hospital.
- BURR, Wm. Talbot, M.B., M.Ch. T.C.D., appointed Medical Officer and Public Vaccinator for the Gamlingay District of the Caxton and Arrington Union.
- BURTON, R. G., M.D., L.R.C.S.Edin., appointed Medical Officer of Health for the Rural Sanitary District of the Brentford Union.
- CHAPMAN, Charles W., M.R.C.P., appointed Physician to the Nationa Hospital for Diseases of the Heart and Paralysis.
- COOPER, H. J., M.A., M.B., B.C.Cantab., L.R.C.P., M.R.C.S., appointe Clinical Assistant in the Skin Department, St. Thomas's Hospital.
- CORT, J. G. D., LR.C.P.Lond., M.R.C.S.Eng., appointed Medical Office and Public Vaccinator of the No. 2 District of the Blackburn Union.

 DALBY, A. W., L.R.C.P., L.R.C.S.Edin., appointed Medical Officer of Health for the Frome Rural and Urban Sanitary Districts.

- Health for the Frome Rural and Urban Sanitary Districts.

 DALZELL, A., L.R.C.P., M.R.C.S., reappointed Non-Resident House Physician to St. Thomas's Hospital.

 DARRELL, H. W., M.D.Toronto, C.M., L.R.C.P.Lond., appointed Medical Officer for the Third Sanitary District of the Blofield Union.

 DIXON, C. J. W., M.B., C.M.Edin., appointed Assistant Resident Medical Officer at the Royal National Hospital for Consumption and Diseases of the Chest, Veninor.

 DORMAN, M. R. P., M.A., M.B., B.C.Cantab., L.R.C.P., M.R.C.S., reappointed Clinical Assistant in the Throat Department, St. Thomas's Hospital.

 DUMMERER. H. H. L.R.C.P.Lond, M.R.C.S.
- DUMMERE, H. H., L.R.C.P.Lond., M.R.C.S., appointed Medical Officer for the Fourth Sanitary District of the Bromley Union.
- Ellis, R. K., M.B., B.Ch.()xon., appointed Junior Obstetric House-Physician to St. Thomas's Hospital.
- FISHER, J. H., L.R.C.P., M.R.C.S., reappointed House-Surgeon to St Thomas's Hospital.

- FISHER, J., B.A., M.B., B.C. Cantab., reappointed Senior Ophthalmic House Surgeon to St. Thomas's Hospital.
- FREDERICK, H. J., L.S.A., reappointed Clinical Assistant in the Ear Department, St. Thomas's Hospital.
- HAINWORTH, E. M., B.Sc.Lond., L.R.C.P., M.R.C.S., appointed Non-Resident House-Physician to St. Thomas's Hospital.
- Hamper, C. Norman, M.B., C.M. Edin., appointed Resident Medical Officer to the North-West London Hospital, vice Charles D. Sutherland, resigned.
- ${\bf Hardwick},~{\bf E.~W.,~M.B.},$ appointed Medical Officer for the No. 2 District of the Stourbridge Union.
- HEATON, George, M.A., M.B.Oxon., F.R.C.S., appointed Visiting Surgeon to the Birmingham and Midland Counties Hospital for Sick Children.
- HICKS, T. W., L.R.C.P., M.R.C.S., appointed Clinical Assistant in the Throat Department, St. Thomas's Hospital.

 1SAACS, E. P., L.R.C.P., M.R.C.S., appointed Junior Ophthalmic House-Surgeon to St. Thomas's Hospital.
- JAFFÉ, C. S., L.R.C.P., M.R.C.S., appointed Resident House-Physician to St. Thomas's Hospital.
- Lewis, Cyril, M.B., C.M.Edin., appointed Resident Medical Officer of the Royal National Hospital, Ventnor, vice Hubert M. Wood, M.R.C.S., L.R.C.P., resigned.
- McKelvie, R., M.D., L.R.C.P.S.Edin., appointed Medical Officer for the Workhouse and the Second Sanitary District of the Blofield Union.
- MASON, Wm., L.R.C.P., L.M., L.R.C S.Edin., appointed Medical Officer of Health for the St. Austell Rural and Urban Sanitary District.
- MORTLOCK, Ambrose W., M.B., M.S. Edin., appointed Medical Officer for the Second Sanitary Division of the Greystoke District of the Penrith
- PETHICK, Charles Stuart, M.B.Cantab., L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer and Public Vaccinator for the Woolton District of the Prescot Union.
- PHILLIPS, E. V., L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer for the First Western District of the Billesdon Union.
- PRICE, A. E., L.R.C.P., M.R.C.S., reappointed Clinical Assistant in the Ear Department, St. Thomas's Hospital. PURVIS, W. P., B Sc. Lond., L.R.C.P., M.R.C.S., appointed Assistant House-Surgeon to St. Thomas's Hospital.
- STROVER, H. C., L.S.A.Lond., L.A.H.Dub., appointed Medical Officer of the Sandy Sanitary District of the Biggleswade Union.
- STURGE, Maida, M.B.Lond., appointed Resident Medical Officer to the New Fever Hospital, Stamford Hill, under the Metropolitan Asylums
- TAYLOR, Daniel M., M.A., M.B., C.M.Glasg., appointed Deputy Coroner for the North Riding of Yorkshire.
- THOMAS, E. C., M.B., C.M. Edin., sppointed Medical Officer for Llanbyther District of the Lampeter Union.
 THOMSON, Andrew, M.R.C.P., L.R.C.S. Edin., appointed Medical Officer for the Parish of Inveresk, vice A. M. Sanderson, L.R.C.S. Edin., deceased.
- Townsley, J., M.B., C.M.Edin., appointed Medical Officer to the Ardsley Local Board.
- WAINWRIGHT, W. L., L.R.C.P., 'M.R.C.S., appointed Assistant House-Surgeon to St. Thomas's Hospital.
- Wallace, C. S., L.R.C.P., M.R.C.S., appointed Senior Obstetric House-Physician to St. Thomas's Hospital.
- WATKINS-PITCHFORD, W., L.R.C. P., M.R.C.S., reappointed Resident House-Physician to St. Thomas's Hospital.
- Wells, E. N. K., M.B., C.M.Edin., appointed Medical Officer for the No. 3 District of the Romsey Union.
- Wickham, H. T., M.B., C.M.Edin., appointed Medical Officer for the No. 2 District of the Newport Pagnell Union. WOODCOCK, A. H., L.R.C.P., M.R.C.S., appointed Clinical Assistant in the Skin Department, St. Thomas's Hospital.

DIARY FOR NEXT WEEK.

MONDAY.

- LONDON POST-GRADUATE COURSE, Royal London Ophthalmic Hospital, Moorfields, 1 P.M.—Mr. A. S. Morton: Ocular Injuries. Parkes Museum, 74A, Margaret Street, W., 4 P.M.—Dr. L. C. Parkes: Foods and Dietaries. 101, Great Russell Street, W.C., 8 P.M.—Dr. Galloway: Cardio-Vascular System.
- MEDICAL SOCIETY OF LONDON, 8.30 P.M.—Dr. W. Collier (Oxford): Athletic Exercises as a Cause of Disease of the Heart and Aorta. Mr. Herbert Allingham: Piles: the Importance of Recognising the Varieties as determining the Selection

- LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 2 P.M.—Dr. H. Corner: Moral Insanity. Hospital for Diseases of the Skin, Blackfriars, 4 P.M.—Dr. Payne: Pemphigus, and allied Diseases. 101, Great Russell Street, W.C., 8 P.M.—Dr. Amand Routh: Post-partum Hæmorrhage.
- GROCERS' SCHOLARSHIP LECTURE (at the Examination Hall, 4 P.M.).—Dr.
 William Hunter: On the Physiology and Pathology of
 Blood Destruction.

WEDNESDAY.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. C. Y. Biss: Demonstration of Cases of Special Interest. Royal London Ophthalmic Hospital, Moorfields, 8 P.M.—Mr. A. Quarry Silcock: Progressive Myopia.

THURSDAY.

- LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed and Epileptic, Queen Square, 2 P.M.—Dr. Taylor: Pathological Specimens. Hospital for Sick Children, Great Ormond Street, 4 P.M.—Mr. F. W. Wagstaffe: Pathological Demonstration on Diseases of Bone. Central London Sick Asylum, Cleveland Street, W., 5.30 P.M.—Mr. John Hopkins: Cases in the Wards. London Throat Hospital, Great Portland Street, 8 P.M.—Mr. George Stoker: Impaired Movements of the Vocal Cords.
- ROYAL COLLEGE OF SURGEONS OF .ENGLAND, 4 P.M.—Mr. Christopher Heath: The Bradshaw Lecture on Diseases of the Nose.
- BIRMINGHAM AND MIDLAND COUNTIES HOSPITAL FOR DISEASES OF THE EYE, 4:30 P.M.—Dr. Robert Saundby: The Middlemore Lectures on the Retinal Changes in Bright's Disease and Diabetes. Lecture II.
- HARVEIAN SOCIETY OF LONDON, 8.30 P.M.—Mr. Field: The Harveian Lectures: Pathology and Treatment of Suppurative Diseases of the Ear. Lecture I

FRIDAY.

- LONDON POST-GRADUATE COURSE, Bacteriological Laboratory, King's
 College, 11 a.m. to 1 p.m. Professor Crookshank: Lecture—
 Typhoid Fever, Diphtheria, Rabies, and Tetanus. Practical
 Work—Sections and Cultivations. Hospital for Consumption, Brompton, 4 p.m.—Dr. C. Y. Biss: Demonstration of
 Cases of Special Interest.
- WEST KENT MEDICO-CHIRURGICAL SOCIETY, Royal Kent Dispensary, 8 P.M. -Clinical Evening.
- —Clinical Evening.

 West London Medico-Chirurgical Society, West London Hospital, 8.30 P.M.—Clinical meeting. Dr. Rayner Batten will demonstrate a Clinical Pulse Manometer at 8 P.M. Mr. Swinford Edwards: A Case of Amputation at Hip-joint for Osteo-sarcoma of Femur. Mr. R. Lake: A Case of Cholesteatomata of Mastoid Antrum. Mr. William Steer: (1) Case of Friedreich's Disease; (2) Case of Progressive Muscular Atrophy of Youth: (3) Case of Myxedema (male). Dr. Abraham: Case of Probable Syphilide of Face. Mr. Keetley: Case of Subcutaneous Suture of Patella and Excision of Bronchocele. Mr. Bruce Clarke: A Case of Nephrorrhaphy. Mr. A. D. Humphry: Cases'of Inguinal Hernia with Undescended Testis, and of Radical Cure of Femoral Hernia in a Girl aged 10.

SATURDAY

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 11 A.M.—Dr. Percy Smith: Lunacy Law.

BIRTHS, MARRIAGES, AND DEATHS.

- The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in post-office orders or stamps with the notice not later than Wednesday morning, in order to insure insertion in the current issue. BIRTHS.
- AMBLER.—On November 17th, at Ampthill, the wife of Richard Ambler, L.R.C.P. and S.Edin., of a daughter.
- Parsioe.—On November 2nd. at Davona House, Ivydale Road, S.E., the wife of H. Heath Parsloe, M.R.C.S., of a son.
- SYMES.—On November 21st, at Claremont House, Saltram Crescent, Maida Hill, the wife of William Legge Symes, M.R.C.S., of a daughter.
- Tweedy, -On November 17th, at 100, Harley Street, W., the wife of John Tweedy, of a daughter. MARRIAGES.
- BARBER-GIBBES.-On November 16th, at Kurrachee, H. R. C. Barber, B. A., M.B., B.C.Cantab., Surgeon-Captain Indian Medical Service, eldest son of the Rev. Henry Barber, of Ravenstone, Leicestershire, to Edith Mary (Donnie), third daughter of F. R. Gibbes, Esq., M.R.C.S.E., of Harewood, St. Leonard's-on-Sea, and late of Anerley, S.E. (By cablegraph.)
- COULTON—COUCH.—On November 22nd, at the Church of St. John, Brom-ley, Kent. John J. Coulton, L.R.C.P., M.R.C.S., to Jane Le Mosley Couch (Sister Mellish, London Hospital).
- ROBERTSON-DOXFORD.—At Christ Church, Sunderland, on November 19th, by the Rev. Canon Scott-Moncrieff, Andrew Robertson, M.A., M.B., and C.M., son of the late Rev. Gilbert Robertson, M.A., of New-castle-on Type, to Margaret Emily, eldest daughter of Alfred Doxford, Esq., Thornhill Gardens, Sunderland. No cards.
- WHITAKER—GARNEYS.—November 19th, at St. Mary's Church, Bungay, by the Rev. T. K. Weatherhead, vicar, George Herbert Whitaker, M.R.C.S. Eng., L.S.A., of Avona House, Bungay, third son of Joseph Whitaker, F.S.A., of White Lodge, Enfield, Middlesex, to Gertrude, third daughter of the late Thomas Garneys, M.R.C.S., L.S.A., of Trinity Street House, Bungay.

DEATH.

WILTSHIRE .- On November 2nd, at Winkleigh, Tunbridge Wells, Thomas-Wiltshire, surgeon, aged 56.

HOURS OF ATTENDANCE AND OPERATION DAYS AT THE LONDON HOSPITALS.

CANCER, Brompton (Free). Hours of Attendance. - Daily, 2. Operation

Days.—Tu. S., 2.
CENTRAL LONDON OPHTHALMIC. Operation Days.—Daily, 2.

CHARING CROSS. Hours of Attendance.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 1.30; Skin, M., 1.30; Dental, M. W. F., 9; Throat and Ear, F., 9.30. Operation Days.—W. Th. F., 2.

CHELSEA HOSPITAL FOR WOMEN. Hours of Attendance. — Daily, 1.30 Operation Days.—M. Th., 2.

EAST LONDON HOSPITAL FOR CHILDREN. Operation Day. -F., 2.

GREAT NORTHERN CENTRAL. Hours of Attendance.—Medical and Surgical, M. Tu. W. Th. F., 2.30; Obstetric, W., 2.30; Eye, Tu. Th., 2.30; Ear, M. F., 2.30; Diseases of the Skin, W., 2.30; Diseases of the Throat, Th., 2.30; Dental Cases, W., 2. Operation Day.—

W., 2.

GUY'S. Hours of Attendance.—Medical and Surgical, daily, 1.30; Obstetric,
M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu., 1; Skin, Tu.,
1; Dental, daily, 9; Throat, F., 1. Operation Days.—(Ophthalmic), M. Th., 1.30; Tu. F., 1.30.

HOSPITAL FOR WOMEN, Soho. Hours of Attendance.—Daily, 10. Operation

Days.-M. Th., 2.

KING'S COLLEGE. Hours of Attendance.—Medical. daily, 2; Surgical, daily, 1.30; Obstetric, daily, 1.30; o.p., Tu. W. F. S., 1.30; Eye, M. Th., 1.30; Ophthalmic Department, W.. 2; Ear, Th., 2; Skin, F., 1.30; Throat, F., 1.30; Dental, Tu. Th., 9.30. Operation Days.—M. F. S., 2.

LONDON. Hours of Attendance.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, Tu. S., 9; Ear, S., 9.30; Skin, Th., 9, Dental, Tu., 9. Operation Days.—M. Tu. W. Th. S., 2.

LONDON TEMPERANCE HOSPITAL. Hours of Attendance.—Medical, M. Tu. F. 2; Surgical, M. Th., 2. Operation Days.—M. Th., 4.30.

METROPOLITAN. Hours of Attendance.—Medical and Surgical, daily, 9; Obstetric, W., 2. Operation Day.—F., 9.

Obstetric, W., 2. Operation Day.—F., 9.

MIDDLESEX. Hours of Attendance.—Medical and Surgical, daily, 1.30; Obstetric, M. Th., 1.30; O.p., M. F., 9, W., 1.30; Eye, Tu. F., 9; Ear and Throat, Tu., 9; Skin, Tu., 4, Th., 9.30; Dental, M. W. F., 9.30. Operation Days.—W., 1.30, S., 2: (Obstetrical), Th., 2.

NATIONAL ORTHOPÆDIC. Hours of Attendance.—M. Tu. Th. F., 2. Operation Day.—W., 10.

NORT—WEST LONDON. Hours of Attendance. — Medical and Surgical, daily, 2: Obstetric, W., 2; Eye, W., 9; Skin, Tu., 2; Dental, F., 9. Operation Day.—Th., 2.30.

ROYAL FREE. Hours of Attendance.— Medical and Surgical, daily, 2:

ROYAL FREE. Hours of Attendance. — Medical and Surgical, daily, 2; Diseases of Women, Tu. S., 9; Eye, M. F., 9; Dental, Th., 9. Operation Days.—W. S., 2; (Ophthalmic), M. F., 10.30; (Diseases of Women), S., 9.

ROYAL LONDON OPHTHALMIC. Hours of Attendance.—Daily, 9. Operation Days.—Daily, 10.

ROYAL ORTHOPEDIC. Hours of Attendance.—Daily, 1. Operation Day.—

ROYAL WESTMINSTER OPHTHALMIC. Hours of Attendance. - Daily, 1.

ROYAL WESTMINSTER OPHTHALMIC. Hours of Attendance. — Daily, 1. Operation Days.—Daily.
ST. BARTHOLOMEW'S. Hours of Attendance.—Medical and Surgical, daily, 1. 30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, W. Th. S., 2: 30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2: 30; Orthopædic, M., 2: 30; Dental, Tu. F., 9. Operation Days.—M. Tu. W. S., 1: 30; (Ophthalmic), Tu. Th., 2.
ST. GEORGE'S. Hours of Attendance.—Medical and Surgical, M. Tu. F. S., 12; Obstetric, Th., 2; o.p., Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2; Orthopædic, W., 2; Dental, Tu. S., 9. Operation Days.—Th., 1; (Ophthalmic), F., 1.15.
ST. MARK'S. Hours of Attendance.—Fistula and Diseases of the Rectum, males, W., 8.45; females, Th., 8: 45. Operation Day.—Tu., 2.
ST. MARK'S. Hours of Attendance.—Medical and Surgical, daily, 1.45; o.p., 1.30; Obstetric, Tu. F., 1.45; Eye, Tu. F. S., 9; Ear, M. Th., 3; Orthopædic, W., 10; Throat, Tu. F., 1.30; Skin, M. Th., 9: 30; Electro-therapeutics, Tu. F., 2; Dental, W. S., 9: 30; Consultations, M., 2: 30. Operation Days.—Tu., 1: 30; (Orthopædic), W., 11; (Ophthalmic), F., 9.
ST. PETEE'S. Hours of Attendance.—M., 2 and 5, Tu., 2, W., 5, Th., 2, F. (Women and Children), 2, S., 4. Operation Days.—W. and F., 2; o.p., daily, exc. W. and S., 2; Obstetric, Tu. F., 2; o.p., W. S., 1: 30; Eye, Tu., 2; o.p., daily, exc. S., 1: 30; Ear, M., 1: 30; Skin, F., 1: 30; Throat, Tu. F., 1: 30; Children, S., 1: 30; Dental, Tu. F., 1: 0. Operation Days.—W. S., 1: 30; Coprident Days.—W. S., 1: 30; Coprident Days.—W. And F., 2; o.p., daily, exc. St. St. Thomas Free for Women and Days.—W., 2: 30.
SAMARITAN FREE FOR WOMEN AND CHILDREN. Hours of Attendance.—Daily, 1: 30. Operation Days.—W., 2: 30.

SAMARITAN FREE FOR WOMEN AND CHILDREN. Hours of Attendance. Daily, 1.30. Operation Day.—W., 2.30.

THEOAT, Golden Square. Hours of Attendance.—Daily, 1.30; Tu. and F., 6.30; Operation Day.—Th., 2.

6.30; Operation Day.—Th., 2.

UNIVERSITY COLLEGE. Hours of Attendance.—Medical and Surgical, daily, 1.30; Obstetrics, M. W. F., 1.30; Eye, M. Th., 2; Ear, M. Th., 9; Skin, W., 1.45, S., 9.15; Throat, M. Th., 9; Dental, W., 9.30; Operation Days.—W. Th., 1.30; S., 2.

WEST LONDON. Hours of Attendance.—Medical and Surgical, daily, 2; Dental, Tu. F., 9.30; Eye, Tu. Th. S., 2; Ear, Tu., 10; Orthopsedic; W., 2; Diseases of WomCn, W. S., 2; Electric, Tu., 10, F., 4; Skin, F., 2; Throat and Nose, S., 10. Operation Days.—Tu. F., 2.30.

WESTMINSTER. Hours of Attendance.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1; Eye, M. Th., 2.30; Ear, M., 9; Skin, W., 1; Dental, W. S., 9.15. Operation Days.—Tu. W., 2.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELE-GRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting Editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the Journal, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

In order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the Office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429, Strand, W.C.

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

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

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with duplicate copies.

Queries, answers, and communications relating to subjects to which special departments of the BRITISH MEDICAL JOURNAL are devoted, will be ound under their respective headings.

QUERTES.

L.R.C.P. (Bournemouth) asks for any information about Bakersfield, California, or neighbourhood: (1) As regard to medical prospects. (2) And more especially as to the prospects of fruit culture pure and simple.

A MEMBER asks if there is an English translation published yet of Hertwig's Embryology; and also asks to be recommended a simple elementary book on embryology, which a beginner could understand without a teacher.

Dr. O'FLYNN asks: What fee is paid to a registrar of births and deaths in England? The fee paid to a registrar in Ireland is 1s. for each entry in the register.

** A fee of 1s. is payable for the examination of an entry in the Register; but if a certified copy is required a further sum of 2s. 7d. is pavable.

payante.

IRRITABLE URETHRAL CARUNCLE.

J. F. D. asks if there is a milder way of treating irritable urethral caruncle than by either scissors, galvanic cautery, or nitric acid? The patient stands pain very badly, and "J. F. D." would prefer not to use any

chloroform.

PERSISTENT HICCOUGH.

R. B. would feel grateful for a suggestion which would ensure relief in a case of persistent and exhausting hiccough. The patient is a lady, aged 48, who has been ill for upwards of nine months. She has suffered from extensive pulsation of the abdominal aorta—just below the diaphragm-emests for a long time, general wasting, and diminution in power over left side, but unmistakable improvement in all these particulars has recently gradually occurred. Most ordinary remedies have been tried—sinaplems over epigastrium and hypodermic injections of morphine modify but do not remove the hiccough.

SCHOOL LETTERS AND SCARLET FEVER.

PATER asks: Is it usual, is it wise, to allow boys isolated in the sanitorium of a public school, after scarlet fever to write letters, either home or to friends, even with a parent's consent?

*** With regard to the former part of this query, we believe that the practice here described is not usual. So far as medical officers of schools are responsible for the framing and carrying out of the sanitary regulations, we do not suppose that they would stultify themselves by sanctioning a needless indulgence directly opposed to the principles of sanitary science. As to the wisdom, there are cases on record of school boys, convalescent from scarlatina, enclosing in a letter which they desired to have sent home almost perfect desquamative casts of a whole hand, as interesting personal memorials likely to be tenderly appreciated by the various members of the family circle; and although a correspondence thus illustrated is probably far from "usual," few would pretend that its encouragement is either desirable or "wise." But apart from such exceptional instances, it is agreed that the same suspicion which justly attaches to the clothes worn and the books handled by a scarlatina patient is equally deserved by the letters which he writes. The parents' "consent"-whatever that may be worth-is scarcely germane to the question, for the simple and sufficient reason that the parents of the patient are not the only or the most important persons concerned. A hygienically heretical father may scout the idea of infection, but he has no right to timpose his exceptional views upon other people who would thus be exposed-unknowingly or against their will-to the risk in which they believe, and from which they are