

cytes. On the other hand, Sobernheim and Radziewsky¹⁷ found that when anthrax bacilli were introduced into the peritoneal cavity, or developed there from the spore stage, phagocytosis was present in a very small degree and at a late stage, while the swelling up and granular disintegration of the bacilli was obvious. Kiesskalt¹⁸ also tested the same point and came to the same conclusion.

The simplest explanation of these differing views is to assume the action of an intracellular toxin which in slight amounts attracts, and in large keeps back, the leucocytes. We get less confused if, dismissing phagocytosis from our minds, we still retain the idea of the cells of the body, and accept the principle of immunity to be the fabrication by these cells of the bactericidal substances which, passing into the intravascular and extravascular fluids, destroy the bacilli. Radziewsky has shown by special staining methods that all the time the development of an anthrax infection is proceeding the multiplication of organisms is accompanied by death and destruction of others. The introduction of spores of anthrax on threads into the peritoneal cavity of guinea-pigs is followed up to the ninth hour by enormous increase in number, so that a thick network of them is formed, all staining well. Between that and the eleventh hour the reverse process goes on, during which an extraordinary destruction takes place, and by the fourteenth almost all are dead. This helps much to explain the negative bacteriological find in several cases of anthrax, as the number of bacteria which may be found at the end of an infection may not correspond in the slightest degree with the number that may at one time or another have been present. If there was no formation of bactericidal substances, as the vital powers became exhausted there would be no sufficient reason to explain the decrease rather than the increase of bacilli. And it is probable that the same bactericidal substances which kill the bacillus are the same as are produced in the organism during the process of immunization.

A fatal issue in anthrax is to be explained on this view of Radziewsky by assuming that as the microbes increase so the cells of the body react to destroy them. The bactericidal substances thus produced destroy so many bacilli that the substances liberated at their death exceed the minimum lethal dose. The use of the serum, therefore, would be to assist in the destruction of the bacilli before their number was such that from their death so much poisonous substance was produced as to be fatal. If this view explained everything its use would be limited to early cases, and in late cases it might even be a direct cause of death. From consideration of the cases treated in man by the serum, we can hardly believe that its only effect is to cut short the capacity of the bacilli to increase at a time when the amount of the intracellular poison has not yet reached a lethal dose.

Recently MacFadyen and S. Rowland,¹⁹ by special methods, consisting in the use of very low temperatures, have obtained extracts from the bodies of typhoid bacilli, or in other words, their intracellular toxin. Injection of this into monkeys, rabbits, and goats over a period of four to six weeks produced a serum which showed (1) marked anti-bactericidal and antitoxic properties, and (2) curative and preventive properties as regards the typhoid bacillus and its intracellular toxin. This is the first instance where a serum has been obtained which was found to be bactericidal against a particular organism and antitoxic as regards the toxin contained in its substance.

The work of Wright and Douglas,²⁰ with its proof that the blood fluids through the opsonins contained in them modify bacteria in a manner which renders them a ready prey to the phagocytes, may be expected to throw light on the action of the antianthrax serum. The anthrax bacillus unfortunately, owing to thread formation, does not appear to lend itself well to the particular method of experimentation employed by them, namely, averaging the number of bacteria ingested by a certain number of leucocytes; but in experiments on the opsonic power of human blood in its relation to the anthrax bacillus when unheated serum was used, they say—

Although enumeration was impossible, there was everywhere evidence of phagocytosis. In the few cases where the leucocytes had not ingested bacteria, they were found to have extended themselves in a characteristic manner along the bacterial thread. Repeating the experiments with heated serum, there was practically no sign of phagocytosis.

The presence of opsonins in quantity in the blood after inoculation of serum would account for the observation of Andrewes²¹ in the case already referred to in which no anthrax colonies could be cultivated nineteen hours after injection of serum, although their presence had previously

been abundantly proved, such few disintegrating bacilli as were found being mostly enclosed in leucocytes.

REFERENCES.

- ¹ *Deut. med. Woch.*, vol. xx, 1895, pp. 515, 535, 688, 706, 916, 955, 977. ² *Munch. med. Woch.*, vol. xvi, 1899, p. 517. ³ *Deut. med. Woch.*, vol. xi, 1901. ⁴ *Guy's Hospital Reports*, vol. xlvii, 1890, p. 1. ⁵ *Lancet*, 1888, vol. 1, p. 269. ⁶ *Reference in Centrabi. f. Chir.*, 1882, 1890, and 1892. ⁷ *Wien. klin. Rund.*, vol. x, 1903, p. 165. ⁸ *Sullo stato presente della Sieroterapia Anticharbonchiosa, Rivista d'Igiene e di Sanità Pubblica*, Year xiv, 1903. ⁹ *BRITISH MEDICAL JOURNAL*, C. B. Lockwood and F. W. Andrewes, January 7th, 1905; A. A. Bowlby and F. W. Andrewes, February 17th, 1905. ¹⁰ *Lancet*, February 4th, 1905. ¹¹ *Quattordici casi di Pustulo Maligno*, by Dr. Cicognani, *Gazz. degli Osped. e delle Clin.*, No. 114, 1901. ¹² *Comptes Rendus*, vol. xci, 1895, p. 303. ¹³ *Ann. de l'Inst. Past.*, 1895. ¹⁴ *Experimentelle Untersuchungen zur Frage der aktiven und passiven Milzbrand-Immunität*, *Zeit. f. Hygiene*, vol. xxv, 1898; *Weiter Untersuchungen über Milzbrand-Immunität*, *ibid.*, vol. xxxi, 1899; *Beri. klin. Woch.*, No. 22, 1902; *Deut. med. Woch.*, Nos. 26 and 27, 1904. ¹⁵ *Lancet*, August 16th, 1904. ¹⁶ *L'Immunité*, 1902. ¹⁷ *Zeit. f. Hygiene*, 1901, vol. xxxvii, p. 33. ¹⁸ *Ibid.*, 1903, vol. xlv, pp. 18-19. ¹⁹ *Centrabi. f. Bakt.*, vol. xxxiv, 1903, p. 765. ²⁰ *An Experimental Investigation of the Role of the Blood Fluids in Connexion with Phagocytosis*, A. E. Wright, S. R. Douglas, *Proc. Roy. Soc.*, 1904, vol. lxxii, p. 357, and vol. lxxiii, p. 128. ²¹ *BRITISH MEDICAL JOURNAL*, February 17th, 1905.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

AN UNUSUAL COMPLICATION OF VARICELLA.

VARICELLA is usually regarded as little more than an inconvenience to the average subject, and complications are conspicuous by their absence. They may, however, occur, and be of a troublesome nature, an instance being described in the following note. A healthy boy of 11 slept in the same bed as his elder brother on December 29th last; the following morning the elder boy showed a definite chicken-pox eruption, and was absolutely isolated, so that no further contact of any kind or degree took place between the two. On January 13th the younger boy complained of headache, loss of appetite, and weariness; examination showed a very profuse varicellar eruption, the vesicles increasing in number for about twenty-four hours. None could be seen upon the fauces, though the throat was sore. It was a severe attack—according to the patient's account there were over 300 spots—and the general symptoms continued for two days. On the night of January 15th I was called in to see the boy, who had passed practically no urine for sixteen hours, and was in pain, with constant but ineffectual efforts at micturition. The prepuce was swollen, and its opening obliterated by a large pock, and within the urethra, half an inch from the meatus, was a very tender and painful spot, which may or may not have represented another vesicle. There was tenderness above the pubes, and at least an inch of dullness, and there was evidently severe pain referred to the hypogastrium and penis. He was at once given a hot bath and a full dose of morphine, which almost immediately induced a plentiful passage of urine. Subsequently there was a certain amount of discomfort on micturition, but not enough to call for special treatment; the swelling of the prepuce disappeared as the eruption dried up.

Curiosity led me to see whether textbooks furnished any precedent for such an unusual occurrence; in only one—Keating's *Encyclopaedia of Children's Diseases*—out of eight or nine standard English and American works was there even the barest mention of such a complication. This leads me to suppose that it is a rare incident, and therefore worthy of record.

Bristol.

CAREY COOMBS, M.D., B.S.Lond.

SCARLET FEVER IN A CHILD THREE WEEKS OLD.

I DO NOT mean to assert that this case is unique, but an undoubted case of scarlet fever in a child 3 weeks old is very uncommon. It is a good illustration of how careful one has to be in examining cases as they may be brought for quite a different complaint. This child was brought up to the outpatient department to the County Hospital, Ayr, on account of an erysipelatous condition of the scrotum and thighs. On questioning the mother it was ascertained that the child had been feverish and very fretful for two days, and had also vomiting. The legs appeared redder than usual. The child was then stripped, when the upper limbs and the whole of the body were seen to be of a brilliant red hue, the throat was very red and injected, and there was a typical strawberry

tongue. The temperature in the axilla was almost 102° F. The case was notified, and was taken into the fever block of the hospital. There the temperature soon came down, and three days later the characteristic desquamation commenced round the ears and neck. This went on quickly, and he was discharged five weeks after admission.

Ayr.

JOHN ALLAN, M.B., Ch.B.

ACUTE STRANGULATION OF ILEUM THROUGH AN APERTURE IN MESENTERY.

A GIRL, 9 years of age, retired to bed in her usual health; two hours later she was attacked by severe colicky pains in abdomen and frequent vomiting, which later became stercoral. I saw her fourteen hours after the commencement of attack. She was then collapsed, pulseless, heart-beats 180 per minute. The temperature in the groin was 99.5° F. There was tenderness over the whole abdomen, greatest at a point 2 in. below and to the right of the umbilicus, the abdomen was also slightly distended, and almost immobile during respiration; no motions nor flatus had been passed. Eight hours later she was still very collapsed. Heart-beats 180 per minute. Temperature in groin 100.5° F. There was great tenderness and much distension of the whole abdomen and occasional hicough. She died suddenly twenty-four hours from the commencement of attack.

Autopsy.—The abdomen contained about 30 oz. of bloody serum, 4 ft. of the lower portion of ileum had passed through an aperture—large enough to admit the tips of two fingers—in the mesentery, and become strangulated, the gut being greatly congested. There was evidence of an old peritonitis in this part of abdomen. It appears that about four years ago she was run over by a trap, and it seems probable that the rent in the mesentery occurred at that time.

Walthamstow.

J. CLARKE, M.R.C.S., L.R.C.P.

LARGE CYSTIC CALCULUS.

MR. PIKE in the BRITISH MEDICAL JOURNAL dated January 7th reported a cystic calculus of $13\frac{1}{2}$ oz., and more recently Lieutenant-Colonel Hatch (JOURNAL, February 18th) recorded one of 17 oz. It may therefore interest some readers to learn that in 1898 I removed by suprapubic lithotomy at Civil Hospital, Nasik, a calculus weighing 1 dr. and some grains over or under 20 oz. My notebook is not with me to refer to, but I fancy the stone was just over the 20 oz.

The patient was a low-caste Hindu. Had a history of stone for thirty-six years. He was in a very bad state of health, but said he preferred to die under the operation rather than bear the stone any longer. He died on the third day after the operation.

Both kidneys were most extensively diseased. The stone was white, smooth, circular, and—except a rather softer outer layer of less than $\frac{1}{2}$ in. in thickness—extremely hard, almost like marble.

I carefully, and with difficulty, divided it in half with a fine-toothed saw. Being transferred almost immediately I lost sight of the stone for a year. On writing for it only one half was forthcoming, and that is now in my possession.

Liverpool.

C. TILSON HUDSON, Major, I.M.S.

HAEMATEMESIS AND MELAENA IN AN INFANT: RECOVERY.

READING the account of Drs. Morris and Feldman's case of haematemesis and melaena neonatorum reminded me of a case I attended in December, 1903, with the same happy result.

On December 17th I was called by the midwife to see a child—born the previous day—who was vomiting blood. The mother had been attended by the midwife, who assured me the delivery was easy, and that she had waited, as was her custom, for the child to cry before tying the cord. The midwife was anxious about the case, because she said she had had three other similar cases during several years of practice, and they had all died. The child was vomiting every half-hour or so, and most of the vomited matter was dark, nearly black, and thin, not clotted. It had also passed meconium several times, accompanied on the last two or three occasions by some bright, fresh blood. It had not been put to the breast or fed.

I saw dark blood vomited and bright blood on the napkin.

The mouth, pharynx, and nose seemed normal; no bleeding points. Temperature and pulse were normal. It did not seem affected by the loss of blood, although I was assured several tablespoonfuls had been vomited. I administered drop doses of adrenalin chloride 1 in 1,000 every half-hour. At the end of twenty-four hours the loss of blood had greatly diminished, and on the third day ceased. It lasted altogether about eighty hours. Before the bleeding stopped, however, icterus was well marked, the conjunctivae were distinctly yellow, the napkins stained yellow by urine, and the skin generally of a pale yellow tinge. Under $\frac{1}{2}$ gr. doses of calomel this disappeared in five days, and recovery was complete. Weak milk and lime water only was administered. The child is now strong and healthy.

It appeared to me the liver or one of its appendages was responsible for the haematemesis and melaena, but if so I was much surprised to find the icterus clear up so rapidly.

Leigh, Lancs.

J. CLAY BECKITT.

A CASE OF HAEMARTHROS OF THE WRIST.

THE following case merits, I think, publication, as the condition presents features of some interest and must be of considerable rarity.

J. C., a boy aged 14, came to my rooms on February 9th, and showed me a hand on the back of which there seemed at first sight to be a large diffuse ganglion. I found, however, that the hand had been normal until about ten minutes before, when the boy slipped in the road and fell, with the back of his hand on the kerbstone. He felt only slight pain at the moment, but noticed in a minute or two that the hand was getting stiff and tight, and that the back of it was rapidly swelling.

There could be no doubt that one had to do with a haemarthros of the wrist, and on examination it was seen that the compartments of the joint had been picked out in such a way as to demonstrate quite accurately the individual synovial pouches. From above down there were four distinct swellings on the back of the wrist.

1. An L-shaped swelling between the radius and ulna.
2. A sausage-shaped swelling below the level of the bones of the forearm, stretching transversely across the wrist, and united on either side by the lateral ligaments.
3. An irregular tumour like a small bean over the centre of the carpus.
4. An ill-defined irregular swelling running across the back of the wrist at the base of the metacarpal bones.

A glance at a diagram of the wrist shows the relation of these swellings to the joint. Even as I examined the case the contours of the tumours became blurred, and the separate swellings slowly merged into one irregular swelling, which obscured the wrist-joint.

I removed with a large hypodermic needle $3\frac{1}{2}$ drachms of blood, and applied firm pressure over the wrist. The subsequent history was uneventful; there was extensive synovitis of the wrist-joint, which subsided under ordinary treatment; and there is now, except some slight thickening round the joint, very little wrong with the part.

R. ALLAN-BENNETT, M.B.Lond., M.R.C.S.

Saltburn-by-the-Sea, Yorkshire.

INCUBATION PERIOD OF MUMPS.

As medical officer to a preparatory school I have of late years insisted on a quarantine period of twenty-nine days in cases of mumps, and for this reason—that the school had been spared an epidemic in consequence of the detention at home beyond the usually-recognized period of twenty-five days of a lad who was unfit to travel through malaise (induced probably by the ferment of parotitis in his system), the disease only declaring itself on the twenty-eighth day. On a second occasion another boy developed the disease on the twenty-ninth day after last exposure, the very day on which he was about to return to school.

A still longer period of incubation came under my notice in an Eton scholar who developed the disease thirty-five days after leaving an infected house; but, though there was not the slightest evidence of fresh exposure, I cannot help thinking there must have been some source of fallacy in this case.

W. T. PARKER DOUGLAS, B.A., M.B.Cantab.

Speen, Newbury.

There are some points worthy of note with regard to this boarding out of pauper lunatics in England and Wales. In the first place, there is an entire lack of coherence between these patients and the general lunacy administration of the country, an absolute want of central control; in the second place, the guardians of the patients are in nearly all cases their parents or natural guardians, that is to say, the very people whom universal experience has proved to constitute the worst kind of guardian; in the third place, the sums paid to the guardians are utterly inadequate for their proper maintenance; and lastly, the medical care and supervision is less than in any of the countries we have taken under review. Contrast this system, or rather want of system, with the close care, the regular inspection and efficient control, the monthly bathing and medical examination, of the patients of the French, Belgian, Dutch, or German colonies, or with that of Scotland, which ensures, as Mr. Spence has said, "that no insane person in Scotland who receives parochial relief while under private care shall receive such relief unless under conditions prescribed by the State through the Board, and under Governmental inspection ensuring the fulfilment of these conditions," and it becomes abundantly clear that the boarding out of pauper lunatics in England and Wales is in need of instant reformation, and that the introduction of a modern properly-organized family-care system would result in increased, not diminished, co-ordination and control.

D.—The application of the family-care system has a beneficial influence on the treatment of the insane, both in the asylum and in those under family care.

Between Esquirol and Sir John Batty Tuke there has been a succession of alienists who have repeatedly urged the formation of small asylums for the treatment of acute and curable cases. In Germany for years, and in many other Continental States, and also since 1900 in Scotland, there have been mental hospitals for the treatment of early insanity amongst the poor, which have more than justified their establishment. In France the separate establishment of hospitals for acute and curable cases is being accomplished. Yet notwithstanding the weight of professional authority, England still lags behind. As a step in this direction, as a means of disencumbering the asylums of their surplussage of chronic and incurable cases, the value of family-care colonies is undeniable and, indeed, self-evident. Letchworth showed years ago that the recovery-rate of an asylum which had been relieved of its incurable cases by the formation of a colony, when added to the recovery-rate of the colony, exceeded the recovery-rate of mixed establishments, and this favourable influence of the separation of the cases has been the subject of comment by every medical director of the colonies we visited. Amongst the class of patients discharged to family care recoveries could hardly be hoped for, but in every colony we found these occurring amongst patients many of whom had been for years in asylums. More marked than this, however, is the amelioration in the mental condition of chronic cases under domestic influences, cases which have been agitated and restless in asylums have become comparatively tranquil in the family, the subjects of persistent delusions of persecution no longer kick against the pricks, and there are many cases living quietly in the family colonies, who had been actively suicidal in the asylum. This in no way detracts from the value of asylum treatment. The asylum and the family colony has each its proper sphere. For early, acute and curable cases, small completely-equipped mental hospitals under expert alienists in sufficient number to give individual attention to the patients—a condition impossible to fulfil in our immense asylums; for protracted, agitated, and dangerous cases, and those requiring careful nursing on account of their bodily or mental condition, the pavilion or villa asylum, in closed and semiclosed houses, and for a considerable percentage of the insane, chronic, incurable, and inoffensive cases, family care.

Prof.essor Clifford Allbutt, in a letter published on May 23rd, 1904, wrote:

The prevalent methods of treatment of insanity are not even yet individual enough. County asylums have too much of the barrack, retreats for the wealthy too much of the hotel. For the poorer we want the village system, for the richer a farther extension of the villa system, which of late years has made much way.

The important benefit which the adoption of this system confers on the treatment of insanity is that, whilst securing the boon of family life to thousands who would otherwise be immured within asylums, it permits, at a greatly diminished cost, of an expenditure of individual effort and expert skill

upon those likely to benefit by it which is impossible under our present system.

The possible dangers of the family-care system have been thoroughly discussed in the preceding reports. Suffice it to say that any misgivings we may have had under this head have been entirely removed by the results of our investigation. Major casualties are very much greater in the asylums than in the colonies, following naturally from the selected class boarded out, and under efficient inspection and control and with the exercise of proper care in the selection of cases the possibility of immoral or illegal conduct may be entirely eliminated.

The introduction of this system into England and Wales and also into Ireland has been frequently discussed and has been opposed by many on the ground of public danger or of the possibility of lax or exacting guardianship. We have also heard it said that it is a "cheap" system, with the implication that this is its sole recommendation. Its adoption by England and Wales would undoubtedly result in an immense economy of public funds, but had this been its only virtue it should have sought elsewhere for its advocacy. A study of this system proves that for a considerable proportion of the insane it is the most humane and the least costly mode of care as well as an important curative co-efficient. It is essentially a reformatory and not a retrogressive measure, and those who oppose its extension in England on the ground of public safety or from fear of careless or harsh treatment of the patients by their guardians forget that we have to-day over 5,000 lunatics under family care who are seldom inspected, who are detached from any central administrative control, and for whom the use of mechanical means of restraint is, if not countenanced, at least not prohibited.

THE GRIFFITHS TESTIMONIAL FUND.

DR. A. P. FIDDIAN (23, The Walk, Cardiff), Treasurer of this Fund, has received the following further subscriptions:

Amount previously acknowledged	£	s.	d.
Dr. Egbert Williams...
Dr. W. F. Brook, sen.
Dr. Eleazar Davis
Dr. J. Charles Edwards
Dr. S. J. Trevor Jones
Dr. S. Cromwell Jones
Dr. J. Walters

The object and particulars of the fund were stated in our columns of January 21st, 1905, p. 160.

CONTRACT MEDICAL PRACTICE.

NOTICE AS TO DISTRICTS IN WHICH DISPUTES EXIST.

A notice as to places in which disputes exist between members of the medical profession and various organizations for providing contract practice will be found among the advertisements, and medical men who may be thinking of applying for appointments in connexion with clubs or other forms of contract practice are requested to refer to the advertisement on page 90.

PROPRIETARY MEDICINES.—Among the Bills before the New York State Legislature is one prohibiting the sale of proprietary medicine in the State unless an analysis or formula specifying the ingredients which it contains is printed on the label of the bottle or package. False analysis or failure to place the formula on the outside of package is made punishable by a fine of not less than £10 or more than £100, or by imprisonment of not less than one month or more than six months. A similar Bill is before the Massachusetts State Legislature. It is resisted by the Druggists' Association because, as a correspondent of the *Boston Medical and Surgical Journal* tersely puts it, "they think that people would not take so much patent medicines if they knew what they were swallowing."

A SPANISH MUNICIPALITY AND ITS MEDICAL OFFICER.—It is seldom that the services of a medical officer receive any recognition from a local authority in this country. We therefore commend to the special attention of all town councils, boards of guardians, and other public authorities, the following example of appreciation of medical service shown by a Spanish municipality. The Ayuntamiento of Villamartin de Campos (Palencia) has recently conferred the freedom of the town on Dr. Rodrigo Fernandez in recognition of the zealous and devoted manner in which he has discharged the duties of Poor-law medical officer for twenty-five years. His name has been given to one of the streets of the town.

MEDICAL NEWS.

THE Home Secretary has notified that His Majesty has authorized the Life Saving Society to be known in the future as the Royal Life Saving Society.

THE first doctor's degree conferred on a woman by the University of Marburg has been won by a Japanese lady, Miss Tada Urata of Kumamoto.

We are informed that Mr. G. H. Makins, C.B., F.R.C.S., and Mr. Charters Symonds, F.R.C.S., have joined the consulting staff of the Bolingbroke Hospital, Wandsworth Common.

A SOCIETY called the Chorley and District Medical Society has been formed at Chorley for the discussion of professional and social subjects. Dr. Jackson has been chosen President and Dr. Maskell Secretary and Treasurer.

MESSRS. C. J. HEWLETT AND SONS, of London, have been awarded a gold medal for their standardized tinctures, drugs, and pharmaceutical preparations at the Cape Town International Exhibition, 1904-5.

THE new whooping-cough block of the East London Hospital for Children, Shadwell, will be opened by the Princess Louise Augusta of Schleswig-Holstein on Saturday, April 8th, at 3.30 p.m.

We are informed that fourteen surgeons are competing for the quinquennial orthopaedic prize of £140 in memory of Umberto I, King of Italy. Professor Bassini of Padua, Professor Mikulicz of Breslau, and Mr. Bernard Roth of London, have been appointed by the University of Bologna to adjudge the prize.

THE Sanitary Inspectors' Examination Board will hold an examination in London on May 2nd and the four following days for certificates of qualification for appointment of sanitary inspectors or inspectors of nuisances under Section cviii (2) (d) of the Public Health Act, 1891. Further particulars can be obtained on application to the Honorary Secretary of the Board, 1, Adelaide Buildings, London Bridge, E.C.

THE report presented to the annual meeting of the Royal National Pension Fund for Nurses stated that during the past year 1,185 pension policies had been taken out, as compared with 953 in 1903. The annuities falling due showed satisfactory progress; at the December quarter these were being paid at the rate of over £12,000 per annum under 318 policies. The sum of £1,651 was distributed in sick pay during 1904. The total funds of the Society increased during the year from £820,792 to £910,525.

AMONG the objects exhibited this week by the Royal Meteorological Society in the library of the Institution of Civil Engineers is a life-size dummy, prepared by Mr. J. Lynn Thomas, dressed in the remains of the clothes of a man who was struck by lightning near Cardiff, on July 17th, 1903. The thermometers, anemometers, and sunshine recorders used on board the *Discovery* in the recent Antarctic expedition are also exhibited, as well as a number of beautiful water colour drawings of sky and cloud effects in Antarctic regions, made by Dr. E. A. Wilson.

IN view of the importance of the more exact study of the insects which transmit disease in man and animals, the office of lecturer in economic entomology and parasitology has been created in the Liverpool School of Tropical Medicine, and Mr. R. T. Newstead has been appointed the first occupant. Mr. Newstead, who was assistant to the late Miss Ormerod, has been employed by the Board of Agriculture and some of the Colonial Governments to make investigations, and has published, through the Ray Society, articles upon scale insects and mealy bugs.

SOCIETY OF ANAESTHETISTS.—The following have been elected officers of the Society for next session: Mr. Edgar Willett, President; Mr. Walter Tyrrell, Vice-President; Dr. Probyn Williams, Treasurer; Mr. Crouch and Dr. Blumfield, Secretaries; and Drs. Bowen and Barton, Auditors. The Council is formed of the officers, in addition to Mrs. Berry, M.D., Mr. Carter Braine, and Dr. McCordie.

EXHIBITION OF TROPICAL DISEASES.—An exhibition of tropical diseases, as observed in Portuguese colonies, is being organized in connexion with the Section of Colonial and Naval Medicine at the Fifteenth International Medical Congress to be held at Lisbon in April, 1906. The exhibition will comprise interesting clinical cases, specimens, pathogenic

parasites, species of *Culicidae* found in the Portuguese possessions, photographs of hospitals, statistics and curves showing the diffusion of particular diseases and the mortality therefrom in the Portuguese colonies, photographs of types of aboriginal races showing their clothing and mode of life, and specimens of their industrial produce.

UNIVERSITY OF LONDON.—A meeting of the Faculty will be held at 5 p.m. on Friday, March 24th, at the University. The Faculty will elect a Senator in place of Sir Cooper Perry, who is unwilling to accept nomination for re-election. The Dean will make a statement as to the progress of the Institute of Medical Sciences scheme, and also on a matter connected with the visit of British physicians and surgeons to Paris in May next. Dr. Calvert has given notice of motion for a committee to consider a plan of retirement for members of the Boards of Studies.

CONGRESS OF FRENCH-SPEAKING ALIENISTS.—The fifteenth congress of the alienists and neurologists of France and French-speaking countries will be held this year at Rennes from August 1st to 7th, under the presidency of Dr. A. Giraud, Medical Director of the Lunatic Asylum of Saint-Yon in the Seine-Inférieure Department. The following are the questions proposed for discussion: (1) Hypochondriasis, (2) forms of ascending neuritis, (3) baths and hydrotherapy in the treatment of mental diseases. Communications should be addressed to the General Secretary, Dr. J. Sizaret, Médecin en chef de l'Asyle Public des Aliénés de Rennes.

THE MEDICAL SOCIETY OF LONDON.—The one hundred and thirty-second anniversary dinner of the Medical Society of London was held at the Whitehall Rooms, Hotel Metropole, on March 15th, with the President, Mr. J. Langton, in the chair. To the right of the Chairman were seated the President of the Royal College of Physicians, the Principal of the University of London, the President of the Clinical Society, the Dean of the Faculty of Medicine of the University of London, the President of the Harveian Society, the President of the Gynaecological Society, the President of the West London Medico-Chirurgical Society, and to the left of the Chairman the President of the Royal College of Surgeons, the Director-General of the Army Medical Service, the President of the Royal Medical and Chirurgical Society, the President of the Neurological Society, the President of the Hunterian Society, the President of the Obstetrical Society, the President of the Laryngological Society, and the President of the Society of Anaesthetists. After the usual loyal toasts had been duly honoured, Sir William S. Church proposed the toast of "The Medical Society of London." He observed that there was in the air much talk of a scheme whereby the various medical societies in this metropolis would be more or less confederated together. He trusted that the individual societies would still retain their individuality. In any such movement, the Medical Society was bound to take a leading part. Mr. Langton, in responding to this toast, referred to the Lettsomian Lectures giving by Dr. Savage and to the address on the Growth of Cancer by Dr. Bashford. Sir A. W. Rücker, in replying to the toast of "The Guests," proposed by Dr. F. de Havilland Hall, said that the number of students of medicine in the metropolis, instead of increasing, had been for some years falling off, owing to the fact that the new provincial schools provided excellent classes for preliminary medical subjects. London must certainly put itself on an equality with the provinces. London had so many great medical schools and such an extraordinary wealth of teaching material that instruction in preliminary medical subjects in the metropolis must be put on a higher footing. These subjects did not require to be taught in the immediate neighbourhood of the sick bed, and it was a matter of the greatest importance that there should be established a central medical institution where physics and chemistry, and probably also anatomy and physiology, could be taught. That would do something to put the teaching of these subjects in the metropolis on an equality with the provincial centres, and with the greatest medical institutions in the capitals of the world. He concluded by reminding his hearers that that could only be done with the help of the medical profession. Mr. Tweedy also responded to this toast, and said he was glad to have the opportunity of acknowledging the benefits he had derived from the excellent library of the Medical Society. Sir Constantine Holman proposed the health of "The President," and that gentleman, in acknowledging the toast, paid a high compliment to the efforts of the two honorary secretaries of the Medical Society, Mr. Waring and Dr. Risten Russell, to whom he attributed the great success of the evening.

CHARLES JAMES HARRIS, M.R.C.S., L.S.A., died on March 4th in his 83rd year. He entered as a student at the Middlesex Hospital when 35 years of age, and while obliged to earn his own living. He took the diplomas of M.R.C.S. and L.S.A. in 1865. Details as to his professional life are unknown to the writer; but long after he had retired from practice, and when aged 73, he became a vegetarian. Six years later, in a paper read before the Middlesex Hospital Medical Society, he could say, "Here am I, in my 79th year, not yet feeling old or stiff in the joints, and well in every respect, despite not having a tooth in my head. For nearly six years I have taken nothing in the shape of fish, flesh, or fowl; neither have I taken alcohol in any shape, nor have I used tobacco. In fact, I ingest nothing from the animal kingdom, and my drink is mostly water. Living thus, I desired to test my bodily condition; so last year, on July 11th, I started to ride to Edinburgh and back on my tricycle. I may remark that my tricycle weighed about 65 lb., and my body weight was 115 lb.; it is now 117 lb. This journey I accomplished with comfort and pleasure, riding about forty miles a day, and that, too, without losing weight. In July of the present year I thought I would like to see how far I could ride in the day without distressing myself, so I took a run from London to Bath. I started at 4 a.m. on July 9th, and covered over ninety miles in the day, reaching Calne at 10 p.m. I did not feel any signs of exhaustion or weariness. Four and a half hours' sleep found me quite refreshed, and after a breakfast of bread and butter and strawberries, I started for Bath, a distance of eighteen miles. On July 12th I started at 5 a.m. on my return journey to London (108 miles); and I reached London at 2 a.m., without a break, after riding through a storm of thunder and lightning and in such a pouring rain that I was thoroughly soaked. I cleaned up my tricycle before going to bed." Last summer Mr. Harris repeated his ride from London to Edinburgh and back under the same dietetic conditions. Influenza prostrated him on February 23rd, and adynamic pneumonia followed. Though medical friends and a trained nurse were in attendance, he chose to lie untended and undrugged, and almost un nourished, waiting with a great longing for death. He saw no human being for five hours before what is believed to have been the time of his departure. His body was cremated on Ash Wednesday.

W. W. H.

BRIGADE-SURGEON ALEXANDER JOHNSTON, retired pay, late Army Medical Department, died at Ryde, I.W., on January 18th. He was appointed Assistant Surgeon, April 24th, 1865; Surgeon, March 1st, 1873; Surgeon-Major, November 23rd, 1874; and Honorary Brigade-Surgeon on retirement from the service, August 8th, 1883. He has no war record in the Army Lists.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF OXFORD.

Examinations for the Degree of Bachelor of Medicine.

ATTENTION is called by the Secretary of the Board of Faculty to the fact that the new regulations as to the production of certificates of instruction on entering names for these examinations will take effect at the next examination—namely, in Trinity Term, 1905, commencing on June 22nd. The necessary forms are supplied by the Secretary to the Boards of Faculties, Old Clarendon Building, Broad Street.

Degree Days.

The following are the degree days appointed for next term: Thursdays, May 4th, May 25th, June 22nd, June 29th, and Saturday, July 8th.

UNIVERSITY OF LONDON.

MEETING OF THE SENATE.

A MEETING of the Senate was held on February 22nd.

The London School of Tropical Medicine.

The London School of Tropical Medicine was admitted as a school of the University in the Faculty of Medicine in tropical medicine only.

Report of the Physiological Laboratory Committee for 1904.

The report stated that in addition to eleven courses delivered in 1902-3 six courses of eight lectures and one of five lectures had subsequently been given. Professor Halliburton's lectures delivered in the first quarter of 1903 at the Physiological Laboratory of the University, and at the Columbia University, New York, during January, 1904, had been published by Mr. John Murray by authorization of the Senate. Nine papers—seven by Dr. A. Waller, one of them in conjunction with Mr. Collingwood, and two by Mr. W. L. Symes, the outcome of work conducted in the laboratory—had been published.

Changes in the Regulations for Internal and External Students in the Faculty of Medicine.

The registrars reported that the deletion from the regulations in medicine for internal and external students of the section on the special

examination in organic chemistry of January, 1905 (Calendar II 404-5 and III 21-22 of the medicine section), had involved certain consequential changes in the regulations relating to exemptions (Calendar II 388-91 and III 6-8 of the medicine section).

Appointments.

The name of Dr. C. S. Myers, M.A., was approved for inclusion in the panel of examiners in psychology and physiology.

UNIVERSITY OF LEEDS.

UNIVERSITY COURT.

A MEETING of the Court was held on March 8th, when certain ordinances were approved.

Degrees in Medicine and Surgery.

As regards medicine and surgery, it was decided that the degrees shall be Bachelor of Medicine and Bachelor of Surgery (M.B. and Ch.B.), Doctor of Medicine (M.D.), and Master of Surgery (Ch.M.). Provision was made for the exemption from examinations and courses of study of students of the Yorkshire College or the Victoria University of Manchester, in order that students may be at no disadvantage in consequence of the changes which have recently taken place.

Ad Eundem Degrees.

The following recommendations of the Senate as to *ad eundem* degrees were adopted:

1. As to conferment of *ad eundem* degrees on students who have attended full courses of study at the Yorkshire College, and have graduated at various universities, but who have not been admitted to the College Associateship.

- That graduates of the Victoria University be offered the same degrees in the University of Leeds as those which they have received from the Victoria University.
- That graduates in medicine of other universities be admissible on application to the M.B. degree of the University of Leeds.
- That applications from other university graduates who have been students of the Yorkshire College be considered on their merits.

II. As to Associates of the Yorkshire College.

- That graduates of the Victoria University be offered the same degrees in the University of Leeds as those which they have received from the Victoria University.
- That graduates of other universities be offered the degree of Bachelor in the University in the Faculties in which they graduated elsewhere.
- That the question of the admission to degrees of Associates *honoris causa* be deferred.

It was also decided that all persons admitted to degrees of the University of Leeds under the foregoing conditions be admissible as life members of Convocation; and also that no graduate so admitted to a degree be precluded from proceeding in the University of Leeds to a higher degree in his particular Faculty.

Honorary Degrees.

It was also decided to confer the honorary degree of M.Sc. upon members of the staff of the Leeds Infirmary who are also members of the Faculty of Medicine in the University.

The Council was authorized to grant to any professor of the University, or to any lecturer who is the head of any department in the University, a degree not higher than that of Master of the Faculty in which he has graduated, or, in the case of a professor or lecturer holding no degree, such degree, not higher than that of Master, as the Council may determine. The Council was also authorized, if it thought fit, to grant to any other officer of the University such degree, not higher than that of Master, as it might determine, but no such degree shall be conferred until a report thereon has been received from the Senate.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

An ordinary Council was held on March 9th, Mr. John Tweedy, President, in the Chair.

Board of Examiners.

Mr. W. H. A. Jacobson and Mr. Bilton Pollard were admitted to the Court of Examiners.

Dental Surgery.

A report was adopted recommending that synopses be furnished indicating the range of examination in anatomy, physiology, and surgical pathology for candidates for the licence in Dental Surgery.

Bradshaw Lecturer.

Mr. H. T. Butlin was elected Bradshaw Lecturer for the ensuing collegiate year.

Presentation of Books.

The best thanks of the Council was given to the President for his presentation to the College Library of eight volumes of fifteenth-century books.

St. Gilbert Blane's Medals.

These were awarded to Surgeon Sidney Thomas Reid, H.M.S. *Vesta*, 1901-2, and Surgeon Robert William Glennan Stewart, M.B., H.M. Ships *Latona* and *Thames*, 1903.

Central Midwives Board.

The best thanks of the Council were given to Mr. Ward Cousins for his services as the College Representative on the above. The following extracts from the report made by him will indicate its scope:—The arrangements for the future training of pupil-midwives have received the careful attention of the Board. The following table indicates the number of the training schools recognized, and the number of teachers appointed by the Board up to the present time:

	Training Schools.	Teachers.
England	28	54
Wales	3	4
Scotland	4	1
Ireland	6	4
India	1	0
	39	65

The scheme of examinations prepared by the Board has recently received the approval of the Privy Council.

The examinations will be partly oral and partly written. The written examination will consist of six questions, and the time allowed for

answering them will be three hours. Fifteen minutes will be the average period for the oral examination of each candidate.

The examination will embrace the following subjects:

The elementary anatomy of the female pelvis and generative organs.
Pregnancy and its complications.
The symptoms, course, and management of natural labour.
The signs of abnormal labour.
Haemorrhage: Its varieties and the treatment.
Antiseptic midwifery.
Management of the puerperal patient.
Management of infants, and the signs of important diseases which may develop soon after birth.
Duties of the midwife.
Obstetric emergencies and how the midwife should deal with them before the arrival of the doctor.
Disinfection of person, clothing and appliances; house sanitation.
Puerperal fever: Its nature, causes, and symptoms.
Any candidate, who during the examination shows a want of acquaintance with the ordinary subjects of elementary education, may be rejected on this ground alone.

The examiners appointed by the Central Midwives Board will be men or women who are duly qualified practitioners. The examiners may, however, when they see fit, with the consent of the Board, employ for certain parts of the examination properly qualified women who are not medical practitioners.

The examinations will take place both in London and the Provinces three times a year, or oftener if necessary. They will be held simultaneously and on the same papers.

The first examination is fixed for June, 1905, and the first provincial centres will be Bristol, Manchester, and Newcastle-on-Tyne.

On the first day of April of the present year the provisions for existing midwives under the second section of the Midwives Act will expire; and, after that date, no woman will be entitled to use the name or description of midwife, implying that she is a person specially qualified to practise midwifery, unless she has obtained the certificate of the Central Midwives Board. Fifteen thousand four hundred and ninety women have already been entered on the First Midwives Roll; of this number seven thousand and forty-two have been admitted on certificates of training approved by the Board, and the remaining eight thousand four hundred and forty-eight have produced satisfactory evidence that before the passing of the Act they had been for at least one year in bona-fide practice as midwives. The majority of these women, it is no exaggeration to state, are both ignorant and incompetent, and, unfortunately, for some years at least they will continue to follow their calling among the poor classes of the population throughout the country.

The county councils and county borough councils throughout England and Wales are now actively engaged in carrying out the administration of the Act. They have appointed 127 local supervising authorities, and each authority is called upon to exercise general control and supervision over all the midwives practising within its area, and also to investigate charges of malpractice, negligence, and misconduct, and whenever a prima-facie case is established to report the same to the Central Midwives Board.

In conclusion, the opinion is steadily gaining ground that the introduction of educated midwives, controlled in their practice by well-defined duties and restrictions, will in a few years prove of inestimable benefit to the poor people of the land. Still it is already evident that the Midwives Act of 1902 is by no means a perfect piece of remedial legislation, and that experience may show the necessity of many modifications. In its present form there are difficulties which are scarcely fair to the medical profession, and the Central Midwives Board has recently drawn the attention of the Privy Council to the omission from the Act of any provision for the payment of medical fees.

Now it is the universal spirit of the profession to be ever ready to render immediate help in the hour of danger, and it is true that every medical man acknowledges a moral obligation to assist in every form of emergency. Still, as the law now stands, medical men will be summoned in every part of the country, and many practitioners will have to travel miles to aid midwives in cases of difficulty and danger. The fact is medical men everywhere will be practically responsible for the safety of the poor parturient women during the attendance of midwives practising under legal supervision, and therefore for the successful operation of the Act some amendment is necessary in order to provide a fair scale of remuneration for professional services.

Fellows' Subscription Dinner.

It was determined to have a Fellows' dinner at the College on the day of the Council election in July next.

TRINITY COLLEGE, DUBLIN.

HILARY TERM, 1905.

THE following candidates were approved at the Hilary Term final examination in Medicine: Eva J. Jellett, W. J. Powell, C. R. M. Morris, R. Magill, W. Hassard, W. R. Galwey, W. F. Samuels, J. Murdoch, H. E. M'Cready, C. Scaife.

The following degrees and licences were conferred at the Spring Commencements:

M.D.—C. H. W. M'Cullagh, H. Stokes, G. S. Ross (*in absentia*).
M.B., B.Ch., B.A.O.—G. Hassard, R. Kelly, H. E. M'Cready, R. Magill.
L.M., L.Ch., L.A.O.—M. J. M'Auliffe, E. G. Scroope.

PUBLIC HEALTH

AND

POOR-LAW MEDICAL SERVICES.

CARE AND CONTROL OF IDIOTS AND EPILEPTICS.

THE Royal Commission on the Care and Control of the Feeble-minded met again on March 13th, when evidence was given by the senior medical inspector for Poor-law purposes to the Local Government Board, Dr. A. H. Downes. He said that part of his work had been the formation of the Metropolitan Asylums District, and that he still paid special attention to it. Its Asylums Board was empowered to deal with imbeciles; it had taken into its care imbeciles and lunatics of the harmless class formerly treated in workhouses, and attempts had been made

to provide completely separate accommodation for imbecile children and schools suitable for their education. More recently the Board had endeavoured to meet the needs of children who, though not of the certified class, were yet, by reason of defective intellect or physical infirmity, unfit to be trained in association with ordinary children; he did not think that any special arrangements had been made by it for epileptics or for those with physical defects. He considered that provision for the care of sane epileptics was greatly required, and that two authorities to deal with the same class of infirmity should certainly not be established. All classes should be admitted into one colony, guardians paying for the poor, and the rest for themselves.

Miss M. H. Mason, senior inspector of boarding-out to the Local Government Board, also gave evidence. Her experience was unfavourable to the boarding-out of children with mental or physical defects. Feeble-minded children attending special schools should live in homes under a qualified matron. There was a class of persons who were neither of normal intellect nor yet actually imbecile; when properly trained and supervised they were capable of keeping themselves, but they required constant protection throughout their lives. Individual unions should not attempt to set up homes and colonies; they should combine or the work be done by the County Council through a special Committee. On to the latter outside members should be co-opted and the membership of a certain number of women should be compulsory.

NEW YORK BUREAU OF HEALTH.

DURING December, 1904, the Division of Medical Inspection of the New York Department of Public Health and Charities made 8,353 inspections of houses and business places and ordered 889 fumigations. Sixty-two cases were referred for special diagnosis. There were 5,030 visits to schools and 1,253 children were excluded from school. Two hundred and eighty-five cultures were taken; 86 injections of antitoxin given; and 2,370 vaccinations performed. In the Division of Milk Inspection 163,977 quarts of milk were inspected; 1,891 quarts were condemned; 127 specimens were examined chemically, and 950 microscopically. In the Bacteriological Laboratory 1,340 examinations were made for diphtheria; 299. Widal examinations; 819 milk examinations; 102 examinations of sputum; and 1,990 bottles of antitoxin were supplied. In the chemical laboratory 210 analyses were made.

AERIAL TRANSMISSION OF SMALL-POX.

At a sessional meeting of the Royal Sanitary Institute, held at Newcastle-on-Tyne on March 4th, a paper was read by Dr. H. E. Armstrong on the question of the aerial dissemination of infection round small-pox hospitals. Dr. Louis Parkes presided. Dr. Armstrong's paper dealt in part with Dr. G. S. Buchanan's recent report to the Local Government Board on small-pox in Gateshead and Felling in relation to the Sheriff Hill Small-pox Hospital. It will be remembered that that report concluded that the use of this hospital had been responsible, directly or indirectly, for a material part of the epidemic, and should no longer be used for the isolation of cases of small-pox. Dr. Armstrong discussed in particular the apparent absence of aerial transmission of small-pox in Newcastle in the epidemic of 1870-72, although the site and circumstances of the old Small-pox Hospital in Bath Lane—only 50 ft. distant from the densely-populated dwellings of Stowell Street—seemed to favour such dissemination, if such was, in point of fact, a channel of small-pox infection. In 1904 a group of cases at the east end of Newcastle notified between June 27th and July 16th did, on the contrary, seemed to indicate some such method of dissemination, and could be accounted for by the direction of the prevailing wind. Dr. Armstrong went on to discuss the possibility of flyborne infection being an explanation of infection often attributed to air. If it be established that small-pox is airborne, the question naturally arose at what distance from dwelling houses could a hospital safely be placed, and can airborne infection be destroyed by passing the outgoing air from wards through fire? A discussion followed, which appears to have been largely devoted to arguments for and against Dr. Buchanan's report on airborne dissemination.

PAYMENT OF MEDICAL MEN CALLED IN TO ASSIST MIDWIVES.

We are informed that at a meeting of nursing associations of the counties of Oxford, Gloucester, Worcester, and Warwick held on March 9th, the following memorial to the Local Government Board was adopted:

Your memorialists venture to ask your honourable Board that directions should be given whereby the district medical officers of the several unions shall be required to attend in cases of urgency on the requisition of a midwife whose name is on the Roll, and who, for the purpose of such requisition shall have the same power as an overseer, the medical officer being paid for his services by the guardians according to the scale provided (by the General Order (Consolidated) July 24th, 1847) in the case of orders given by a relieving officer; and that the case shall be forthwith reported by him to the relieving officer, who shall bring the matter before the Board of Guardians to determine whether or not it is a case in which the services of the medical officer should be treated as medical relief or (in the alternative) as a loan; the whole or some part of it in the latter case to be repaid, in such manner as the guardians shall see fit, by the husband whose wife has been attended.

READJUSTMENT OF POOR-LAW DISTRICTS.

W. W.—The change our correspondent proposes could not be made by the guardians without the consent of the Local Government Board. We do not think our correspondent would be well advised to make any attempt to procure an alteration of the boundaries of the medical districts of his union.

HOSPITAL AND DISPENSARY MANAGEMENT.

ROYAL DENTAL HOSPITAL OF LONDON.

Mr. J. TWEEDY, President of the Royal College of Surgeons, presided on March 14th at the annual general meeting of Governors of the Royal Dental Hospital of London, held at the hospital, Leicester Square.

Mr. J. H. HALF, in moving the adoption of the annual report, pointed out that it required an increase in the number of cases treated, the total being 99,451, exceeding the number treated during 1903 by 1,628. Of these the anæsthetic cases alone numbered 41,928, being an increase of 6,309 over those of 1903.