

THE ACTION OF "BAYER 205" ON TRYPANOSOMA EQUIPERDUM IN EXPERIMENTALLY INFECTED MICE.

BY

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THOUGH many drugs have been tried in the treatment of trypanosomiasis in man and animals, it is generally admitted that none of them is entirely satisfactory, although cases of the human disease have undoubtedly recovered after their prolonged use. In experimentally inoculated small animals, such as mice, it is usually possible, by means of a single dose of a drug, to bring about the disappearance of the trypanosomes from the peripheral blood, but almost invariably relapses occur in a comparatively short time and the animals die of the infection.

Haendel and Joetten¹ (1920) and Mayer and Zeiss² (1920) published accounts of the trypanosomicidal action of a drug which they referred to as "Bayer 205." They reached the conclusion that the preparation possessed trypanosomicidal powers on various pathogenic trypanosomes in small laboratory animals.

In small doses it cured mice, rats, guinea-pigs and rabbits infected with *T. brucei*, *T. equiperdum*, *T. equinum*, *T. gambiense* and *T. rhodesiense*. The animals which had been cured were for a considerable time immune to further inoculations. A dose of 0.0006 gram (about 0.0024 gram per kilo) would cure mice of their infections, and the animals were not reinoculable for a period of three months. Administered prophylactically before inoculation the drug prevented infection. The drug was then tried by Pfeiler³ (1920) in natural dourine in horses. The results in 200 horses thus treated were highly successful, and it is concluded that "Bayer 205" is efficient in the treatment and prophylaxis of dourine, and that it will be found to be equally successful in the treatment of sleeping-sickness and other trypanosome diseases. Miessner and Berge⁴ (1920) and Ellinger⁵ (1920) confirmed Pfeiler's results. In small animals the German workers employed the subcutaneous or intraperitoneal methods of injection.

Dr. C. R. Hennings gave a sample of the drug to Sir David Bruce, who handed it to me for trial. It was tested on a very virulent strain of *T. equiperdum* in mice.

The animals were inoculated intraperitoneally from another heavily infected animal. In forty-eight hours the blood showed very heavy infections, and if left untreated the animals died on this or the following day. In all cases the drug was given forty-eight hours after inoculation by the intravenous route when trypanosomes were swarming in the blood.

It was found that a dose of 0.0025 gram per kilogram of body weight would cause the trypanosomes to disappear, but that relapse occurred in about one week, the animals then dying of very heavy infections two or three days later. A dose of 0.005 gram per kilogram of body weight, however, has not been followed by any relapse during ten weeks' observation. The mice are quite healthy, and from what I know of the action of other trypanosomicidal drugs if relapse is to occur, as is practically always the case, it does so in mice within ten days. It may fairly safely be assumed that the minimal dose required to produce this apparent *sterilisans magna* in mice lies between 0.0025 and 0.005 gram per kilogram of body weight if the drug is administered intravenously.

These doses do not indicate the limit to which one can go. It is possible to give a mouse with a heavy infection as much as 0.5 gram per kilo of body weight. With this high dose there is, however, a definite and immediate reaction, and some of the animals succumb to its toxic effects within twenty-four hours. With half this dose (0.25 gram) the reaction is slight. The German workers pointed out that the ratio of the minimal therapeutic dose required to bring about a permanent cure to the maximal tolerated dose was 1 to 60, and the experiments just detailed bear this out. Employing the subcutaneous method, their maximal tolerated dose was higher than that obtained here by the intravenous method. The action of the drug is not immediate. The trypanosomes disappear gradually from the blood during the forty-eight hours following the injection. In the case of tartar emetic all trypanosomes may have disappeared in half an hour.

"Bayer 205" thus has a remarkable action on the trypanosomes, in that in every instance (over 50 mice) a single injection of a suitable dose has apparently brought about a *sterilisans magna*, and this in a dose which is considerably lower than that which can be given without killing the animals. There seems every reason to suppose that this drug, whatever may be its constitution—and this has not yet been made public—will be found to be a more efficient remedy than those hitherto used in cases of human and animal trypanosomiasis, if not in other diseases, such as kala-azar. I have tried

in animals most of the remedies which have previously been employed for the treatment of trypanosome diseases, and in no case has a permanent cure been obtained with single doses. The animals have invariably relapsed and have died of their infections. Thus, in the case of sodium antimony tartrate it is necessary to give mice intravenously a dose of 0.015 gram per kilo to cause the trypanosomes to disappear in twenty-four hours, while a dose of 0.05 will kill the animal in less than two days. The toxic dose is thus barely four times as great as the therapeutic dose. If a man of 70 kilograms is to receive the same proportionate dose he should be given $0.015 \times 70 = 1.05$ grams. In practice man is rarely given as much as 0.2 gram as a single dose, and this is often followed by marked reaction. The usual dose for a man is 0.1 gram (10 c.cm. of 1 per cent. solution), which, as will be seen, is about one-tenth of that required by the calculation based on mouse dosage. In the case of neo-salvarsan and its allies 0.02 gram per kilo of body weight may be taken as the minimal therapeutic dose for mice, while a dose of 0.3 gram per kilo of body weight may be tolerated. A man of 70 kilograms should then have a dose of $0.02 \times 70 = 1.4$, but in practice he is only given about half this amount, as larger doses produce severe reactions. In the case of these drugs, however, the therapeutic dose in mice does not effect a cure, but only brings about a temporary disappearance of trypanosomes. If the minimal therapeutic dose of "Bayer 205" is 0.005 gram per kilo of body-weight for mice the corresponding dose for man would be $0.005 \times 70 = 0.35$ gram. If the doses of sodium antimony tartrate and neo-salvarsan which can be tolerated by mice and man bear any relation to the doses of "Bayer 205" which can be given to mice and man, then there is every prospect that human beings will be able to tolerate a dose of 0.35 gram or even more, which is well up to the therapeutic dose required to bring about a permanent cure in animals. The dosage of "Bayer 205" for man, however, has to be determined by direct trial, as calculations based on animal dosage are full of fallacies. It is understood that this is now being done. It is also possible that different samples of the same drug may vary in their action, and the statements made here refer, of course, only to that particular one used by me.

The claims made for this drug by the German investigators, and which have been confirmed by the results detailed above, demonstrate that in experimental animals it has a remarkable trypanosomicidal action. There can be no doubt that the drug should be given a trial in naturally occurring cases of human and animal trypanosomiasis with a view to discovering if it will have in these as definite an action as it apparently has in that produced experimentally in small animals.

REFERENCES.

- ¹ Haendel and Joetten (1920): *Berliner klin. Wochenschrift*, No. 35 p. 821. ² Mayer and Zeiss (1920): *Archiv f. Schiff- und Tropenhygiene* vol. xxiv, No. 9. ³ Pfeiler (1920): *Veröffentlichungen der Tierseuchen stelle*, Jena, Nos. 5-6. ⁴ Miessner and Berge (1920): *Deutsche Tierärztliche Wochenschrift*, No. 11, p. 133. ⁵ Ellinger (1920): *Berliner Tierärztliche Wochenschrift*, p. 492.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

GLYCOSURIA OF MALARIAL ORIGIN.

It may be of interest to record the fact, of which I became aware at the cost of a mistaken diagnosis, that transient glycosuria may occur during a malarial paroxysm.

The patient was a man of 30, suffering from bilateral apical subacute pulmonary tuberculosis, and confined to bed with mild intermittent pyrexia, the evening temperature being from 99° to 100° F. Tubercle bacilli were present in the sputum, and the urine was free from albumin or sugar. He had been under treatment in hospital for three weeks with this condition when, at 10 o'clock one morning, I found him confused, complaining of severe headache, and with a temperature of 104.2° F. There was no history of rigor. Having in mind the possibility of meningitis I sought for further physical signs, but, apart from the above condition, the only sign suggesting meningitis was the presence of sugar in the urine. According to Frew and Garrod,¹ glycosuria occurs

¹ *Lancet*, 1913, vol. i, p. 15.

in more than a third of all cases of tuberculous meningitis, although usually during the last two days of life.

During the course of the day the temperature fell. On the second day it remained under 100° F., and there was no sugar in the urine. On the morning of the third day the temperature was 104° F. and malarial parasites were found in the blood. Sugar was no longer present. The patient was put on quinine, and although the urine was examined at intervals for some weeks afterwards, sugar never reappeared. On the only occasion when sugar was present the result of the Fehling test was confirmed by the fermentation test. It occurs to me either that this occurrence is very rare, or, as is more probable, that the urine is rarely examined for sugar during malarial paroxysms. At any rate, the standard textbooks do not refer to this occurrence.

London, W.

HALLIDAY SUTHERLAND.

ADVANTAGE OF IMMEDIATE OPERATION IN PENETRATING WOUNDS OF THE ABDOMEN.

ABOUT 4.10 p.m., on October 17th, 1921, G. E. K., aged 18½, an inmate of this institution, sustained a stab wound of the abdomen by accidentally colliding with another inmate who was holding a long sharp bread-knife. When I saw him, some twelve minutes after the accident, although he was pale and in great pain his pulse was good. The wound, which was about two inches long, was situated in the left inguinal region, and through it protruded some coils of small intestine. There was a cut about three-quarters of an inch long in the transverse axis of the small intestine opening the lumen of the gut.

Dr. Newton of Feltham was immediately called to give an anaesthetic, and by 4.35 p.m.—that is to say, within half an hour of the accident—the patient was under chloroform. I sutured the intestinal wound, and on returning the bowel into the peritoneal cavity I found the deep epigastric artery bleeding freely. This was ligatured, and after sponging dry the peritoneum the abdomen was closed in the usual manner. The patient made an uneventful recovery.

It must be very rare for an injury of this nature to have received such prompt attention. I attribute the happy result to the absence of delay and to the fact that the operation was performed in a room practically adjoining that in which the accident occurred, as I cannot claim any practical experience in abdominal surgery.

ALLAN C. PEARSON, M.B., B.Ch.,
M.O., H.M. Borstal Institution, Feltham, Middlesex.

POLYTHELIA WITH FUNCTIONING ACCESSORY NIPPLE.

THE condition of polymastia is not uncommon, and is usually regarded as an atavistic reversion. It has been said that in numerous cases an apparent hereditary influence can be traced. Williams (Baltimore), in writing of the condition, says: "One in every few hundred women has one or more accessory breasts," and Goldberger makes mention of 262 such cases. Polythelia is the rarer condition, and when it occurs the accessory nipple is usually functionless. The following case of a functioning accessory nipple seems sufficiently rare as to be worthy of record:

Mrs. D., aged 23, a primipara, first remembered noticing the accessory nipple on her breast in early childhood, and regarded it as a fleshy mole.

The accessory nipple, which is about the size of a shilling, is situated close to the left mamillary line in the inferior half of and towards the periphery of the left breast, and resembles the normal nipple in everything but size; even Montgomery's secondary areola is faithfully reproduced. There is no macroscopical evidence of a supernumerary breast. The right and left breasts are symmetrical except for the small accessory nipple, and no demarcation of the gland tissue could be distinguished by inspection or by palpation. She stated that she was confined two years ago, and that after the milk flow had become established she experienced considerable discomfort from the free secretion of milk from the accessory nipple, the doctor then attending her having dissuaded her from nursing the child.

There is no evidence of any hereditary influence. The woman is one of a family of eleven, and is the only one possessing this abnormality. It has caused her no discomfort except on the occasion mentioned.

R. DOUGLAS HOWAT,
Denholm, Hawick. L.R.C.P. and S. Edin., L.R.F.P.S. Glasg.

Reports of Societies.

MEDICAL ASPECTS OF URINARY DISEASE.

At the meeting of the Section of Urology of the Royal Society of Medicine on October 27th Sir THOMAS HORDER delivered his address from the chair on "The medical aspects of some urinary diseases." There was no doubt whatever, he said, that many of the problems met with in urogenital diseases were of joint medical and surgical interest, requiring the combined efforts of surgeons, physicians, and workers in laboratories for their proper elucidation. Here was a field for more than one type of man and more than one kind of training. At first sight it might seem that the diagnosis and treatment of simple prostatic enlargement with its mechanical disabilities, to which their first president (the late Sir Peter Freyer) had made so valuable a contribution, was a purely surgical affair if ever there was one. No doubt in a large number of cases the medical interest was reduced to a minimum. Yet the mortality in prostatectomy even to-day was by no means negligible. Elderly patients were sometimes subject to latent diseases which were only discovered by a complete overhaul. Recently, during a routine examination of a candidate for prostatectomy, he found the case to be one of chronic lymphatic leukaemia. When sent to him the patient was short of breath, and this symptom was thought to be of cardiac origin. Treatment led to an improvement, and he stood the operation very well. Most careful surgeons liked their prostate patients to be examined methodically before a final decision was given with regard to excision. Mr. John Pardoe spoke to him recently about those cases—very grave but fortunately uncommon—in which late haemorrhage followed prostatectomy, and confessed himself puzzled as to their meaning. An obvious suggestion was that the underlying cause was sepsis, but that appeared by no means certain, and this was another problem in the elucidation of which physicians and surgeons were both concerned.

Speaking of nephrolithiasis, the president said that it was true that their studies in metabolism did not as yet give any very definite lead in the direction of preventing uratic and oxalic deposits in the kidney and renal pelvis, but at least the main principles of prevention were understood. It was fairly certain that a large number of patients were kept in a safe position with regard to the re-formation of calculi when once they had been frightened into obedience by the experience of a nephrotomy or a nephrectomy. One of the most interesting of the conjoint problems was the type of case in which calculi were known to be present, perhaps in both kidneys, but the condition was largely latent as regards pain or haematuria. In such cases it was important to assess, as nearly as possible, the future history of the patient in respect of his trouble. His renal adequacy and the question of the subinfection of the urinary tract were points needing investigation. Perhaps the large and important question of infection provided the chief meeting ground for physicians and surgeons. The fact that so-called primary infections of the urinary tract were still very largely dealt with by surgeons was a survival of the old doctrine which taught that all infections were "ascending" in nature. Practitioners were still to be found who visualized a stone in the bladder or some other gross lesion as soon as a case of acute pyelitis presented itself. It was only fair to suggest that another reason why surgeons still held a lien over many of these cases was that they had been more in the van of progress than had physicians in the matter of working out problems connected with the subject. All the same, it was in the interest of patients generally that the chief centre of interest should shift to the medical side. With regard to lavage of the pelvis of the kidney, he himself had an open mind. He did not think he had ever met with a case in which really careful and detailed management failed to cure and in which the pelvic lavage did cure.

In the brief discussion following the address Mr. THOMSON WALKER said that physician had not always been as interested in urogenital problems as they were to-day, but he agreed that the combination of physician and surgeon was very important. Mr. FRANK KIDD said

affected him severely, and latterly his health had been failing. Dr. Daly is survived by his widow, who is a daughter of the late Vice-Admiral von Donop, and by two sons, both of whom have made the army their profession.

J. WICKHAM LEGG, M.D., F.R.C.P., HON. D.LITT. OXON.,
Formerly Assistant Physician, St. Bartholomew's Hospital.

MANY old students of St. Bartholomew's Hospital will have heard with regret of the death of Dr. Wickham Legg, formerly assistant physician to that hospital, whose interest in life is, however, best expressed by the fact, which he placed first in the notice published in *Who's Who*, that he was for ten years chairman of the council of the Henry Bradshaw Society for editing rare liturgical texts. He was born in 1843, retired from the staff of St. Bartholomew's Hospital in 1887, and had resided in Oxford since the death of his wife in 1908. He graduated M.D. Lond. in 1868, and had previously, for a couple of years, been tutor to the late Duke of Albany. He was appointed demonstrator of morbid anatomy at St. Bartholomew's Hospital in 1874, and became lecturer on pathological anatomy and assistant physician to the hospital in 1878. For some years he took an active share in the medical life of London, and in 1883 he delivered the Bradshaw Lecture on cardiac aneurysms before the Royal College of Physicians of London, of which he had become a Fellow in 1876. He published a treatise on haemophilia, and another on bile, jaundice, and bilious disorders. Suddenly, and to those who were not in his confidence rather unexpectedly, he retired from St. Bartholomew's Hospital in 1887, the motive partly being a breakdown in health following a severe attack of rheumatic fever; but a strong reason was no doubt his great interest in the study of liturgical subjects. He was one of the founders of the Henry Bradshaw Society, and edited for it in 1888 the Quignon Missal, and in 1916 the Sarum Missal; in 1914 he published a book on *English Church Life from 1660 to 1833*, and in 1917 an essay on *Church Ornaments and their Civil Antecedents*, as well as a volume of collected essays on liturgical and historical subjects. He leaves one son, who is a Fellow and modern history tutor of New College, Oxford.

THE LATE LIEUT. COLONEL E. M. WILSON, C.B., C.M.G., D.S.O.—Colonel P. Broome Giles, C.B., writes: In your obituary notice of the late Colonel E. M. Wilson, C.B., C.M.G., etc., there is no mention of the great work he did in connexion with the Volunteer and Territorial Medical Services. Colonel Wilson and his chief, the D.G.A.M.S., were not only sympathetic with, but thoroughly understood, the enthusiasm and difficulties of the Volunteer medical officer. At that time, with the exception of a few R.A.M.C.V. units and certain bearer companies, the system was entirely regimental and opposed to a service. In 1899, when D.D.G., Colonel Wilson speedily realized that the attenuated R.A.M.C. personnel was quite inadequate to cope with the demand created by the Boer war. The Militia R.A.M.C. was practically non-existent, so his only hope of immediate assistance was what could be supplied by the Volunteers. He had frequently visited our Volunteer Ambulance School of Instruction, and so appealed to us and to other sources; we never missed any month to send him a quota of trained men for home or foreign service. Again in 1904, as the technical adviser to Lord Raglan at a deputation of senior medical officers, his intimate knowledge of the value of Volunteers enabled him to present our claim to the D.G.A.M.S., and we had nearly all we asked granted. Lastly, in 1907, as chairman of a committee of Volunteer medical officers nominated by the British Medical Association, his tact, knowledge, and good temper formulated the report which was the basis of Sir Alfred Keogh's Territorial medical scheme. Colonel Wilson did good service in co-ordinating the R.A.M.C. and the R.A.M.C.T. The excellent result the late war proved.

DR. PIERRE HENRI SOULLIER, honorary professor of the Lyons Medical Faculty and corresponding member of the Académie de Médecine, has recently died at the age of 88.

DR. ERNEST DUPRÉ, professor of clinical mental diseases in the Faculty of Medicine of the University of Paris, died recently at Deauville, at the age of 59.

Universities and Colleges.

UNIVERSITY OF CAMBRIDGE.

THE first and second examinations for medical and surgical degrees will begin on Monday, December 12th. Part I of the third examination (surgery and midwifery) will begin on December 13th; Part II (principles and practice of physic, pathology and pharmacology) on December 14th. The M.Ch. examination will be held on December 13th, 16th, and 17th. The certificates of candidates, with their postal addresses, must be sent to the Registry for Parts I and II of the third M.B., and for the M.Ch. examination by November 12th; certificates for the first and second M.B. by December 2nd.

At a Congregation held on October 28th the following medical degrees were conferred:

M.B., B.Ch.—L. W. Jones.

M.B.—L. P. Garrod, H. H. Brown.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

AN ordinary Comitia of the Royal College of Physicians of London was held on Thursday, October 27th, at 5 p.m., with the President, Sir Norman Moore, Bt., in the chair.

The President announced that Mr. Ronald Henry Knight had been elected the twenty-ninth Jenks Scholar.

Dr. A. J. Cleveland and Dr. F. H. Jacob, elected to the Fellowship at a previous comitia, were admitted as Fellows.

The following gentlemen were admitted as Members:

Janet Ridell Bell, M.D. Melb., William Harris Best, L.R.C.P., Robert Edward Collins, M.B. Edin., L.R.C.P., Geoffrey Challin Linder, M.D. Lond., L.R.C.P., Arthur Griffith Maitland-Jones, M.B. Lond., L.R.C.P., Wathen Ernest Waller, M.B. Oxfr., Philip Hewer Wells, L.R.C.P.

Licences were granted to the following seventy-seven candidates who had passed the required examinations:

M. T. Ahmed, S. Annecke, Helen R. Ashton, T. J. D. Atteridge, Mary J. Ayrtton, A. H. Bean, J. H. Blair, J. G. B. Brass, H. P. Brice-Smith, E. E. L. Burnier, Linda Catmur, W. E. R. Coad, W. E. Cody, Nancy M. Coutts, P. G. Cumming, E. C. Curwen, P. T. Davidson, Edith M. P. Davies, Muriel A. M. Davies, A. H. Douthwaite, H. S. Drabble, C. T. J. N. Drobog, H. O. Eksteen, A. H. El-Ramli, E. W. Evans, V. Feldman, L. R. Fifield, E. C. H. Foreman, E. Gallop, J. E. Gardner, C. M. Gwillim, C. B. Hawthorne, Margaret Haywood, Marjorie B. Hubert, J. W. Hunt, E. R. Jagger, A. V. Johnson, Eva M. Johnson, D. J. Jones, D. M. Jones, Gladys H. E. H. J. Jones, R. O. Jones, E. J. L. Jones Evans, G. Kinnair, F. C. Lewis, W. E. Lloyd, I. B. McCann, Elisabeth E. McCulloch, A. Maud, E. O. Morrison, J. B. G. Muir, H. W. L. Nichols, F. A. Pickworth, Enid M. Powell, F. W. M. Pratt, J. A. Prichard, Philippa P. Pugh, W. G. Roberts, A. T. Rogers, I. Rosenberg, J. J. Rowlands, A. R. Rutnam, Elaine M. K. Salmond, L. Segal, A. I. Solberg, A. E. Strawbaun, B. O. Swaine, D. B. Thompson, Helen C. Tompson, Nellie Vaus, C. E. Whitting, A. B. Whytock, B. W. Williams, W. H. Williams, Beryl Wiseman, J. R. Wright, Greta I. Yeoman.

* Under the Medical Act, 1876.

The President nominated Dr. Sidney P. Phillips and Dr. G. F. Still to serve on a committee being constituted by the College of Preceptors in regard to the physical education of girls.

Dr. M. R. Robertson was granted permission to resign his Membership of the College. A letter from Dr. J. J. MacWhirter (Dunbar) asking that the Membership which he resigned in 1881 may now be restored to him was read for a second time.

Professor C. S. Gibson was appointed an Examiner in Chemistry, vice Dr. Le Sueur, deceased.

The President announced the names of the Fellows he had appointed to serve on the Committee appointed to consider changes in the Curriculum and Examination for the Conjoint Diplomas—namely: The President and Registrar (*ex officio*), Sir W. Hale-White, Sir H. D. Rolleston, Sir James Galloway, Dr. H. M. Fletcher, Dr. G. F. Blacker, and Sir John Broadbent.

Sir William Hale-White was re-elected a member of the Committee of Management.

After some formal College business the President dissolved the Comitia.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

At the annual general meeting of Fellows and Members of the Royal College of Surgeons of England, to be held on Thursday, November 17th, at 3 p.m., the following resolutions will be moved on behalf of the Society of Members of the Royal College of Surgeons of England:

1. That this thirty-fourth annual meeting of Fellows and Members again affirms the desirability of admitting Members to direct representation on the Council of the College, which (as now constituted) only represents those Members who also hold the Fellowship; and that it does so in order that the constitution of the Council of the Royal College of Surgeons of England shall be in keeping with modern ideas of true representation.
2. That as the Royal College of Surgeons is composed of about 18,000 persons, of whom over 16,000 are engaged in general practice, this annual meeting requests the President and Council to nominate at least two Members in general practice to represent the interests of general practitioners in the management of College affairs.
3. That this meeting of Fellows and Members earnestly requests the President of the College to make a detailed statement *here and now* as to all the reasons, legal and otherwise, for the Council persisting with a refusal to allow representation on the Council of the Members in general practice; and to state definitely whether legal advice has been taken as to any possible means of overcoming any difficulties in the way of carrying out our wishes: and, if so, to declare what that advice was.

Medical News.

A ROYAL proclamation, dated September 27th, 1921, has formally ordered the disembodiment of the Territorial Force, in pursuance of the Territorial and Reserve Forces Act, 1907.

THE centenary of the birth of Virchow, referred to in an article in our issue of October 8th, was celebrated on October 13th by a congress of medical societies at Berlin.

THE eighteenth congress of the Italian society of otolaryngology was held at Ravenna, under the presidency of Professor Biaggi, on October 13th to 15th, when the physiopathology of the nasal cavities was discussed.

THE opening lecture for this winter of the Old Glasgow Club was given, on October 27th, by Sir George T. Beatson, on "An epoch-making event in the history of the Glasgow Royal Infirmary"—the introduction of antiseptic surgery by Lister.

A MEETING of the Medico-Legal Society will be held at 11, Chandos Street, W.1, on Tuesday, November 15th, at 8.30 p.m., when Dr. Thomas Good, of Littlemore Mental Hospital, Oxford, will read a paper on "Nature *versus* Law," with special reference to the development of psychotherapy and its problematical use in the treatment of feeble-minded persons and criminals. The annual dinner will be held on Wednesday, December 14th, instead of Friday, December 16th, as previously announced.

AT the meeting of the Association of Economic Biologists to be held on Friday, November 18th, at 3 p.m., in the Botanical Lecture Theatre of the Imperial College of Science, South Kensington, S.W.7, Dr. E. J. Butler, Director of the Imperial Bureau of Mycology, will open a discussion on "Meteorological conditions and disease."

THE first National Congress of Italian Medical Women was held at Salsomaggiore from October 14th to 16th.

A MEETING of the Central Midwives Board for England and Wales was held on October 13th, Sir Francis Champneys presiding. In reply to a letter from an inspector of midwives it was pointed out that the question of the ownership of a midwife's register of cases is one to be decided by a court of law and not by the Board. An inquiry by a medical officer of health regarding compensation to a midwife suspended from practice in order to prevent the spread of an infection was answered to the effect that if she were suspended by a local authority the question of compensation was one to be decided by the local authority concerned, but if suspended by the Board the question would be decided by the Board.

DR. T. P. STEWART, of Newport, Fife, who has been absent from his practice for some months owing to ill health, has received a complimentary letter bearing the names of 600 friends and patients and accompanied by a silver salver, and a cheque for £1,400, "in inadequate recognition of a long-continued indebtedness."

THE American Public Health Association announces that on the occasion of its fiftieth annual meeting a Health Fortnight will be held, extending from November 8th to 19th. This celebration will include three main divisions: a health institute, from November 8th to 11th; a health exhibition, the largest of its kind ever held in New York, from November 14th to 19th; and the annual meeting of the association, between the same dates. November 13th will be observed as Health Sunday in many churches, and the week will be observed by numerous business and social organizations.

PROFESSOR W. E. DIXON, F.R.S., will read a paper on the Drug Habit at the first evening meeting of the Pharmaceutical Society, 17, Bloomsbury Square, W.C., on Wednesday, November 9th, at 8 p.m.

ON October 20th, at Ladywell Sanatorium, Salford, there was presented to Dr. John W. Mullen, superintendent of the sanatorium, an illuminated address which, in appreciating his long tenure of service, recorded a resolution passed by the health committee of the borough congratulating Dr. Mullen on the completion of forty years' service to the borough of Salford. Since the commencement of his work in Salford upwards of 50,000 cases of infectious disease had passed through Dr. Mullen's hands, and he has himself suffered from almost every infectious disease, including typhus fever, during the course of his duties.

DR. J. SCHOEMAKER, a well-known surgeon at the Hague, has been made an honorary Fellow of the American College of Surgeons.

THE fifth Congress of the German Urological Society was held at Vienna on September 29th, when over 100 papers were read.

THE annual dinner of past and present students of the Royal Dental Hospital of London will be held at the Hotel Victoria on Saturday, November 26th, when Dr. H. Austen will take the chair at 7 p.m.

THE annual autumnal general meeting of the Irish Medical Schools' and Graduates' Association will be held on Thursday, November 17th, at Pagani's Restaurant, Great Portland Street, the President, Major-General Wallace Kenny, C.B., A.M.S., in the chair. It will be followed by a banquet.

THE Aberdeen University Club, London, will hold its sixty-sixth biennial dinner at Gatti's Restaurant, Strand, on Thursday, November 17th, at 7.30 p.m. Graduates of either sex desirous of attending the dinner, or of becoming members of the club, should write to Dr. Milligan, 11, Upper Brook Street, W.1.

IT is announced this week that the well known London firms of Messrs. John Bell and Croymden, Ltd., dispensing chemists, of Wigmore Street, and Messrs. Arnold and Sons, surgical instrument manufacturers, of Giltspur Street, have been amalgamated. The amalgamated firms will in future be known as "John Bell and Croymden, Ltd., incorporating Arnold and Sons."

THE annual dinner of the Chelsea Clinical Society was held in the Café Royal on October 25th. Sixty-five members and guests were present. In proposing the health of the Chelsea Clinical Society, the President of the Medical Society of London (Mr. James Berry, F.R.C.S.) congratulated the Society on attaining its majority that evening, and on the good work done at its meetings. Dr. D. M. Barcroft (President) replied, and later proposed the health of the guests. Replies were given by the President of the West London Medico-Chirurgical Society (Sir Lenthal Cheate) and the President of the Hunterian Society (Mr. Russell Howard). The President of the Harveian Society (Dr. G. de Bec Turtile) proposed the health of the President of the Chelsea Clinical Society, and Dr. Barcroft responded.

LIEUT.-COLONEL J. H. DUDGEON, V.D., J.P., of Stainburn, near Workington, has been appointed Deputy-Lieutenant for the County of Cumberland.

THE American Ophthalmological Society, the Section of Ophthalmology of the American Medical Association, and the American Academy of Ophthalmology and Otolaryngology have arranged to hold an international congress of ophthalmology at Washington from April 25th to 28th, 1922.

THE fifth National Medical Congress of Cuba, which takes place every five years, will be held from December 11th to 17th, under the presidency of Professor J. A. Presno, founder and director of the *Revista de Medicina y Cirugía*, of Havana.

DR. F. G. CROOKSHANK, F.R.C.P., will deliver the Revilliod-Julliard lecture before the Geneva Medical Society on Thursday, November 10th. His subject is: "The Traditions and Development of British Medicine."

THE annual old students' dinner of St. Thomas's Hospital was held on October 28th, at the Wharnccliffe Rooms, Hotel Great Central, with Dr. Hector Mackenzie, consulting physician to the hospital, in the chair. The company, which numbered 170, included Sir Anthony Bowlby, P.R.C.S., Sir Robert Hill, Medical Director R.N., Sir George Makins, Sir Wilmot Herringham, Sir Seymour Sharkey, Sir Charles Ballance, and Sir William Macpherson. The Chairman, in proposing "Prosperity to St. Thomas's Hospital and Medical School," gave a brief outline of the history of the institution from its remote origin in mediaeval times up to the opening of the new buildings on the present site fifty years ago by Queen Victoria. The Treasurer, Sir Arthur Stanley, who replied on behalf of the hospital, in his reference to financial difficulties, said that payment by patients was still voluntary at St. Thomas's, though all were urged to pay according to their means. The recent coal strike had been a trying time and had induced the governors to replace coal by oil fuel at half the cost. He mentioned also the participation of St. Thomas's in the national provident scheme, "whereby the 98 per cent. of people who are well pay for the 2 per cent. who are ill." Sir Cuthbert Wallace, the Dean of the Medical School and Director of the Surgical Unit, replied on behalf of the School, and gave a sketch of the year's doings. He said that the number of students was now as large as it had ever been. Discussing new ideas and ideals in medical education, Sir Cuthbert Wallace distinguished between the system which aimed at providing teaching and that which aimed at giving the student an opportunity to learn for himself. The health of the Chairman, proposed by Dr. R. Percy Smith, was received with acclamation, and Dr. Mackenzie briefly replied.