

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

THE IMPROVEMENT OF FLY-SPRAYING FLUIDS AND THE CONTROL OF EXPERIMENTAL TRIALS.

In the course of a number of experimental trials of different fly-spraying fluids I found, as is, I believe, the general experience, that when these fluids are used in accordance with the directions they knock down or stupefy but do not kill all the flies; a varying percentage recover after an hour or two. This is especially noticeable when the temperature is at or above 72° F. In some cases, where the spray seemed fairly effective at room temperature (60–65°), it was only necessary to transfer the stupefied flies to a warm room (at 75° F.) when they at once began to recover and speedily regained their full activity. A number of parallel experiments proved that the use of an emulsion of kerosene oil and soft soap, diluted about 1 in 10, killed the flies within a period of twelve to eighteen hours, although it did not stupefy them speedily, as do most of the proprietary sprays. I therefore tried an admixture of the quick action sprays with the oil emulsion fluid, and found that the combination gave excellent results, quickly stupefying the flies on the one hand and preventing their recovery on the other. The oil emulsion used consisted of 3 parts of soft soap, completely melted by heat in 15 parts of water, a proportion up to 100 parts of kerosene or other light burning oil is then added very gradually with thorough agitation by stirring or shaking in a closed vessel between each addition. The resultant emulsion can be kept indefinitely, and may be diluted with water to any extent. For addition to the fly spray allowance must be made for the extent to which they are diluted for use—the quantity of oil emulsion required being 1 in 10 to the water content of the fluid.

The following experiments with a quick action spray with and without the oil emulsion will serve to illustrate the value of the addition.

Experiment 1.

Two wire traps, containing large numbers of flies, caught within the previous two hours, were used.

Cage A.—The quick action fluid was diluted 1 in 30 (by the directions 1 in 40 should have been sufficient); this was used to spray the flies in cage A for two minutes.

Cage B.—To 20 c.cm. of this mixture 2 c.cm. of the oil emulsion was added, and the flies in cage B were sprayed with the mixture for two minutes.

The flies in both cages were all incapable of flight or active movement within fifteen minutes, the temperature being 65° F. Both cages were placed in a warm room at 75° F.

After three hours, at least half of the flies in cage A were actively flying or walking, while in cage B only five or six were active.

After seven hours: In cage A 32 were dead and 328 active (mortality, 9 per cent.). In cage B 290 were dead and 52 were active (mortality, 84 per cent.).

Experiment 2.

The flies were sprayed for two and a half minutes; almost all the flies in both cages were down within fifteen minutes. The cages were then put into a warm room at 75° F. After two hours a large number had recovered in the A cage, but only 5 in B. Both cages were left for the night in the warm room.

On the following day a count showed: Cage A, 196 dead, 193 living, mostly active (mortality, 50 per cent.). Cage B, 247 dead, 19 living, but only 5 active (mortality, 91 per cent.).

As an instance showing the susceptibility of flies to drought and the care necessary in the controlling of experimental trials the following may be quoted:

Experiment 3.

Flies (*Musca domestica*) were captured in two wire cages between 1 p.m. and 2.30 p.m. in the same room, the cages being placed about 12 in. apart. The flies in cage A were kept without food or water in a room temperature about 65° F. until 5 p.m. (two and a half hours). In cage B they were kept in the same room, but a plug of cotton-wool soaked in weak syrup was placed in the cage. At 5 p.m. this was removed, and both cages were placed in a warm room at 75° F. for seventeen hours.

In cage A 20 out of 63 were dead (mortality, 31 per cent.). In cage B 6 out of 81 were dead (mortality, 7 per cent.).

A. BACOT,
Medical Entomologist, Lister Institute.

A METHOD OF RENDERING CELLULOID PLASTIC.

HAVING been somewhat of a pioneer in introducing celluloid to the profession for various surgical purposes which I have indicated in papers, I would like to communicate a discovery I have made recently. One of the difficulties I was unable to solve was how to render celluloid so plastic that it could be moulded into any shape for application in the tissues in certain parts of the body for certain conditions. I made innumerable inquiries from chemists, journals, the Xylonite Company, doctors, etc., but all without avail. Recently, having another matter under consideration, and remembering that ether was used in the preparation of celluloid, it was necessary for me to ascertain whether celluloid would dissolve or soften in ether. This also led me to try chloroform and alcohol. The latter acted slightly, but ether to such a gratifying degree that any shape could be obtained with the greatest ease. Previously I had to rely on boiling, but this was only partly satisfactory; but now, with ether, this difficulty has almost, if not entirely, been overcome. Place the celluloid in ether solution, in a few hours the celluloid will swell slightly and become soft as jelly. Take it out of the solution, mould, and let dry. The celluloid will resume its original thickness and appearance but retain its new shape. Ether also being one of the most powerful bactericides, will effectually sterilize the mould and make it ready for insertion.

Sydney, Australia.

G. S. THOMPSON, F.R.C.S.

Reports

MEDICAL AND SURGICAL PRACTICE IN HOSPITALS AND ASYLUMS.

ROYAL ALBERT EDWARD INFIRMARY, WIGAN.

RECURRENT INTUSSUSCEPTION: ROUND-CELLED SARCOMA OF THE ILEO-CAECAL VALVE: EXCISION: INTESTINAL ANASTOMOSIS: RECOVERY.

(By C. R. GRAHAM, Senior Honorary Surgeon to the Infirmary.)

A. A., aged 14, was admitted on May 30th, 1916. He had been feeling unwell for the past six weeks with sickness and gripping pains in the abdomen. The sickness had only appeared the week before admission. The bowels had acted daily; there had been no diarrhoea nor blood in the stools. Four years ago he had suffered from typhoid fever.

Laparotomy was performed on admission by my colleague Mr. Buchanan, assistant honorary surgeon, and an intussusception involving the ileo-caecal region was reduced without any difficulty. The boy made an excellent recovery, and was discharged on June 19th.

On his arrival home he commenced to vomit, and had pain in the right iliac fossa. He was confined to bed, and as the sickness and pain continued he was readmitted to the infirmary on June 29th. Nothing abnormal could be felt in the abdomen, and as his symptoms gradually subsided he was discharged on July 3rd.

On July 11th, immediately after dinner, he felt sick and vomited. He complained of abdominal pain, which was referred to the left side of the umbilicus. The same evening, as he did not improve, he was again taken to the infirmary. Palpation did not reveal any tumour, and there was no distension of the abdomen, but there was intense pain referred to the umbilical region.

Laparotomy was again performed on July 14th, and an indurated mass the size of a pullet's egg was discovered deep down in the right iliac fossa. This proved to be a well-marked intussusception, with considerable thickening in the vicinity of the ileo-caecal valve and adjoining caecum. The intussusception could not be reduced. The lumen of the bowel was not greater than that of a crow's quill. The ileum, about 4 in. from the ileo-caecal valve, and the whole of the caecum were excised, anastomosis being effected by means of a Murphy's button.

The patient made an uninterrupted recovery, his condition at no time causing any anxiety. He was discharged quite well on August 6th. The button was recovered on the sixth day after operation.

Sections made from the indurated portion of bowel showed the structure of a small round-celled sarcoma.

ROYAL MEDICAL BENEVOLENT FUND.

THE following is a continuation of the summary of cases relieved by the Committee at its meeting on November 14th:

Widow, aged 78, of M.R.C.S.Eng. who practised at Hordeness and died in 1896. Left with a large family and only £30 per annum. With the exception of two daughters, who help at home, the other children are married and unable to help. Tries to supplement income by taking in lodgers. Relieved six times, £72. Voted £12 in twelve instalments.

Daughter, aged 64, of M.D.Lond. who practised in London and died in 1887. Applicant is blind and her only income is a pension from a society for the blind. Relieved four times, £42. Voted £12 in twelve instalments.

Daughter, aged 65, of F.R.C.S.Eng. who practised at Chester and died in 1884. Applicant left without means, and has endeavoured to earn a living as housekeeper, but, owing to age, cannot obtain a post. Relieved five times, £32. Voted £10 in two instalments.

Widow, aged 46, of L.R.C.P.Edin. who practised in Fifeshire and died in 1913. Applicant was left without means with six children, two of whom are still at school, and the only one able to help earns £70 per year, which is the only source of income. Applicant has recently been very ill, and with the increased cost of living has got into difficulties. Relieved once, three years ago, £10. Voted £20.

Daughters, ages 64 and 56, of M.R.C.S.Eng. who practised in Cornwall and died in 1873. Only property left them the house in which they live, and they try to make a living by receiving paying guests, but recently not successfully. Relieved seven times, £118. Voted £18 in twelve instalments.

Widow, aged 53, of M.D.Edin. who practised at Newcastle and died in 1896. Applicant was left entirely without means with one young daughter. Up to about two years ago, when she fractured her leg, managed to make a living as nurse companion, but cannot undertake any work now, and is dependent on her daughter, now married and only able to help a little. Relieved twice, £24. Voted £12 in twelve instalments.

Daughter, aged 57, of M.D.Lond. who practised at St. Pancras and died in 1868. Applicant and her mother were left entirely unprovided for, and since her mother's death earned her own living as nurse companion, but, owing to ill health and age, unable to obtain suitable work. Voted £6 in six instalments.

Widow, aged 66, of L.R.C.P.Irel. who practised in Essex and died in 1896. Since the death of her husband has earned a living by acting as cook. Recently had a serious operation which prevents her from working. Only income a small pension from another society. Relieved five times, £42. Voted £12 in twelve instalments.

Daughter, aged 48, of M.R.C.S.Eng. who practised in Bombay and died in 1873. Applicant endeavours to earn a living by nursing but finds it impossible to make sufficient to keep herself. Relieved five times, £64. Voted £12 in twelve instalments.

It was reported that four annuitants had died since the previous meeting, one of whom had received £500, another £480. The vacancies were filled up.

Subscriptions may be sent to the honorary treasurer, Dr. Samuel West, at 11, Chandos Street, Cavendish Square, London, W.

The Royal Medical Benevolent Fund Guild is now called upon, as a result of the war, to deal with many widows and children who, in happier times, would not have thought of asking for assistance. It is glad to receive secondhand clothing and household linen. The class of clothes most wanted is that suitable for boys and girls working in offices, for women, and for old men. The gifts should be sent to the secretary of the Guild, 43, Bolsover Street, W.

Universities and Colleges.

UNIVERSITY OF LONDON.

MEETING OF THE SENATE.

THE following committees of the Senate have elected their respective chairmen as follows:—Brown Animal Sanitary Institution Committee: Sir Rickman J. Godlee, K.C.V.O.; Honorary (War) Degrees Board: The Vice-Chancellor, Sir Alfred Pearce Gould, K.C.V.O.; Committee of Members of the Senate: Dr. Frederick Taylor; Physiological Laboratory Committee: Sir David Ferrier, F.R.S.

The Rogers Prize of £100 for 1916 has been awarded to Dr. J. L. Jona, D.Sc. Adell, M.D., B.S. Melb., for an essay on the nature of pyrexia and its relation to micro-organisms.

SOCIETY OF APOTHECARIES OF LONDON.

THE diploma of the society has been granted to Messrs. L. Baumgarten and P. C. C. Fenwick.

The Services.

EXCHANGES.

CAPTAIN R.A.M.C.(T.), recruiting medical board, near London, desires exchange with T.F. officer doing sanitary work or with R.E. unit. Eastern command preferred. Address No. 4800, BRITISH MEDICAL JOURNAL Office, 429, Strand, W.C.

Captain R.A.M.C.(T.), Yeomanry Regiment, stationed easy distance from London, seeks transfer with M.O. in base hospital, casualty clearing station, or ambulance train.—Address No. 4798, BRITISH MEDICAL JOURNAL Office, 429, Strand, W.C.

M.O. (Captain), regiment East Coast, wishes to exchange with any Territorial M.O., abroad.—Address No. 4799, BRITISH MEDICAL JOURNAL Office, 429, Strand, W.C.

Medical News.

WE are informed that Sir James Mackenzie withdrew from the Final Medical Appeal Board a month ago.

At the meeting of the Medical Society of London on Monday next at 8.30 p.m. demonstrations illustrating the principles of the re-education of the wounded will be given by Mr. Arnold Lawson (the blind), Mr. Derwent Wood (facial restoration), Dr. J. B. Mennell (walking), and Mr. McMahon, instructor of speech defects at St. Bartholomew's Hospital (shell-shock, stammering and other affections of the voice and speech).

CHRISTMAS lectures to juvenile audiences at the Royal Institution of Great Britain were instituted by Michael Faraday in 1826. The ninety-first course will be given by Professor Arthur Keith, F.R.S., on December 28th, 30th, January 2nd, 4th, 6th, and 9th, at 3 o'clock on each day. His subject is "The human machine which all must work." At a later date Professor C. S. Sherrington, F.R.S., will give six lectures on the old brain and the new brain and their meaning, and on pain and its nervous basis. The first Friday evening discourse will be given on January 19th, when Professor Sir James Dewar will lecture on soap bubbles of long duration.

A COURSE of lectures and demonstrations in hospital administration for the D.P.H. will be given by Dr. E. W. Goodall at the North-Western Hospital, Hampstead, on Tuesdays and Fridays, beginning January 2nd, 1917. The fee for the course is £3 3s., which should be paid to the Metropolitan Asylums Board, Embankment, E.C., from whom further information can be obtained.

SIR RICHARD TEMPLE, Chairman of the Edith Cavell Homes of Rest for Nurses (25, Victoria Street, Westminster), informs us that a number of contributions have been received from officers and men in both services, who, in sending them, have expressed their cordial sympathy with the scheme. Its object is the establishment, in memory of Nurse Edith Cavell, of a home or homes of temporary rest for practising trained women nurses and probationers who are or have been employed in civil or military hospitals, or in connexion with war, or in any other capacity, and have become temporarily in need of mental or physical rest. The appeal is signed by, among others, Lady Haig, Lady Jellicoe, Viscount French, Lord Beresford, and Sir William Robertson, all of whom are serving on the council.

ABDULLA AND CO., cigarette makers, have issued again this year a tablet wall almanac (for 1917) with illustrations. Among the artists whose drawings are reproduced in colours are representatives of Italy, Japan, Portugal, and Russia, as well as of this country and of Australia. Twenty thousand copies have been prepared for sale at the price of 1s. 4d. each, out of which 1s. will be paid to the funds of the British Red Cross Society.

A RECENT report of the United States Public Health Service states that there are two establishments for lepers in Venezuela. The larger, which is on the Isla de Providencia, just outside the harbour of Maracaibo, has accommodation for 700 patients. It is in charge of a staff of doctors and nurses and is provided with apparatus for the disinfection of clothes and bedding by steam. Lepers are segregated in the several states of Venezuela as they are found and removed later to the Isla de Providencia. The number of lepers interned there at the beginning of 1914 was 400 and 233 were received during the year. During the same period 10 patients were discharged apparently cured. The other establishment at Cape Blanco, about four miles from La Guaira and Maiquetia, which formerly accommodated 400 patients was closed, but is now used for the temporary reception of local lepers till they can be transferred to the Isla de Providencia.

ANNA J. JEANES of Philadelphia, a member of the Society of Friends, well known as a philanthropist, died in 1908 leaving estate which now amounts to more than £600,000 to be applied to the treatment of cancerous, nervous, and disabling ailments. Dr. Winford H. Smith, superintendent of the Johns Hopkins Hospital, Baltimore, who was asked by the trustees of the fund to investigate the work of the Philadelphia hospitals with a view to the most useful employment of the money, has recommended that it be given to the University of Pennsylvania Hospital.

To all lovers of old medical literature a catalogue of "early works on the sciences of medicine and surgery" issued by Messrs. Charles J. Sawyer will make a strong appeal. It includes a number of rare and curious old books printed before 1800. Among them we note an English translation of Paul Barbette's *Thesaurus Chirurgiae* with *Medicina Militaris*, "a Body of Military Medicines experimented" by Raymundus Mindererus, and *Cista Militaris* or "a Military Chest furnished for sea and land" by G. F. Hildanus, printed at Amsterdam in 1676; Herman Bussehof's treatise on Gout "Englished out of the Dutch by a careful hand" (1676) (it contains an advertisement of moxa, the secret remedy of the "Chineses and Japaneses" described by Sir William Temple in his essay "upon the cure of gout"); the *Mellicium Chirurgiae* of James Cooke of Warwick (1685); Richard Wiseman's *Chirurgical Treatises*, including those on gun-hot wounds (third edition, 1697); Cl. Quilletus's *Callipædia, seu de pulchrae prolis habendae ratione* (1708); Nathaniel Hodges's *Loimologia*, "an historical account of the plague in London in 1665" (third edition, 1771); and John Huxham's *Essay on Fevers* (1750). There are two volumes of manuscript medical and household recipes (seventeenth and eighteenth centuries). Among the pictures is an interesting caricature which may perhaps find a modern application; it is a folio coloured etching published in 1810, and described as "the winding up of the medical report of the Walcheren expedition." There is also a selection of engraved portraits of medical celebrities. It may be added that the Medical Iconographical Society announces the publication, beginning from January, 1917, of a new series of medical portraits from the time of Linacre down to the present century. Particulars may be obtained from Messrs. Charles J. Sawyer, Ltd., publishers to the Society, 23, New Oxford Street, W.C.

Letters, Notes, and Answers.

AUTHORS desiring reprints of their articles published in the **BRITISH MEDICAL JOURNAL** are requested to communicate with the Office, 429, Strand, W.C., on receipt of proof.

THE telegraphic addresses of the **BRITISH MEDICAL ASSOCIATION** and **JOURNAL** are: (1) **EDITOR** of the **BRITISH MEDICAL JOURNAL**, *Aitology, Westrand*, London; telephone, 2631, Gerrard. (2) **FINANCIAL SECRETARY** and **BUSINESS MANAGER** (Advertisements, etc.), *Articulatr, Westrand*, London; telephone, 2630, Gerrard. (3) **MEDICAL SECRETARY**, *Medisecra, Westrand*, London; telephone, 2634, Gerrard. The address of the Irish Office of the British Medical Association is 16, South Frederick Street, Dublin.

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

QUERIES.

G. S. wishes to consult literature regarding the annual expected progress in height and weight among boys in an industrial home, and statistics of incident sickness.

INCOME TAX.

G. W. inquires whether army pay received as recruiting medical officer is assessable.

* The pay in question appears to be received for services rendered in connexion with an employment of profit under the Crown, and as such is assessable under Sec. E. The fact that it may be terminated without notice does not affect the existence of liability. We gather that the local surveyor of taxes is dealing with the matter, and if that means that the pay has been assessed locally, the "final appeal" would lie to the local or special commissioners on a question of fact, and to the High Court on a point of law. We advise our correspondent to satisfy himself that no tax is being or will be deducted by the pay agents or paymaster.

ACID DYSPEPSIA.

A **MEDICAL MAN**, who for the past year has suffered from dyspnoea, heart weakness not due to valvular disease, blueness of hands, and some slight swelling of the fingers in frosty weather, and who finds relief from alkalis, etc., would be

glad to know of the best spa to go to be treated, as he is of opinion that the condition is due to acid dyspepsia.

* The typical simple alkaline spas are Vichy and Vals, but, apart from the difficulties created by the war, the season at both places is from May to September. Any suggestions will be forwarded to the inquirer.

EXTINCT BRITISH SURGICAL INSTRUMENT FIRMS.

SCALPEL wishes to know where he could find information about the dates of the founding and dissolution of instrument-making firms. The curators of several college and medical school museums are interested in this subject. "Savigny" is well known; the firm published a fine illustrated catalogue in 1798, and the excellence of its steel is known even to surgeons now living. "Laundy" was flourishing in 1820. "Stodart" is marked on instruments used by John Hunter, "Robinson, Oxford," on Blizard's lithotomy knives, and "Pepys" and "Evans" on instruments used by Long, Master of the College of Surgeons in 1800. "Boog" seems to have flourished at the beginning of the nineteenth century, and "Botschan" made a large number of David Davis's obstetrical instruments, of which samples are to be seen in several museums; they were made about 1820.

ANSWERS.

POSITION OF FETAL HEAD.

SCOTTISH PRACTITIONER.—The accoucheur's hand is the best instrument we have for assisting the flexion or altering the position of the fetal head. A recent article by Plass (*Johns Hopkins Hosp. Bull.*, xxvii, 164-177, 1916) gives reasons for not interfering with the head in occipito-posterior positions, and pleads for conservative measures.

AUTO-WHEELS.

AUTO writes: In reply to "W." (November 25th, p. 748), I have an auto wheel in use for over twelve months, and find it satisfactory. It does all that is expected of it.

DR. T. REVELL ATKINSON (Chadwell Heath) writes in reply to "W.": I bought an auto-wheel in March, 1914, and had it fitted by a good mechanic to my B.S.A. bicycle. It has done me good service, and I can speak well of it. My speedometer now registers 8,937 miles, and quite half of that mileage has been done since fitting on the auto-wheel. I have worn out two or three tyres, and have required two or more new sparking-plugs. Besides that, there has been very little extra expense—very occasionally I send it to be cleaned. I get about eighty miles to the gallon out of it. It doesn't climb hills well, but is all right on the level. On a hill I assist it by foot-peddalling. Only on two or three occasions have I been held up. I find it quite as reliable as my car, much cheaper to run, and it gives one a little gentle exercise now and then. I found it a good plan when I wanted a new back tyre to my bicycle to have a tandem tyre fitted. I should say it would be very wise for any purchaser to see that the machine only got into the hands of a capable mechanic who knew what he was about. I have heard of auto-wheels being ruined by careless repairs and cheap tinkering.

LETTERS, NOTES, ETC.

A WARNING.

N. B. writes: There are blackmailers, etc., about trying to get misleading medical certificates for rejection purposes. Medical men are advised to be careful in stating how long they have known their clients, etc.

INDIAN AND EGYPTIAN RESIDENTS IN ENGLISH HOSPITALS.

DR. K. S. BHAT (London) writes: Will you kindly grant me a few lines in your valuable columns to thank the authorities of Paddington Green Children's Hospital for their very candid advertisement in the **BRITISH MEDICAL JOURNAL** for November 25th, 1916, for applications for the posts of house-physician and house-surgeon there? They say there: "As this hospital is a children's hospital, applications from Indian and Egyptian students will not be entertained." It is certainly gratifying to find some one at least who will say such things out. I am an Indian myself, and happen to be the resident medical officer at the East London Hospital for Children; and the house-physician here is an Indian too. It is beside the point to enter into any comparison between the two hospitals.

SCALE OF CHARGES FOR ADVERTISEMENTS IN THE BRITISH MEDICAL JOURNAL.

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An average line contains six words.

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Advertisements should be delivered, addressed to the Manager, 429, Strand, London, not later than the first post on Wednesday morning preceding publication, and, if not paid for at the time, should be accompanied by a reference.

NOTE.—It is against the rules of the Post Office to receive *poste restante* letters addressed either in initials or numbers.