

correction for this source of error, but gives reasons for believing that it does not materially vitiate results.

In one-apartment dwellings in the entire city the death-rate was 32.7 as compared with 19.5 for Glasgow as a whole. It varied in five districts of the city from 25.4 to 41.2, the death-rate for the entire population of these five districts varying from 13.7 to 31.1 per 1,000. It is clear, therefore, that these one-apartment houses must manifest conditions which differ greatly among themselves. Taking the statistics of the entire city, the following table brings out the essential points of the comparison between dwellings of different sizes:

Houses of	Death-rate per 1,000 from			
	All Causes.	Zymotics.	Phthisis.	Respiratory Diseases.
One apartment ...	32.7	7.4	2.4	7.6
Two apartments ...	21.3	4.5	1.8	4.6
Three apartments ...	13.7	1.9	1.2	2.4
Four apartments and upwards ...	11.2	1.0	0.7	2.0

There is a uniform excess in one-apartment houses of death-rate from the different causes which is most significant. When we attempt to analyse the causes of the excessive mortality shown in the preceding table, the task is one of great difficulty. No doubt closeness of aggregation bears a great part in it. Vitiating air and the greater facility for the spread of infection must be potent influences. The one apartment imposes physical restrictions in which it must be more difficult to comply with the demands of healthy existence than in houses of larger size; and this difficulty is greater precisely among those who by education and training are least fitted to engage in the struggle that is demanded.

The fact cannot, however, be lost sight of that the excessive death-rate is not solely and probably not chiefly due to the occupation of one-apartment dwellings. The occupation of such dwellings is a useful index, connoting certain social circumstances which are even more important than sanitary circumstances. Persons do not live in these apartments by choice. They have fallen to this level, or failed in the struggle of life ever to get above it. There is the same fallacy as occurs when the mortality of coal-miners is compared, for instance, with that of tailors. Liberal deduction must be made for the fact that coal-miners must be robust before choosing such an occupation, and that they necessarily leave it for more sedentary work when they cease to be robust. Similarly it is the poverty-stricken who live in one-apartment dwellings, and the one factor contributing to their high death-rate more probably than any other is deficient food. Personal infection, however, bears an important part in the problem, as shown by the fact that the zymotic death-rate is four times, the death-rate from phthisis twice as high, and from respiratory diseases three times as high as in dwellings containing three apartments.

ARSENIC IN SWEETS AND FOODSTUFFS.

ACCORDING to the *Times* of August 25th, Mr. Otto Hehner, public analyst, reporting to the Isle of Wight Council, states that in one sample of sweets submitted from that council's district he found a notable trace of arsenic. They were small chocolate-coloured sugar cubes, containing about one-fiftieth of a grain of arsenic per pound. The sweets were not coated with chocolate, as might be inferred from their colour, but with a mineral colour, oxide of iron, which almost invariably contained arsenic, and which was an altogether improper substance to use even when it was pure. "Whether this arsenic could produce poisonous effects," continued Mr. Hehner, "unless the sweets were consumed in very large quantities appears to me doubtful, but it is evident that circumstances might readily occur that might lead to a charge of murder against perfectly innocent persons if the sale of such compounds were permitted. As I have found arsenic in several other food materials coloured with oxide of iron, such as bloater paste, anchovy sauce, and chocolate powders, I have ventured to draw the attention of the Royal Commission on Arsenical Poisoning, which is still collecting evidence, to the above case, and hope that steps will be taken to prevent the use by manufacturers of food stuffs of oxide of iron as a colouring agent."

CERTIFICATION OF PAUPER LUNATICS.

SABERTON, a district medical officer, writes that he has to meet a certain J.P. in reference to the certification of pauper lunatics, and as he has had serious difficulties with some of these cases in the past, he is apprehensive of further difficulties in the future. He asks whether the Lord Chancellor would in any such case be the "appeal body."

*** Our correspondent should remember that when called upon by a magistrate to certify the mental condition of a pauper lunatic, he is not then acting in his official capacity as a district medical officer, but as a private medical practitioner called upon by a magistrate to give him the requisite medical assistance. Should he in any such case find it impossible to get the provisions of the Lunacy Act complied with, we consider that the proper course would be for him to forward a statement of the facts of the case to the Lunacy Commissioners, and to abide by any instructions he may receive from them. Their office is 66, Victoria Street, S.W.

HEALTH OF WANDSWORTH.

DR. CALDWELL SMITH, the Medical Officer of Health, estimates the population of Wandsworth for 1902 as 245,893. The birth-rate was 26.3 and the death-rate 13.4 per 1,000. The infant death-rate is returned as 126, and the usual tables of vital statistics are incorporated in the report. Some thirty pages of the report are devoted to the small-pox outbreak which affected Wandsworth less than most metropolitan districts. In reference to diphtheria on the Hyde Farm Estate, which has since its construction been liable to this disease, Dr. Smith reports 28 cases, and attributes the prevalence of the disease to "houses built upon a wet soil which contains a large portion of organic matter...the germ existing in the

superficial layers of the soil. It is probable that the infection is conveyed to the mouth by the hands of children playing with this soil, and consequent infection from person to person." Twenty-two cases of typhoid were traced to eating shellfish (14 to oysters), but it was impossible to trace the source of the oysters. Dr. Smith reports specially upon cancer, upon the water supply, and upon housing the working classes.

HEALTH OF ENGLISH TOWNS.

IN seventy-six of the largest English towns, including London, 9,096 births and 4,548 deaths were registered during the week ending Saturday last, August 22nd. The annual rate of mortality in these towns, which had been 14.4, 14.3, and 15.7 per 1,000 in the three preceding weeks, was again 15.7 per 1,000 last week. The rates in the several towns ranged from 4.0 in Horsey, 4.9 in King's Norton, 6.9 in Reading, 7.0 in Stockton-on-Tees, 7.1 in Barrow-in-Furness, 7.9 in Derby, and 8.6 in Willesden and in West Bromwich, to 21.3 in Hull, 21.8 in Newcastle-upon-Tyne, 22.1 in Liverpool, 22.6 in Bolton, 23.5 in Wigan, 25.5 in Sheffield, 26.3 in Middlesbrough, and 32.6 in Bootle. In London the rate of mortality was 14.4 per 1,000, while it averaged 16.3 in the other seventy-five large towns. The death-rate from the principal infectious diseases averaged 3.5 per 1,000 in the seventy-six large towns; in London this death-rate was equal to 2.6 per 1,000, while it averaged 3.8 per 1,000 in the seventy-five large provincial towns, among which the highest death-rates from the principal infectious diseases were 6.5 in Liverpool, 6.6 in Middlesbrough, 6.8 in Norwich, 7.1 in Warrington and in Salford, 8.2 in Hanley, 9.2 in Wigan and in Hull, 9.8 in Aston Manor and 10.3 in Bootle and in Sheffield. Measles caused a death-rate of 1.2 in Blackburn, 1.4 in Sunderland, 1.5 in Sheffield and in Merthyr Tydfil, 1.6 in Stockport, in Warrington, and in Middlesbrough, 2.0 in Aston Manor, and 3.0 in Ipswich; whooping-cough of 1.1 in Oldham and 1.7 in Wigan; and diarrhoea of 5.0 in Birkenhead, 5.4 in Bury, 5.5 in Grimsby, 6.4 in Norwich, 6.7 in Wigan, 7.9 in Aston Manor, 8.2 in Hanley and in Sheffield, 9.2 in Hull, and 10.3 in Bootle. The mortality from scarlet fever, from diphtheria, and from "fever" showed no marked excess in any of the large towns. One fatal case of small-pox was registered in Gateshead, and one in Newcastle-on-Tyne, but not one in any other of the seventy-six large towns. The number of small-pox patients under treatment in the Metropolitan Asylums Hospitals, which had been 66, 48, and 45 on the three preceding Saturdays, rose again to 52 on Saturday last, August 22nd; 13 new cases were admitted during the week, against 9, 4, and 9 in the three preceding weeks. The number of scarlet-fever patients in these hospitals and in the London Fever Hospital at the end of the week was 1,795, against 1,726, 1,771, and 1,758 at the end of the three preceding weeks; 225 new cases were admitted during the week, against 237, 216, and 215 in the three preceding weeks.

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday last, August 22nd, 903 births and 493 deaths were registered in eight of the principal Scotch towns. The annual rate of mortality in these towns, which had been 14.7, 14.6, and 15.4 per 1,000 in the three preceding weeks, fell last week to 15.1 per 1,000, and was 0.6 per 1,000 below the mean rate during the same period in the seventy-six large English towns. The rates in the eight Scotch towns ranged from 12.8 in Greenock and 13.5 in Edinburgh, to 16.4 in Paisley and 17.2 in Dundee. The death-rate from the principal infectious diseases averaged 3.0 per 1,000 in these towns, the highest rates being recorded in Glasgow, Dundee, and Paisley. The 232 deaths in Glasgow included 3 from measles, 2 from diphtheria, 4 from whooping-cough, and 5 from "fever." Three fatal cases of diphtheria, 2 of whooping-cough, and 2 of "fever" occurred in Edinburgh. Two deaths from whooping-cough, and 2 from "fever" were registered in Dundee. Of the 65 fatal cases of diarrhoea, 38 occurred in Glasgow, 8 in Dundee, 6 in Edinburgh, 5 in Paisley, and 3 each in Aberdeen and Leith.

HEALTH OF IRISH TOWNS.

DURING the week ending Saturday, August 22nd, 563 births and 348 deaths were registered in six of the principal Irish towns, the births being 62 over those recorded in the previous week and the deaths 43 in excess. The mean annual death-rate of these towns, which had been 14.9, 21.5, and 13.7, per 1,000 during the preceding three weeks, rose to 19.2 per 1,000, and this number being 3.5 over the mean rates during the same period in the seventy-six English towns. The death-rates ranged in these six Irish towns from 9.3 in Waterford and 15.0 in Belfast to 23.3 in Dublin and 27.7 in Londonderry. The death-rate from the principal zymotic diseases in the six towns averaged for the week 3.2 per 1,000, against 2.5 per 1,000 in the preceding period. The highest rate, 10.1, was reached in Londonderry and is explained by 4 deaths ascribed to diarrhoea, 1 to diphtheria, 2 to whooping-cough and 1 to typhus fever. No deaths were recorded from small-pox in any part of Ireland, but there was a second death from typhus in Galway. One death in Belfast was ascribed to measles, and 2 to enteric, but no deaths were recorded in any part of Ireland from scarlet fever.

MEDICAL NEWS.

AUTOMOBILES.—The fifth annual motor car trials organized by the Automobile Club are to be held this year from September 18th to 26th, both days inclusive, and it is understood that 130 cars have been entered, each of a different make. The object of these trials is to test reliability and not speed, and as a matter of fact stringent regulations are laid down to prevent any attempt at fast driving. Every car will have to complete a distance of 1,000 miles, and during the whole period of trial will be under the continuous observation of an official of the club. Every repair or even minor adjustment required during the trials will be noted, and marks awarded even for such points as absence of dust raising or the reverse. The result, therefore, should be to put those who desire to purchase cars for business purposes rather than for pleasure in possession of much useful information.

MEDICAL VACANCIES.

This list of vacancies is compiled from our advertisement columns, where full particulars will be found. To ensure notice in this column advertisements must be received not later than the first post on Wednesday morning.

- BARNWOOD HOUSE HOSPITAL FOR THE INSANE**, Gloucester.—Junior Assistant Medical Officer, resident. Salary, £150 per annum.
- BIRMINGHAM AND MIDLAND EYE HOSPITAL**.—Resident Surgical Officer. Salary, £100 per annum.
- BIRMINGHAM AND MIDLAND HOSPITAL FOR SKIN AND URINARY DISEASES**.—Clinical Assistant. Appointment for three months. Honorarium at the rate of 52 guineas per annum.
- BRIGHTON, HOVE, AND PRESTON DISPENSARY**.—House-Surgeon, resident. Salary, £160 per annum.
- BURY INFIRMARY**.—Junior House-Surgeon, resident. Salary, £90 per annum.
- CAMBRIDGE LUNATIC ASYLUM**.—Second Assistant Medical Officer, resident. Salary, £120 per annum.
- CARLISLE: CUMBERLAND INFIRMARY**.—Resident Medical Officer. Salary, £90 per annum.
- CHATHAM: KENT COUNTY ASYLUM**.—Third Assistant Medical Officer, resident. Salary, £140 per annum.
- CHESTERFIELD AND NORTH DERBYSHIRE HOSPITAL**.—Resident House-Physician and Surgeon. Salary, £120 per annum.
- CHORLEY: RAWCLIFFE HOSPITAL**.—House-Surgeon, resident. Salary, £100 per annum.
- COLCHESTER: ESSEX AND COLCHESTER GENERAL HOSPITAL**.—House-Surgeon, resident. Salary, £100 per annum.
- DEWSBURY AND DISTRICT GENERAL INFIRMARY**.—House-Surgeon, resident. Salary, £100 per annum.
- EAST LONDON HOSPITAL FOR CHILDREN AND DISPENSARY FOR WOMEN**, Shadwell, E.—(1) Medical Officer for Casualty Department. Appointment for six months. Salary at the rate of £100 per annum. (2) House-Surgeon, resident. Honorarium of £25 at completion of six months' service.
- GLOUCESTER GENERAL INFIRMARY**.—Assistant House-Surgeon, resident. Appointment for six months. Salary at the rate of £70 per annum.
- HOSPITAL FOR DISEASES OF THE THROAT**, Golden Square, W.—(1) Senior Clinical Assistant, (2) Anaesthetist.
- HOSPITAL FOR SICK CHILDREN**, Great Ormond Street, W.C.—Honorary Radiographer.
- LIVERPOOL: WEST DERBY UNION WORKHOUSE AND HOSPITAL**.—Assistant Medical Officer, resident. Salary, £120 per annum.
- LONDON: TEMPERANCE HOSPITAL**, Hampstead Road, N.W.—Assistant Resident Medical Officer. Honorarium at the rate of 50 guineas per annum.
- METROPOLITAN HOSPITAL**, Kingsland Road, N.E.—(1) Casualty Officer, (2) House-Physician, (3) House-Surgeon, (4) Assistant House-Physician, (5) Assistant House-Surgeon. Appointments for (2), (3), (4) and (5) for six months. Salary, £150 per annum for (1) and at the rate of £40 per annum for (2) and (3), and £20 for (4) and (5).
- MANCHESTER CHILDREN'S HOSPITAL**.—Junior Resident Medical Officer. Appointment for six months. Salary at the rate of £80 per annum.
- PRESTON ROYAL INFIRMARY**.—Assistant House-Surgeon, resident. Salary, £90 per annum.
- SALFORD ROYAL HOSPITAL**.—Junior House-Surgeon. Appointments for six months. Salary at the rate of £70 per annum.
- SHEFFIELD ROYAL INFIRMARY**.—Junior Assistant House-Surgeon, resident. Salary, £70 per annum.
- SOUTHPORT INFIRMARY**.—Resident Junior House and Visiting Surgeon. Appointment for six months. Salary at the rate of £70 per annum.
- STAFFORD: STAFFORDSHIRE GENERAL INFIRMARY**.—(1) House-Surgeon, resident. Salary, £120 per annum. (2) Assistant House-Surgeon, resident. Salary, £90 per annum.
- WAKEFIELD: CLAYTON HOSPITAL AND WAKEFIELD GENERAL DISPENSARY**.—Junior House-Surgeon, resident. Salary, £80 per annum.
- WEST HAM AND EAST LONDON HOSPITAL**, Stratford, E.—Junior House-Surgeon, resident. Salary, £75 per annum.

MEDICAL APPOINTMENTS.

- EASTON, H. A., M.R.C.S., L.R.C.P.**, Medical Officer to the No. 4 District of Croydon Union, vice Dr. J. G. Deacon (deceased).
- GROVES, Henry Charles, L.R.C.P. and S.I.**, Medical Officer of Health to the Monmouth Rural District Council.
- KING, Arthur, M.B., C.M., D.P.H., R.C.P.I.**, reappointed Medical Officer of Health to the Watford Urban District Council.
- MORRIS, Sylvanus, M.D., Edin.**, Surgeon to the Lockett Merthyr Collieries, Merthyr, Glam., vice Benj. Griffiths, M.D. (resigned).
- RAYMENT, E. W., M.B., C.M.**, Medical Officer of Health to the Pewsey Rural District Council.
- SIXON, D. Ap., M.B., Ch.B.**, District Medical Officer and Public Vaccinator for the Western District of Llandilo-fawr Union, vice S. Glanville Morris, M.D. (resigned).
- SOLTAU, Henry, L.R.C.P. and S.E., L.F.P.S. Glasg.**, Superintendent and Secretary of the Medical Missionary Association.

DIARY FOR NEXT WEEK.

POST-GRADUATE COURSES AND LECTURES.

Post-Graduate College, West London Hospital, Hammersmith Road, W.—Lectures will be delivered as follows: Monday, 4 p.m., Surgical Cases (Surgical Wards); Tuesday, 5 p.m., Surgical Cases (Lecture Room); Wednesday, 5 p.m., Bacteriology in Gynaecology; Thursday, 5 p.m., Rectal Fistula; Friday, 5 p.m., Medical Cases (Medical Wards).

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in post-office orders or stamps with the notice not later than Wednesday morning, in order to ensure insertion in the current issue.

BIRTHS.

- CHAVASSE**.—On August 24th, at Matlock House, Sutton Coldfield, Warwickshire, the wife of Howard S. Chavasse, M.R.C.S. Eng., L.R.C.P. Lond., L.S.A. Lond., of a daughter.
- LORRAIN-SMITH**.—August 19th, at Westbourne, Windsor Avenue, Belfast, the wife of J. Lorrain-Smith, of a son.
- WHALLEY**.—August 21st, at Brooklyn Street Lane, Roundhay, Leeds, the wife of Edgar Whalley, M.R.C.S. Eng., L.R.C.P. Lond., of a daughter.

MARRIAGE.

WILLIAMSON-MACKICHAN.—On Thursday, August 20th, at the United Free Church, Bombay, by the Rev. Dr. Mackichan, father of the bride assisted by Revs. E. MacOmish and Alex. S. Crichton, John Butter Williamson, M.D., of Miral, Bombay Presidency, sixth son of D. Williamson, Esq., J.P., C.C. Surrey, England, to Edith Eliza, elder daughter of Rev. Dr. Mackichan, LL.D., M.A., Principal of Wilson College, Bombay, and Vice-Chancellor of the University of Bombay. (American and Colonial Journals please copy.)

DEATH.

CORFIELD.—On the 26th inst., at Marstrand, Sweden, in his 60th year, William Henry Corfield, M.D., of 19, Savile Row, London, Sanitary Adviser to His Majesty's Office of Works.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting Editorial matters should be addressed to the Editor, 2, Agar Street, Strand, W.C., London; those concerning business matters, advertisements, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

ORIGINAL ARTICLES and LETTERS forwarded for publication are understood to be offered to the BRITISH MEDICAL JOURNAL, unless the contrary be stated.

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

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

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

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

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

TELEGRAPHIC ADDRESS.—The telegraphic address of the EDITOR of the BRITISH MEDICAL JOURNAL is *Asiologia, London*. The telegraphic address of the MANAGER of the BRITISH MEDICAL JOURNAL is *Articulate, London*.

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.

H. A. will be obliged to any member who has had to treat Malta fever sent to England for information as to the length of time the temperature kept up, or information as to the treatment by drugs, etc., found useful.

COUNTRY PRACTITIONER would be glad to hear of another practitioner who has dispensed with horses and gone in for motor car. He wishes to know whether in a large country practice where three horses are required a motor car could be used winter and summer and horses dispensed with. What car can be relied upon and probable cost? He has a motor bike, but he wishes a machine that can be used in all weathers.

ANSWERS.

THE SOUTH AFRICAN MEDAL.

TOWN GUARD should apply to the Adjutant-General, War Office, Pall Mall. A claim form will be sent to him which he will be asked to fill in and return, supplying at the same time the name of some officer who can testify to the correctness of his statements.

COACHMEN AND COCKADES.

J. F. T.—In the BRITISH MEDICAL JOURNAL of January 12th, 1895, p. 113, Mr. G. Ambrose Lee (Bluemantle), of the Herald's College, stated that the opinion given by that College is that the privilege appertains and is confined to the naval and military services, including the militia, yeomanry and volunteers, but that every officer, whatever his rank, as long as he holds Her Majesty's commission, has a right to mount, in the person of his servant, a cockade. The reply evidently alludes to the military cockade only. The civil cockade may be worn by all magistrates placed on the Commission of the Peace by the Lord Chancellor. It is an open question at present whether those who are magistrates by virtue of their being chairmen of district councils, and thus magistrates by Act of Parliament, are entitled to use the cockade during their term of office.

SAL POLYCHRESTUM.

DR. F. W. MENZIES.—Sal polychrestum, otherwise known as Glaser's sal polychrest., is in reality potassium sulphate mixed, probably, with some sulphite. Christison, in his *Dispensatory*, 2nd edition, 1843, says it is much more soluble than sulphate of potash, and it crystallizes from a state of solution in rhombic prisms, the primitive form of that salt. Both the substance itself and its solution have a sulphurous odour. Dr. Duncan (*Edinburgh Dispensary*) states that "it represents the effects of sulphurous mineral waters." It is used as a purgative in dyspepsia and chronic skin diseases. Dose, 3 to 1 drachm. The substance has fallen into disuse of late. Further information can be obtained from Pereira's *Materia Medica*, vol. 1, and from the *United States Dispensary*, 15th edition, p. 1187.

ADMISSION TO THE BAR.

LEX.—To become a barrister it is necessary to become a member of one of the Inns of Court. They are four in number—Lincoln's Inn, Middle Temple, Inner Temple, and Gray's Inn—and the fees payable at each are about the same, except that Lincoln's Inn is slightly more expensive, and Gray's Inn a little cheaper than the others. When the Inn has been decided upon the candidate must get a form of recommendation signed by two barristers of five years' standing, and he must himself sign a statutory declaration that he labours under none of the disabilities there scheduled; he must also pay entrance fees to the amount of about £40, and deposit either £100 as a security for commons, etc., which will be returned to him on his "call," or if a university man, he may furnish a security to this amount, in the shape of a bond given by himself with two respectable householders as sureties. He must also pass a simple preliminary examination in (a) English language and history, (b) Latin language, unless he is a member of a university or has passed one of certain other qualifying examinations. After completing these preliminaries the candidate becomes a member of his Inn. He must now, before being "called," keep twelve terms, and as there are only four terms in the year, three years must elapse from the time of his entering the Inn before he can be "called." To keep a term it is necessary to dine six times in the common hall of the Inn during that term, but if a university man the candidate need dine only three times. Two professional examinations must also be passed—one in Roman law and the other in the various branches of English law, namely, equity, common law, the law of personality and realty, and the principles of evidence (procedure and criminal law), there is also an examination in constitutional law (English and colonial) and legal history. The chief books to be read are the follow-