

he collaborated with Sédillot. This work reached its fourth edition in 1870.

By his own desire, Legouest was buried without the customary funeral orations.

## INDIA AND THE COLONIES.

### INDIA.

**THE DRAINAGE AND WATER-SUPPLY OF BENARES.**—Mr. A. J. Hughes, superintending engineer for municipal works of the North-West Provinces and Oudh, has presented a report descriptive of the insanitary state of the city, and containing a scheme for its sewerage, and the introduction of a pure water-supply from the Ganges above the town. Benares is the most sacred city of the Hindus, and attracts many pilgrims to its sacred shrines and bathing places. Like many other resorts of especial sanctity and holiness, the sanitary condition of the city is most deplorable. The present sewers are elongated cesspools or tunnel middens, discharging their foetid filth at or near the bathing-places, and the whole town reeks with stinks and sewer gases. At least half the population drinks well-water from a surface saturated with the filth of centuries. The population is now over 200,000, and the last recorded death-rate was 35 per 1,000, of which 7.5 per 1,000 was from cholera, and 29 per 1,000 from fever, bowel complaints, and preventable causes. Benares is now recognised as one of the permanent homes of cholera, and one of the centres for its spread by means of the flocks of pilgrims who travel to and return from its shrines. Mr. Hughes's scheme provides for the abolition of the old defective sewers, and for the laying of new ones on the most approved modern principles. But in an oriental city there are racial and caste habits and prejudices which do not readily permit of the sudden and wholesale enforcement of rules and regulations, however necessary to the carrying out of a successful sewerage scheme. Consequently, a choice of alternatives must be offered to the inhabitants, in the hope that they will gradually be persuaded to adopt that one which is most conducive to their own health and comfort. If the householder will provide water for flushing purposes, he may connect his own house-drain with the municipal sewer. Otherwise he may dispose of his filth in cesspools; by having it conveyed to street dépôts provided for it; or he may make use of the public latrines provided for the outside public who are not householders. The cesspools are nuisances, and are dangerous from the pollution of the subsoil and well water to which they give rise; but it is found impossible to abolish them, and their use must be tolerated under proper regulations. The rule of not allowing house connections with the sewers to be made unless water is provided for flushing purposes is a very necessary one in a hot climate, for the proper dilution of the sewage must be ensured if nuisance is to be avoided. It is to be hoped that the great advantages of the water-carriage system of excrement disposal will gradually be made manifest to the dwellers in this crowded city, and that the present filth-polluted condition of water, air, and soil may give way to a purer and better state of things. Mr. Hughes anticipates a reduction of the death-rate to 20 per 1,000 after the sewerage and improved water-supply are established. There are many precedents even for this large diminution; but even should it be much less, an enormous saving of life from preventable diseases may be effected—a saving which has already been accomplished in some of the large towns of India, and which has been spoken of as the greatest benefit to our Indian fellow-subjects which English rule has in its power to confer.

## HOSPITAL AND DISPENSARY MANAGEMENT.

### GLASGOW PUBLIC DISPENSARY.

THIS is an institution which embraces provident features, and was founded to test the acceptability of an institution on such a basis to the poor who were not in receipt of parochial relief. Advice and, if need be, medicine also are given. During the year the total of consultations was 2,630, of which 685 were connected with diseases of the throat and chest, 1,052 of skin and ear, 275 of kidney and urinary organs, and 618 of women and children. The monetary help received from the public was £85, and there is a deficiency of income to meet expenditure of £18 0s. 1d.

## UNIVERSITY INTELLIGENCE.

### OXFORD.

**EXAMINATIONS IN MEDICINE AND SURGERY, 1889.**—The Regius Professor of Medicine gives notice that the Final Examination for the Degree of Bachelor of Medicine will commence on Monday, June 10th, at 10 A.M. The Examination for the Degree of Master in Surgery will take place on Thursday, June 20th. The first examination for the Degree of Bachelor of Medicine will commence on Monday, July 1st, at 10 A.M.

### EDINBURGH.

**GENERAL COUNCIL.**—The statutory half-yearly meeting of the General Council of the University of Edinburgh takes place on Tuesday, April 16th, within the University. The subject of the necessary qualifications for appointment to physicianships in the Royal Infirmary and the Dispensaries will again be before the Council, and communications from the managers of these institutions with reference to the matter will be read. It is also to be moved that the hour of meeting of the General Council of the University be in future 3 P.M. instead of one o'clock as hitherto.

### GLASGOW.

**EXTENSION SCHEME.**—While the courses of lectures in the university in the evenings have not been attended by much success, large numbers of students have been enrolled in some of the suburban classes. In the east-end of the city, a course of lectures on English Literature, delivered by Mr. Mortimer Wheeler, M.A., was attended by 97 students, and a similar course at Pollokshields is being attended by 280.

## PUBLIC HEALTH

### AND

## POOR-LAW MEDICAL SERVICES.

### THE COMPULSORY NOTIFICATION OF INFECTIOUS DISEASES.

**SIR,**—Dr. Biddle declines to "attempt to verify or overthrow" my calculations of the increase or decrease of scarlet fever in the twenty towns taken separately. He also omits, though he does not say so, to challenge my demonstration that, taking the groups of towns as a whole, the decrease has been greater in notification than in non-notification towns, whether we deal with group death-rates, averages of death-rates, or total deaths. He still passes over in silence the objections to his method, or rather to his conclusions, which I have twice pointed out. I need not, therefore, trespass much further upon your space.

His attempt to impale me upon the "horns of a dilemma," due to his own inclusion of towns whose true statistics are unknown, is ingenious, but will scarcely bear examination. The missing data are for the most part pre-notification data, and could prove nothing for or against notification except by the determination of increase or decrease which I advocate, and Dr. Biddle does not accept. Six out of the seven are notification towns, and I quite agree that "if the death-rates were higher in the first half of the period.....the death-rate which I gave for Group III ought to be .....raised." In other words, if in these towns it should prove that the scarlet fever death-rate has diminished under notification, Dr. Biddle's method will make the figures look worse for notification than if no reduction had occurred. This "dilemma," or rather fallacy, is a forcible illustration of one of the weak points in his method. Notification ought not to be made responsible for high mortality in years preceding its introduction. When Dr. Biddle demurs to Portsmouth and Sunderland being regarded as notification towns in the 1882-88 period, he surely forgets that for the whole of his 1877-87 period he has included these same towns as examples of notification, notwithstanding the fact that for respectively seven-elevenths and nine-elevenths of that period their notification was non-existent. Of the 1,415 deaths from scarlet fever in Sunderland during the eleven years in question, only forty-three occurred in the two years of notification.

I have been careful to limit my share in this discussion to purely statistical points, but lest silence should seem to give consent, I wish to say in conclusion that I cannot accept Dr. Biddle's

distinction between single and dual notification as one of much real importance. So far as I know, either system becomes in practice notification by the medical attendant. This is certainly the case in Nottingham, which is nominally under the single system. Not one certificate in fifty reaches me through the hands of the householder, as required by the letter of the law. This modification has been adopted voluntarily by the profession, not upon the initiative of the sanitary authority. Personally I am inclined to think that there was some advantage in disarming opposition at the outset by adopting the "single" system, and to this extent I agree with Dr. Biddle in preferring it to the dual form.—I am, etc.,

ARTHUR WHITELEGGE.

Nottingham, April 6th.

#### OUTDOOR PAUPER LUNATICS.

DR. JAMES MACDONALD, Medical Parochial Officer (Carlisle) writes: In the instructions furnished by the Local Government Board, each poor-law medical officer is requested to make a quarterly report of all outdoor pauper lunatics, so far as he knows them, residing within his district. Printed schedules are supplied him for this purpose, and the items of information desired are specified in tabular form. I wish to ask what is the legal constitution of an outdoor pauper lunatic? In other words, in the event of a case of harmless lunacy, hitherto unreported, coming to the knowledge of a medical officer, what course is he to pursue? May he, on his sole authority, notify the case in his quarterly report, or are the opinion and signature of a justice of the peace also necessary?

\* \* \* We believe the medical officer may include in his list any pauper lunatic not in an asylum, etc., but he must be prepared to make good his assertion that the person so included is really a lunatic, and the guardians are not bound to accept it and pay the fee if they have adequate ground for refusing to accept the statement that so-and-so is a lunatic. It is also obligatory on the medical officer to give notice to the relieving officer if it appears to him that a pauper lunatic ought to be sent to an asylum.

#### UNQUALIFIED ASSISTANTS.

"M.B." writes, with reference to the letter from "Medicus" which appeared in the JOURNAL of March 23rd, to complain that his opponent uses an unqualified relative to underbid him for clubs and private work, and generally to act as the other practitioner's *alter ego* in his poor-law districts. "M.B." considers that "the implied condemnation of the General Medical Council" is a very weak barrier to oppose to such practices. "Why," he asks, "should the Local Government Board require that their officers shall be duly qualified and registered when the work can be handed over to a man who could not have been himself appointed to the post, and who, by the means referred to, poses before the public as 'parish doctor,' and so produces the belief that he is a duly qualified practitioner of medicine?"

\* \* \* The Local Government Board does not recognise the delegation of poor-law work to an unqualified person. Their general consolidated order distinctly requires the habitual personal performance of his duties by a district medical officer, and it also requires that the nominated deputy, in case of unavoidable circumstances, shall be a legally qualified medical practitioner.

#### HEALTH OF ENGLISH TOWNS.

DURING the week ending Saturday, April 6th, 5,813 births and 3,712 deaths were registered in twenty-eight of the largest English towns, including London, which have an estimated population of 9,555,406 persons. The annual rate of mortality per 1,000 living in these towns, which had declined in the three preceding weeks from 21.3 to 19.9, rose again to 20.3 during the week under notice. The rates in the several towns ranged from 12.9 in Brighton, 16.3 in Portsmouth, 17.3 in Leicester, and 17.4 in Halifax to 26.4 in Oldham, 27.8 in Manchester, 30.0 in Preston, and 30.6 in Blackburn. The mean death-rate in the twenty-seven provincial towns was 21.5 per 1,000, and exceeded by 2.7 the rate recorded in London, which was only 18.8 per 1,000. The 3,712 deaths registered during the week under notice in the twenty-eight towns included 464 which were referred to the principal zymotic diseases, against 468 and 421 in the two preceding weeks; of these, 175 resulted from measles, 125 from whooping-cough, 48 from scarlet fever, 47 from diphtheria, 21 from "fever" (principally enteric), and not one from small-pox. These 464 deaths were equal to an annual rate of 2.5 per 1,000; in London the zymotic death-rate was 2.3, while in the twenty-seven provincial towns it averaged 2.7 per 1,000, and ranged from 0.5 in Derby, and 0.6 in Huddersfield and in Halifax to 6.5 in Blackburn, 8.0 in Preston, and 9.6 in Bolton. Measles caused the highest proportional fatality in Bristol, Norwich, Manchester, Preston, Blackburn, and Bolton; scarlet fever in Oldham, Blackburn, and Sheffield; whooping-cough in Bolton, Oldham, Bradford, and Preston; and "fever" in Preston. The 47 deaths from diphtheria recorded during the week in the twenty-eight towns included 26 in London, 4 in Salford, 3 in Manchester, 3 in Liverpool, and 2 in Sunderland. No fatal case of small-pox was registered during the week, either in London or in any of the twenty-seven provincial towns; and only 1 small-pox patient was under treatment in the Metropolitan Asylums Hospitals on Saturday, April 6th. These hospitals contained 535 scarlet fever patients on the same date, against 534 and 541 at the end of the two preceding weeks; there were 37 admissions during the week, against 51 and 36 in the two previous weeks. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 4.4 per 1,000, and was considerably below the average.

#### HEALTH OF SCOTCH TOWNS.

In the eight principal Scotch towns, 841 births and 558 deaths were registered during the week ending Saturday, April 6th. The annual rate of mortality, which had declined from 25.4 to 22.1 per 1,000 in the three preceding weeks, further fell to 21.8 during the week under notice, but exceeded by 1.5 per 1,000 the mean rate during the same period in the twenty-eight large English towns. Among these Scotch towns the lowest rates were recorded in Greenock

and Aberdeen, and the highest in Paisley and Glasgow. The 558 deaths in these towns during the week under notice included 90 which were referred to the principal zymotic diseases, equal to an annual rate of 3.5 per 1,000, which exceeded by 1.0 the mean zymotic death-rate during the same period in the large English towns. The highest zymotic death-rates were recorded in Dundee and Glasgow. The 293 deaths registered in Glasgow included 29 from whooping-cough, 28 from measles, and 6 from diphtheria. Five fatal cases of whooping-cough occurred in Edinburgh, and 4 in Dundee. The death-rate from diseases of the respiratory organs in these Scotch towns was equal to 4.9 per 1,000, against 4.4 in London.

#### HEALTH OF IRISH TOWNS.

DURING the week ending Saturday, April 6th, the deaths registered in the sixteen principal town districts of Ireland were equal to an annual rate of 24.6 per 1,000. The lowest rates were recorded in Wexford and Sligo, and the highest in Armagh and Limerick. The death-rate from the principal zymotic diseases in these towns averaged 1.1 per 1,000. The 174 deaths registered in Dublin during the week under notice were equal to an annual rate of 25.7 per 1,000 (against 26.3 and 27.6 in the two preceding weeks); the rate for the same period being only 18.8 in London and 17.8 in Edinburgh. These 174 deaths included 7 which were referred to the principal zymotic diseases (equal to an annual rate of 1.0 per 1,000), of which 2 resulted from measles, 2 from "fever," and 3 from whooping-cough.

## MEDICAL NEWS.

THE Maharajah of Bettiah has subscribed Rs. 10,000 to the Dufferin Memorial Fund.

A VILLAGE Sanitation Bill has been introduced into the Bombay Legislative Council.

DR. LALLEMENT, Professor of Anatomy in the Medical Faculty of Nancy, died recently of apoplexy.

DR. CHANTRAIN, physician in ordinary to the King of the Belgians, died recently.

PROFESSOR VIRCHOW is said to be engaged in rewriting his great work on *Cellular Pathology*.

DUKE KARL THEODOR, of Bavaria (brother of the Empress of Austria), it is stated, is about to establish in Meran (Tyrol) an eye hospital, of which he will act himself as chief surgeon.

SUCCESSFUL VACCINATION.—Mr. Webster Adams, Medical Officer and Public Vaccinator 6th District, Woodbridge Union, has been awarded the Government grant for efficient vaccination.

A NEW Russian medical journal, entitled *Medizina*, appeared on March 19th. The editor is Dr. S. M. Wassiljew. It is to be published once a week in June, July, and August, and twice a week throughout the rest of the year.

THE German Anatomical Society will hold its third meeting in Berlin at the beginning of October. The German Ophthalmological Society will meet at Heidelberg from September 13th to 15th.

PRESENTATION.—Dr. P. R. Phillips has been presented with an address and purse of sovereigns by his professional brethren in the counties of Carlow and Kilkenny on his resignation of the Leighlinbridge Dispensary District after thirty-eight years' service.

A PHYSICIAN SELF-IMMOLATED.—Diphtheria has made its appearance in some of the districts in West Middlesex. Among the victims we regret to have to record the tragic death of Mr. C. J. Moore, L.F.P.S.Glas., L.S.A. His child was attacked, and he found it necessary to perform tracheotomy, and it was in sucking the tube, which had become blocked, that he contracted the disease, which terminated fatally not only in his own case, but in that of his child also.

METROPOLITAN ASYLUMS BOARD.—At the first meeting of the newly-formed Board, of which Sir Edwin Galsworthy has been re-elected Chairman, the following returns for the fortnight were presented: 99 cases had come into the four hospitals, in place of 129 in the previous fortnight; 102 had been discharged, leaving 644 under treatment, 17 less than a fortnight ago. Of the whole, 549 were cases of scarlet fever, and 40 of enteric, while 46 were cases of diphtheria, and 3 were cases of typhus. No case of small-pox has been received during the fortnight, but two cases remained under treatment.

A PUBLIC meeting of the Hospital Saturday Fund, in furtherance of the penny-a-week collection, was held on Saturday last at Grosvenor Hall, Buckingham Palace Road, Pimlico, under the auspices of the Chelsea, Hammersmith, St. George's, and West-