

if "universalised," and before connecting himself with this society Mr. Wolstenholme advised him to remember the boast of the general secretary that "the average medical pay per member only amounted to 2s. 0 $\frac{1}{2}$ d. per annum, against 4s. per annum in many societies."

It must be remembered that the society declines to pay for the "results of profligacy and drunkenness," either of which elements enters, or might be taken to enter, into a very large proportion of cases of illness and the medical officer has the duty of reporting the cause of the illness. We are sure that Mr. Wolstenholme's criticisms—or rather statements—taken in conjunction with our own remarks in our issues of Dec. 11th, 1897, Jan. 1st, 1898, and Feb. 19th, 1898, will convince anybody that the attitude of the Manchester Medical Guild towards the National Deposit Friendly Society was perfectly justified.

THE WALSALL MEDICAL SOCIETY.

We have received a letter from a correspondent detailing certain occurrences in connexion with this society and enclosing a copy of a letter which a member of the Walsall Medical Society is said to have addressed to the secretaries of sundry friendly societies. The letter in question is certainly not one which should have been written, but we cannot advise our correspondent as to any action which might be taken in the matter.

PROVIDENT DISPENSARIES IN MANCHESTER.

At a meeting of the Manchester and Salford Provident Dispensaries Association held on March 15th a proposal was made that any district dispensary might increase the charge for a prescription from one penny to twopence. Mr. Broadbent and Dr. Gallard opposed this resolution on the grounds that by raising the fees they would eliminate the poorer members who would apply for relief and confine the benefits of the association to those who were really able to pay the ordinary fees of a medical man. The resolution was passed and Mr. Broadbent thereupon intimated that he had done with the association. The chairman said that any person, medical officer or not, could complain if they thought that anyone who was not entitled to do so was receiving aid from the association. Thereupon the case would be investigated by an independent authority. He denied that the association was abused in the manner suggested by Mr. Broadbent.

THE FRIENDLY SOCIETIES' MEDICAL INSTITUTE AT GREAT YARMOUTH.

The first annual meeting of the managing committee of the Great Yarmouth Medical Institute was held on March 25th at the Friendly Societies' Hall. The secretary reported that the "steps taken by the several societies to establish a medical institute have proved a complete success." He also stated: "We shall be no doubt some time before we are free of debt." There were 22,885 attendances at the institute, 16,244 prescriptions had been dispensed, and 8919 visits had been paid by the medical staff, which apparently numbers two practitioners. The balance-sheet, according to the report in the *Eastern Daily Press* is as follows:—
Assets: cost of alterations and fittings, £163 1s. 9d.; furniture, gas, electric light, &c., £94 9s. 1d.; drugs, surgical instruments, dispensary requisites, &c., £101 19s. 6d.; cash to balance at bank, £10 0s. 1d.; cash debit balance, £153 12s. 1d.; total, £523 2s. 6d. Liabilities: due to Messrs. Barclay and Co., £300; loans, £160; due to tradesmen, £38 2s. 6d.; due to treasurer's and secretary's salaries, £25; total, £523 2s. 6d. As far as we can see the medical officers and the dispenser get nothing at all and sundry other people are owed a good deal. The balance-sheet does not seem financially satisfactory.

CHELTEMHAM GENERAL HOSPITAL.—The annual meeting of this hospital was held on March 16th under the presidency of Colonel Croker-King. The financial statement showed that the receipts for 1897 were £5015 and that the expenditure amounted to £5852, which was increased to £6558 by the expenses of the branch dispensary. There were 904 admissions of in-patients and 8749 out-patients were attended, being an increase of 232 over the previous year.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL INSPECTORS OF THE LOCAL GOVERNMENT BOARD.

*Upon the Occurrence of Certain Cases of Enteric Fever in Six Sanitary Districts of Essex and Suffolk and upon Oysters in relation thereto,*¹ by Dr. G. S. BUCHANAN.—This inquiry was ordered by the Local Government Board as a result of a report received from Dr. J. W. Cook, medical officer of health of certain urban and rural districts in East Essex. Dr. Cook entertained suspicions "that enteric fever recently occurring among a number of persons resident within the area under his charge had resulted from eating oysters brought into his district from outside sources. Also Dr. Cook stated in regard of certain other recent sufferers by enteric fever not resident in his district that allegation had been made as to their having become infected similarly by eating oysters partaken of within one of the districts for which he acts as medical officer of health. In all the above instances in which oysters had been under suspicion of having caused enteric fever, these shellfish had come, so far as Dr. Cook had been able to ascertain, from Brightlingsea, an urban district outside the area for which Dr. Cook is medical officer of health." The matter thus involved an inquiry over an extensive area. The places in which fever cases were investigated were comprised in six districts—namely, Clacton-on-Sea, Walton-on-the-Naze, Haverhill, Braintree, Lexden and Winstree, and Tendring. In all, 26 cases were inquired into. Dr. Buchanan's procedure was in each instance to make certain of the accuracy of diagnosis, of the date of onset of illness, of the facts and dates as regards oyster eating, and lastly of the "conditions, irrespective altogether of oysters, to which the sufferer had been subjected antecedent to attack and which could be thought of as possibly concerned with the causation of his fever." All 26 cases were ascertained to have in fact suffered from enteric fever and all had consumed oysters shortly before the onset of illness. Space does not permit an account of the circumstantial evidence obtained in each case. We may, however, briefly refer to the history of an excursion of some 250 young people from Haverhill, a town eighteen miles from Cambridge, to Clacton-on-Sea on Aug. 23rd. Between Sept. 7th and 10th no fewer than 9 of these excursionists were attacked by enteric fever. No cases occurred in Haverhill among persons who had not been on the excursion and this town had during July and August been altogether free from the disease. As the evidence was thus unmistakable that infection had in these cases been contracted on the day of the excursion, articles of food and drink consumed on that occasion by the sufferers were inquired into in detail. All the 9 patients were found to have eaten oysters, but as far as could be ascertained they had partaken of no other article of food or drink in common. 8 of the 9 had, however, eaten ice-cream. But in Braintree, in Essex (where there had been no cases of enteric fever since the beginning of the year), 2 persons, who also had made a day's visit to Clacton-on-Sea on the date in question, Aug. 23rd, fell ill with enteric fever on Sept. 6th. Neither of these persons had eaten ice-cream at Clacton-on-Sea, while both had eaten oysters there. In the course of a summary of this part of the inquiry Dr. Buchanan states the facts obtained in this wise:—
"Among inhabitants of, and visitors from certain districts to, the limited area comprising the town of Clacton-on-Sea, Walton-on-the-Naze, and the parish of St. Osyth, the total of persons heard of as having been attacked by enteric fever during the months in question (i.e., June 1st to Oct. 31st) was 26. All these 26 persons had consumed oysters, in each instance about a fortnight before the onset of illness—on one of the few days, that is, on which, at the ordinary reckoning of the incubation period of enteric fever, they must be thought to have received their infection." In view of the fact that a not inconsiderable proportion of the population in question may be considered to be addicted to oyster-eating the possibility that this circumstance was due

¹ London: Eyre and Spottiswoode, East Harding-street. Edinburgh: John Menzies and Co. Dublin: Hodges, Figgis, and Co. 1898. Price 9d.

to a mere series of coincidences requires to be discussed. But if so a remarkable coincidence must have occurred in 100 per cent. of cases. "It was, indeed, manifest," Dr. Buchanan states, "that I could find no warrant for invoking such an extraordinary freak of chance in explanation unless I were in position to show that some agency or agencies of infection other than oysters had with great likelihood operated to produce all, or at least a majority, of the 26 cases in question." Evidence of the operation of agencies of infection other than oysters proved, however, in every case to be entirely negative, and the conclusion is therefore drawn that "apart from any question of the origin of the particular oysters implicated, or their history prior to reaching the persons consuming them, the facts appeared to afford very definite indication that in these 26 cases oysters had operated as the agency of infection." The second section of the report is a record of inquiries of retail oyster-vendors and middlemen with a view to tracing the implicated oysters to wholesale merchants. In at least 25 of the cases it transpired that the shellfish in question had come from Brightlingsea, while in 21 instances they could be traced to particular oyster-merchants who own layings in Brightlingsea Creek. The third section describes the oyster-layings in this creek and their liability to pollution by sewage. We learn here that matters have not amended since Dr. Bulstrode in 1895 demonstrated the risk to which oysters laid on the Brightlingsea foreshore are liable. The position of the various layings in relation to the outfalls of the Brightlingsea sewers, which without any preliminary treatment discharge their contents into the tidal water of the creek, is illustrated by a map which itself is enough to indicate the risk involved by the present state of affairs. The next step was inquiry as to the particular oyster-merchants believed to have supplied implicated oysters. Dr. Buchanan then found that in all but one doubtful instance oysters supplied by these merchants came from one or other of two layings situated on a part of the foreshore conspicuously exposed to sewage pollution. Finally, inquiries made as to the existence of enteric fever in Brightlingsea during the period in question left "no doubt that from time to time between April and November Brightlingsea sewage contained admixture of infectious matter derived from enteric fever patients." Dr. Buchanan discusses with caution the likelihood that from time to time during the period in question persons other than those whose cases he investigated had swallowed infectious Brightlingsea oysters, and so had been exposed to definite risk of contracting enteric fever. He finds some grounds for inference that such has actually been the case.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns 6998 births and 4635 deaths were registered during the week ending April 2nd. The annual rate of mortality in these towns, which had been 21·8 and 20·2 per 1000 in the two preceding weeks, rose again last week to 21·5. In London the rate was 21·8 per 1000, while it averaged 21·4 in the thirty-two provincial towns. The lowest rates in these towns were 14·7 in West Ham, 15·3 in Huddersfield, 15·5 in Croydon, and 15·6 in Gateshead; the highest rates were 24·4 in Leeds, 24·9 in Birkenhead, 25·6 in Swansea, and 30·7 in Liverpool. The 4635 deaths included 538 which were referred to the principal zymotic diseases, against 555 and 550 in the two preceding weeks; of these, 226 resulted from measles, 126 from whooping-cough, 64 from diphtheria, 49 from scarlet fever, 39 from diarrhoea, and 34 from "fever" (principally enteric). No death from any of these diseases was recorded last week in Blackburn; in the other towns they caused the lowest death-rates in Preston, Nottingham, Portsmouth, and Cardiff, and the highest rates in Newcastle-upon-Tyne, Bristol, Leicester, and Brighton. The greatest mortality from measles occurred in Newcastle-upon-Tyne, Swansea, Halifax, Leicester, Bristol, and Brighton; from scarlet fever in Birkenhead; and from whooping-cough in Plymouth and Salford. The mortality from "fever" showed no marked excess in any of the large towns. The 64 deaths from diphtheria included 45 in London, 4 in Birmingham, 3 in Leicester, and 3 in Sheffield. No fatal case of small-pox was registered during the week under notice either in London or in any other of the large towns; and

no small-pox patients were under treatment in the Metropolitan Asylums Hospitals on Saturday last, April 2nd. The number of scarlet fever patients in these hospitals and in the London Fever Hospital at the end of the week was 2377, against 2445, 2419, and 2371 on the three preceding Saturdays; 239 new cases were admitted during the week, against 197, 255, and 191 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 430 and 402 in the two preceding weeks, rose again to 451 last week, and were 39 above the corrected average. The causes of 53, or 1·1 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bristol, Cardiff, Oldham, Sunderland, and in eleven other smaller towns; the largest proportions of un-certified deaths were registered in West Ham, Liverpool, Bradford, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 24·1 and 22·9 per 1000 in the two preceding weeks, rose again to 24·2 during the week ending April 2nd, and was 2·7 per 1000 above the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 15·3 in Greenock and 20·0 in Aberdeen to 26·2 in Paisley, and 30·6 in Perth. The 729 deaths in these towns included 23 which were referred to measles, 21 to whooping-cough, 17 to diarrhoea, 12 to scarlet fever, 5 to "fever" (principally enteric) and 4 to diphtheria. In all, 82 deaths resulted from these principal zymotic diseases, against 74 and 73 in the two preceding weeks. These 82 deaths were equal to an annual rate of 2·7 per 1000, which was slightly above the mean rate last week from the same diseases in the thirty-three large English towns. The fatal cases of measles, which had been 17 and 25 in the two preceding weeks, declined again to 23 last week, of which 20 occurred in Glasgow and 3 in Edinburgh. The 21 deaths referred to whooping-cough were within 4 of the number recorded in the preceding week and included 14 in Glasgow. The fatal cases of scarlet fever, which had been 10 and 7 in the two preceding weeks, rose again to 12 last week, of which 8 occurred in Glasgow, where 4 of the 5 deaths referred to "fever" were also registered. The fatal cases of diphtheria, which had declined from 7 to 3 in the three preceding weeks, were 4 last week, of which 2 occurred in Glasgow. The deaths from diseases of the respiratory organs in these towns, which had been 161 and 175 in the two preceding weeks, further rose to 178 last week, and were 32 above the number in the corresponding period of last year. The causes of 52, or more than 7 per cent., of the deaths in the thirty-three towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had declined from 37· to 29·5 per 1000 in the three preceding weeks, rose again to 35·1 during the week ending April 2nd. During the thirteen weeks of the quarter ending on Saturday last the death-rate in the city averaged 32·4 per 1000, the rate during the same period being 21·7 in London and 20·3 in Edinburgh. The 235 deaths registered in Dublin during the week under notice showed an increase of 37 upon the number in the preceding week, and included 20 which were referred to the principal zymotic diseases, against 17 and 11 in the two preceding weeks; of these, 5 resulted from whooping-cough, 4 from diphtheria, 4 from "fever," 4 from diarrhoea, 3 from scarlet fever, and not one from small-pox or measles. These 20 deaths were equal to an annual rate of 3·0 per 1000, the zymotic death-rate during the same period being 3·0 in London and 0·9 in Edinburgh. The deaths referred to whooping-cough, which had been 3 in each of the two preceding weeks, rose to 5 last week. The 4 fatal cases of diphtheria considerably exceeded the number recorded in any recent week. The deaths referred to different forms of "fever," which had been 7 and 6 in the two preceding weeks, further declined to 4 last week. The 235 deaths in Dublin last week included 37 of infants under one year of age, and 57 of persons aged upwards of sixty years; the deaths both of infants and of elderly persons exceeded the numbers recorded in the preceding week.