

newspapers, or otherwise, and at the expense of the offender. Advertisements of this kind frequently appeared in the Dublin newspapers. In the front page of the *Irish Times* for February 27th, 1872, the following advertisement appears, much "displayed" and in large type:—

PUBLIC ADVERTISEMENT.—ADULTERATION OF MILK.—At the Northern Police Court, on Saturday, the 17th of February, 1872, John Doyle, dairyman, of 127 Dorset-street, was Fined Five Pounds for Selling Milk adulterated with fifty per cent. of water.

And it being his second conviction for a similar offence, the publication of this advertisement was ordered by the magistrate who heard the case. In addition to the above penalty, cost of advertisement to be defrayed by said John Doyle.

IPSWICH.

Dr. G. S. Elliston, in his annual report for 1892, describes an outbreak of small-pox, apparently caused by importation of infection from Yarmouth.

Small-pox.—No death has been registered from this disease for the last eight years, but early in April it was introduced into the town from Yarmouth, in a manner so peculiar that it became the subject of a long inquiry before the borough coroner. It appeared that a girl had been under treatment for typhoid fever in the Yarmouth Fever Hospital, in which were also cases of small-pox, and when discharged was brought home to Ipswich by train. The journey was too much for her, and she died a few hours after her return. About twelve to fourteen days afterwards an inmate of the house, and a neighbour who came in to help, both developed small-pox, and were removed to the fever hospital. In this outbreak there were seven cases, occurring in four houses; all were safely isolated in the fever hospital, and complete disinfection was carried out. Re-vaccination was offered, but accepted in only a few cases; it appears to have gone out of favour altogether in Ipswich. This is much to be regretted, as there is no doubt that re-vaccination affords an almost absolute safeguard against small-pox when it breaks out in a small house.

CAMBRIDGE.

That a town of the imperial importance attaching to Cambridge should have defective isolation accommodation is a source of some surprise, but that this is the case is clear from Dr. Anningson's annual report, in which he quotes a special report made by him to the Sanatorium Committee. This report states the facts in a trenchant manner, and thus completely throws the onus of any further default upon the sanitary authority. The building of a new administrative block does not by any means completely meet the requirements of the case.

Deficient Isolation Accommodation.—“Wards Nos. 1 and 2 at the Infectious Diseases Hospital are at the present time both occupied by cases of scarlatina (nine in number). There are left, therefore, three or four beds at the utmost available for other cases of the same disease. The nurse's room

of No. 3 Ward is occupied by a case of typhus fever. The committee will, therefore, understand that the only accommodation left at their disposal for the isolation of cases of cholera, diphtheria, and small-pox, also for typhoid fever, if Addenbrooke's General Hospital should not be in a position to take in such, is the main body of No. 3 Ward.

“The committee will further understand that this arrangement is by no means satisfactory, and will require much caution; and that the first case admitted of any one of the above diseases will leave absolutely no accommodation at all for the remaining two or three diseases.

“Furthermore, there is no accommodation for another nurse beyond the wards occupied by patients, and the matron has been obliged to give up her own sleeping apartment for the accommodation of a night nurse for rest by day; such an arrangement as this is not creditable to the institution, and should not be tolerated for a day longer than urgent necessity demands. In the presence of this serious aspect of affairs and the probable length of time needful for the extension of buildings, I very strongly advise the committee to hire a house which is now to let, situate directly opposite the hospital grounds. I have examined the house and think it well suited for the purpose of nurses and convalescents of one disease. If this house were acquired it would at once set free No. 2 Ward for any other cases.”

The authority subsequently decided on the erection of a new detached administrative block at a cost of £1,600.

THE PUBLIC HEALTH AND THE PUBLIC.*

By P. BOOBYER, M.D., M.O.H. for Nottingham.

(Continued from page 50.)

DR. BOOBYER further referred to the gross overcrowding and neglect of ventilation so commonly found in the dwellings of the poor, in schools (especially in small class-rooms), and in factories and workshops, and cited many examples gathered from his own recent experience. He gave it as his opinion that much of the existing evil could be readily obviated if the people most affected were sufficiently instructed to understand the advantage to be gained by an alteration of the conditions under which they lived. He next alluded to the dirty habits of the poor in their homes, and showed how these habits, and the ignorance from which they sprang, as much as any other factor, affected the spread of infectious diseases among them. After touching upon the questions of the disposal of house refuse, and of the dry as opposed to the water carriage system of sewage disposal, in connection with the ignorance and inertia of the masses, he spoke of the total lack of knowledge of elementary dietetics among the poor, which led, he said, not

*Address at opening of current Session of Midland Branch.

only to the injury of their health, but also to a waste of their scanty resources.

He said that he could not conclude such a diatribe against popular ignorance without suggesting some scheme for its abatement. As most of what he had already said was sufficiently well-known to thoughtful and observant people, so that which he had to suggest had already been either partially effected or devised. But what was specially required was co-operation among educating bodies and authorities, and systematic organisation of schemes of instruction, and until this was in some measure attained he feared that but little real advancement was to be hoped for.

The scheme he would suggest might be broadly codified as follows:

1. Special graduated instruction in hygiene in schools of all classes.
2. Technical hygienic instruction to craftsmen of various classes in towns and counties organised by the Town and County Councils.
3. Instruction in hygiene to persons of education and leisure in both sexes with the view of qualifying them as lecturers to adult audiences.
4. More or less popular instruction to all comers afforded by the latter class of teachers, and rendered accessible to all by the frequent delivery of lectures in populous districts of towns and counties.

STAFF OF SANITARY INSPECTORS IN LONDON.—Dr. Warry, in his annual report on the sanitary condition of the Hackney district, gives a valuable table from which the relative strength of the inspectorial staff of each district or vestry in London can be gathered. For the whole of London (excluding Hackney) the average number of inhabitants per inspector is 22,243; the number of houses per inspector, 2,908. Of the northern districts of London, Hackney has the smallest proportional staff, one inspector for every 45,906 inhabitants, St. Pancras coming next with one inspector for every 29,304 inhabitants. Of the eastern districts, St. George's-in-the-East has one inspector to 15,182, and Shoreditch one to 31,001 inhabitants. Of the southern districts, Wandsworth is most efficiently manned with one inspector to every 13,077 inhabitants, Plumstead least efficiently (one to 29,513 inhabitants), and Battersea next (one to 21,494). Of the two western districts, Westminster had one inspector to 18,508 inhabitants (or to 1,918 houses); Kensington, one inspector to 27,720 inhabitants (or to 3,667 houses). The City heads not only the central districts but the whole of London with one inspector to 3,409 inhabitants (or one to 522 houses), St. Giles coming next with one inspector to 7,955 inhabitants, and Holborn last with one inspector to 16,751 inhabitants. The superiority of the City staff is not so great as these figures would imply, as an enormous number of business premises not slept in require sanitary inspection.

RIVER POLLUTION AND SEWAGE DISPOSAL.

By GEO. REID, M.D.,

M.O.H. to the Staffordshire County Council.

THE letter from Dr. Jepson which appears in this issue of the journal calls attention to a subject which, as he says, at the present time is engaging the attention of many sanitary authorities and their advisers throughout the country. The Local Government Act of 1888 imposes the duty on county councils of enforcing the provisions of the Rivers Pollution Prevention Act, 1876, and the supplementary Act of 1893 makes it clear that long custom as regards the discharge of sewage into streams in no way relieves local authorities of their responsibilities. The question as to what is the best method of sewage disposal is not one which admits of a uniform answer; it is governed by local conditions, as well as the nature of the sewage which has to be dealt with. Most unbiased authorities on the subject, however, are agreed that where land treatment is possible it is likely to produce more successful results than any form of artificial filtration. It is also generally admitted that whether the method of land treatment is by broad irrigation or intermittent downward filtration, the sewage should invariably be clarified by precipitation before it is applied to the land. If the statements of promoters of the various methods of chemical precipitation and filtration recently introduced could be accepted, the solution of the problem would be extremely simple, but the experience afforded by failures in the past—which have resulted in large sums of money being thrown away—points to the necessity of extreme caution on the part of authorities before they commit themselves to any particular system of sewage disposal. Appearances are very misleading, and inexperienced persons are apt to form too favourable an opinion of an effluent which, although perfectly clear, may be chemically very impure and quite unfit to be discharged into a stream. For this reason it is most desirable that committees of local authorities when visiting sewage works, with the view of assisting them to form an opinion as to the efficacy of various systems of disposal, should be accompanied by capable advisers who have made a special study of the subject. Even then it is difficult to arrive at the truth, as it is only by obtaining continuous records of analyses that the chemical purity of any effluent can be ascertained, and this unfortunately is seldom possible. It is a question, therefore, whether real good results from these visits of inspection, and, in all probability, sanitary authorities would be less likely to make mistakes if, in place of endeavouring to form an opinion for themselves, they would seek the joint advice of a reliable engineer and a skilled chemist who has given special attention to the question of sewage disposal.

The investigations into the question of river