the two eggs, had been grown for six weeks in urine in the doubly covered glass bottle. An acute abscess, with its usual accompaniments, resulted in all these instances. Thus the cocci, diluted so that (assuming an egg to contain thirteen fluid-drachms) only 1-146,016,000th of a drop of the original pus could have been injected, produced an abscess—a result inexplicable save on the assumption that they were the sole cause. The former observations on the growth, development, and movements of the micrococci in pus were repeated, and controlled by those contained in the egg-albumen.

Experiments on eggs by the introduction of pus containing other forms of organisms, such as bacteria and bacilli, showed that these latter also grew under such circumstances, but produced extreme putrefaction in the eggs, and blackened their red portion.

The behaviour of micrococci in wounds and ulcers was now explained. They grow badly where exposed to the action of the air, and in this imperfect condition do not reproduce themselves with the rapidity necessary for the exhibition of their noxious influences. They probably also lose for a time, when grown under such circumstances, a considerable portion of their activity and virulence. When placed in more favourable conditions, as when removed from the exposed urine to the sheltered egg, they speedily reacquire their ancient powers of inducing disease. This seems also to explain their being so prone to cause blood-poisoning in deep and sinuous wounds, as in those produced by a compound dislocation or removal of the thyroid gland.

To sum up: Micrococci do not produce putrefaction. They develop best when removed from the atmosphere. The preceding facts prove that they are able, under suitable conditions, to give rise to blood-poisoning, to acute inflammation, and to suppuration.

V.—CONCLUSION.

Little remains to be added under this head. The more these things are reflected on, the more pregnant they become with explanations and suggestions regarding many of the obscure facts in connection with the processes of inflammation and blood-poisoning. They tend to confirm the supposition of Kocher, that acute inflammations are due to micro-organisms; they suggest many probable hypotheses to explain the difficulties occurring in the study of pyæmia, septicæmia, gonorrhœal rheumatism, etc.; the different virulence of gonorrhœal balanitis and gonorrhœal urethritis; the occurrence of mammary abscess and pelvic suppurations after childbirth; the causes and varieties of dissection and poisoned wounds; the success attending the open-air treatment of wounds; the causes of surgical fever; and many other features of disease that it would be premature to discuss here.

It is not intended to be conveyed by anything that has been said, that micrococcus is the only organism which produces such results: the other organisms fall to be investigated in their turn, and much yet remains to be done, for the subject is only in its infancy.

I cannot close this paper without expressing my thanks to Professor Ewart and Dr. Walker of Aberdeen, for their counsel and assistance, and my sincere sense of the obligations I am under to the Committee of Scientific Grants, and through them to the British Medical Association, for the aid they have generously given me, without which aid I had previously found it impossible to grapple with the subject of micro-organisms in surgical diseases, save in a most imperfect way.

TRUE AND FALSE DYSPEPSIA.—In a communication made to the Paris Academy of Medicine on January 11th, M. G. Sée set forth his views on the diagnosis of true and false dyspepsia. After having noted that a dyspepsia is a true one when the digestion undergoes a permanent chemical disturbance, he asserted that a number of invalids show the same apparent phenomena as dyspeptics, without experiencing the unpleasant effects or the serious results of chronic dyspepsia. The morbid conditions designated pseudo-dyspepsia by M. Sée, which assume the forms of dyspepsia, are localised in three organs—the intestines, the liver, or the stomach itself. These conditions comprise five types, which were successively passed in review by the writer—viz., simple atony of the intestine with habitual constipation and permanent tympanic distension; atony of hæmorrhoidal or of mechanical origin; atony followed by muco-membranous enteritis; asthenic condition of the intestine, due to diminution of the biliary secretion; spasmodic atony of the stomach. M. Sée described, as a fifth type of pseudo-dyspepsia, spasmodic atony of the stomach, better known under the name of gastralgia or gastric neuralgia. He held that gastralgia has no connection with neuralgia, neurosis, nor hyperæsthesia; it is an additional motor disturbance, and not one of sensibility. After having sketched out the diagnosis of spasmodic atony and dyspepsia, M. Sée ended his communication by the conclusion that the atonic patient suffers constantly and digests well; whilst the victim of dyspepsia digests badly and suffers frequently.

REPORT ON LOCAL LEGISLATION AS TO INFECTIOUS DISEASES.

PRESENTED TO THE PARLIAMENTARY BILLS COMMITTEE OF THE
BRITISH MEDICAL ASSOCIATION

BY ERNEST HART,
Chairman of the Committee.

Provisions as to Infectious Disease in the Local Bills promoted this Session by the Sanitary Authorities of Aberdeen, Barrow-in-Furness, Birkenhead, Bradford, Reading, Salford, and Stalybridge.—Need for Caution in granting Exceptional Powers as to Domestic Quarantine of Infectious Disease.—Notification of Infectious Cases.—Regulations as to Infected Persons, Places, and Things.—Provision of Hospitals, and Compulsory Removal thereto.—Disinfection of Premises, etc.—By-Laws.—Height of Rooms.—Unnecessary Clauses in Local Bills.—Effect of Local Changes in General Statute Law.—Suggestion for Conference with President of Local Government Board.

Provisions as to Infectious Disease in Local Bills of this Session.—In a report bearing the same title as the present, which I presented to the Parliamentary Bills Committee on the 2nd of February, 1880, I undertook to criticise, from a medical and sanitary view-point, certain proposals made by a number of local authorities in the North of England for the alteration of the Public Health Act, and the addition thereto, for the particular districts concerned, of a number of more or less stringent provisions designed for the more effectual checking of the spread of infection. Of the six local Bills dealt with in that report, five have passed into law substantially as originally introduced; and, with regard to the towns affected by these Local Acts, the general public health-law of the country must, therefore, no longer be regarded as unreservedly applicable. The growing desire of local authorities to emancipate themselves from this general law is a matter for very serious consideration; and I make, therefore, no apology for laying before the Committee, at as early a date as possible, the further alterations now proposed by eight other sanitary authorities (Aberdeen, Barrow-in-Furness, Birkenhead, Bradford, Lincoln, Reading, Salford, and Stalybridge) in the local Bills which will be submitted for the approval of Parliament during the present session. The nature and extent of these alterations will be best judged from an abstract of the principal provisions in each of the local Bills in question.

The *Aberdeen* Bill provides that, in order to secure more prompt action in dealing with infectious diseases, every medical practitioner practising within the city shall, within twenty-four hours of the same coming to his knowledge, report to the Town Council every case of cholera, small-pox, measles, scarlet fever, diphtheria, typhus fever, enteric fever, and whooping-cough occurring in his practice, under a penalty not exceeding forty shillings (A).* For every case so reported, a medical practitioner is to be paid a sum not exceeding two shillings and sixpence; and forms, ready stamped for postal transmission, are to be provided by the corporation for the medical reports. The local authority are empowered to alter or vary, from time to time, the list of diseases of which such reports are to be sent. Offence against this clause is punishable by a fine not exceeding forty shillings; and, in case of a continuing offence, by a further penalty not exceeding twenty shillings for each day during which the offence continues.

The *Barrow-in-Furness* corporation, following the example set by Jarrow in 1878, desire power (B) to provide temporary shelter or house accommodation for the members of a family in which infectious disease has appeared; (C) to provide or contract for nurses for attendance upon persons suffering from infectious disease (and to charge any reasonable sum for any nurse so provided); (D) to order public or private day-schools, or other places of public resort situate in neighbourhoods affected by infectious disease, to be temporarily closed or suspended; (E) to order any shop, dairy, or other place for the sale or storage of articles of food or drink, clothing, or other articles liable to retain infection, to be temporarily closed, whenever, from the appearance of infectious disease in such shop, dairy, or other place, or in rooms in connec-

* For greater convenience, I have given to each of the clauses to which I shall have to refer a distinctive letter, so that it can be more easily traced.

tion therewith, such action appears to the corporation to be necessary; and to take all such means as seem to them desirable for preventing the entrance of the public into such place, or the issue from it of food, clothing, or other articles; (F) In case of the existence of any infectious disease in any house within the borough, the corporation are empowered to issue an order declaring such house or any part of it an infected place; and, until such order has been superseded by another certifying it free from infection, no person occupying or living in any such house or part of a house may continue at any in-door occupation which necessitates the handling of any clothing, food, or article likely to retain infection, which is intended for sale, or for the use of persons belonging to another family; nor may any bedding, clothing, or other articles liable to retain infection be removed from such house, or part of a house, without previous disinfection, or without proper precautions, for the purposes of being disinfected or destroyed. When the room or rooms occupied by the persons suffering from such disease can be effectually separated, and are so separated from the other parts of the same house or building, the rooms so occupied only are to be deemed to be affected by such order and regulations. The corporation are to make compensation to any person who has sustained loss by reason of the exercise of any of the foregoing powers, but such compensation is to be in regard only of direct material and pecuniary loss, and not in respect of any consequential loss or damage. Two clauses are, moreover, copied from the Huddersfield Act of last session; the one (G) providing that no person dwelling in any infected house or part of a house shall work at any other place in the same room with healthy persons, except with the written permission of the medical officer of health, and after disinfection of the person and clothing; the other (H), prohibiting a nurse who is attending on any person suffering from infectious disease, from either at the same time or afterwards attending as nurse on any other person, except under the same conditions. Wilful offence against this section is punishable by a penalty not exceeding five pounds; and, in the case of a continuing offence, by a further penalty not exceeding forty shillings for every day during which such offence continues.

The clause relating to the notification of disease (A¹) provides that, when any inmate of any building used for human habitation is suffering from infectious disease (defined to include small-pox, cholera, scarlet fever, scarlatina, diphtheria, typhus fever, enteric or typhoid fever, and puerperal fever) the occupier or person having the management or control of such building, or if the inmate so suffering be himself the occupier, then the person in charge of such inmate, is, as soon as he becomes aware of the existence of such disease, forthwith to give notice of the case to the medical officer of health. If the inmate be not a member of the family of such occupier or person, the head of the family (resident in such building) to which such inmate belongs, or if there be no such head, or if such head be prevented by illness, then the sufferer himself (unless prevented by reason of his disease or of youth), is, on becoming aware of the existence of such disease, forthwith to give notice to such occupier or person. Every medical practitioner attending on or called in to visit a case of these diseases is, on becoming aware of the case, forthwith to send to the medical officer of health a certificate stating, according to forms supplied to him gratuitously by the corporation, the name of such inmate, the situation of such building, the name of such occupier or person, and the nature of the disease from which such inmate is suffering. For every such certificate, a fee of one shilling and sixpence is payable by the corporation. Any person who wilfully and without reasonable cause offends against this section is liable for every such offence to a penalty not exceeding forty shillings.

The corporation may from time to time, by resolution made on the report of the medical officer of health and sanctioned by the Local Government Board, order that any other infectious or contagious disease shall be deemed an infectious disease for the purposes of the Act. Any such order may be permanent or temporary only, and if temporary the period during which it is to continue in force is to be specified, and the corporation is to give public notice of the resolution by advertising it in the local newspapers (A²).

Somewhat unnecessarily, since they are already enabled to do so under Section 131 of the general Act, the corporation take power (I) to provide suitable hospitals for the isolation of persons suffering from infectious disease. Following the example set by Warrington in 1879, the bill further enacts (J) that, on the certificate of the medical officer of health or other legally qualified medical practitioner that any person within the borough is suffering from infectious disease, and is without proper lodging or accommodation enabling the case to be properly isolated so as to prevent the spread of the disease, or to be properly treated, the corporation may give notice to the head of the family (resident in the same building) to which the person so suffering belongs, requiring his removal forthwith to such hospital, or to

any place of temporary accommodation provided under the local Act. If there be no such head of the family so resident, or if such head of the family cannot be found, the notice may be given to the sufferer. If the person to whom the notice is given consent, the corporation may forthwith remove the sufferer to the hospital or place of accommodation; but if the person to whom the notice is given refuse to consent to such removal or to be removed, or if he be by age, disease, or otherwise, incapable of giving consent, any justice may, on the application of the corporation, make an order for the removal of the sufferer. Such order may be addressed to an officer of the corporation or to any constable of the borough; and any person who disobeys or obstructs its execution is liable to a penalty not exceeding ten pounds, and to a further penalty not exceeding twenty shillings for every day or part of a day during which the disobedience or obstruction continues. Any expense incurred by the corporation in respect of the conveyance of persons to the hospital or place of accommodation, and his maintenance and treatment therein, may be recovered from him or from his personal representatives in the event of his death therein; or the corporation may, if they see fit, themselves defray such expenses or any part thereof.

The corporation have also adopted two clauses which first appeared in the Oldham Act, and another that appeared in the Huddersfield Act of last year. The first (K) provides that, if any person die in the fever hospital or place of temporary accommodation from infectious disease, and if the medical officer of health certify that, in his opinion, it is desirable, in order to prevent the risk of spreading infection, that the dead body shall not be removed from the hospital or place except for the purpose of being forthwith buried, it shall not be lawful for the dead body to be removed except for that purpose; and when the body is taken out, it is forthwith to be carried directly to some cemetery or place of burial, and there buried. Any person wilfully offending against this section is liable to a penalty not exceeding fifty pounds. The second (L)—borrowed from Huddersfield—provides that any person who hires a public conveyance other than a hearse for the conveyance of the corpse of a person dead of infectious disease, without previously notifying to the owner or driver of such conveyance that the death has been due to infectious disease, and any owner or driver of such a conveyance used for this purpose who does not immediately afterwards disinfect such conveyance, is liable to a penalty not exceeding five pounds. The third (M) gives power to the corporation to make by-laws for regulating the mode of conveyance for the purposes of interment of the body of any person who has died of an infectious disease; for causing the destruction of articles infected: for compelling the disinfection of articles and places, and prescribing the mode of such disinfection; for preventing the sale of infected articles; for giving power of entry for disinfecting purposes; for preventing the use of public conveyances by persons suffering from infectious diseases; for preventing infectious rubbish from being thrown into ashpits or ash-tubs; for ensuring the proper flushing of water-closets and for requiring water to be properly laid on to water-closets. For every offence, a penalty not exceeding five pounds is imposed, and for a continuing offence a penalty not exceeding that sum for every day or part of a day during which the offence continues.

The *Birkenhead* clauses are, with one quite unimportant exception, exactly similar to those introduced into the Bill of last year, which was not proceeded with. Notice is to be given to the corporation by the occupier, or other person having the control of a house, of any case of small-pox, fever, cholera, or any contagious or infectious disease occurring therein, unless a duly qualified medical practitioner has been called in (A₃). In this case, it is the duty of the medical man to give particulars to the corporation, who will pay him a fee of two shillings and sixpence for each certificate given. Offence against this enactment (unless ignorance can be proved by the offender) is punishable by a fine not exceeding £10. The corporation are empowered (N) to make by-laws regulating the situation and arrangements of dairies, shippens, and cowsheds, providing for their inspection by an officer of the corporation, and ensuring the purity of their water-supply. The *Birkenhead* corporation also adopt the Jarrow clauses (B, C, D, E, F) in their entirety, and take power (I¹), in the event of the prevalence of any infectious disease, to establish a temporary hospital or ward for the treatment of the disease, to provide proper fittings, and to engage medical attendants, nurses, etc.; or to make an agreement with the managers of a hospital for the reception of such cases, and pay the necessary costs and expenses out of the borough fund.

In the *Bradford* Bill, so much of the Jarrow clauses are taken as relate to the temporary closing of schools (D) [not of other places of public resort], and of shops, dairies, or other places for the sale or storage of provisions, clothing, or other articles (E). In order that due notice may be given of the occurrence of cases of small-pox, cholera,

typhus, typhoid, scarlet fever, diphtheria, or relapsing fever, the occupier of the house where any such case exists, or other responsible person, is, if no medical practitioner is attending on the case, to give notice forthwith to the person in charge of the police-office at the Town Hall. Every medical practitioner attending on such a case is to give to the occupier or other person a certificate, on a form to be provided by the corporation, giving particulars as to it. (A₄). This certificate is to be forthwith delivered by the person to whom it is given by the medical practitioner to the officer in charge of the police-office. The fee for the medical certificates is to be half-a-crown, provided that not more than one fee is to be payable within an interval of thirty days to the same practitioner, for certificates given by him in respect of the same disease occurring in the same building. Any person offending against this enactment is liable to a penalty not exceeding £5. Bradford also adopts the Warrington clause (J), giving further powers with regard to compulsory removal to hospital of persons suffering from infectious disease, and who are without proper lodging or accommodation enabling the case to be properly isolated so as to prevent the spread of the disease, and to be properly treated.

The *Lincoln* Bill reproduces substantially the Jarrow clauses (B, C, D, E, F), giving in addition—like Huddersfield last year—power to charge a fee not exceeding five shillings for any licence to a person to supply nurses (C₂), and to charge a reasonable sum for the services of any nurse provided (C₁). The corporation may also order any place for the sale of liquor or any common lodging-house to be closed. The clauses (G and H) prohibiting a nurse who is attending on a patient in any "infected" house, from attending on any person in any other house (H₁) except with the written permission of a medical practitioner, and forbidding persons dwelling in any such house to work at any other place in the same room with healthy persons, except with the written permission of the medical officer of health, and after disinfection of the person or clothing, appear also here. The penalty for offence against these clauses is £5, but there is not, as at Jarrow and elsewhere, any continuing penalty. All cases of infectious disease, defined in the interpretation clause to be "small-pox, cholera, diphtheria, typhus fever, enteric or typhoid fever, relapsing fever, puerperal fever, scarlet fever, scarlatina, and such other diseases as the corporation under the provisions and for the purposes of this Act may from time to time declare to be infectious or contagious," are to be reported both by occupier and by medical attendant to the medical officer of health at his office, or to the inspector of nuisances at his office (A₁). For each medical certificate the Town Council are to pay half-a-crown, with limitations as to certificates given in respect of the same disease in the same building. Any person offending against this clause is liable to a fine of £5 also. The Warrington clause as to compulsory removal to hospital (J), the Oldham clause as to corpses of persons dying in hospital from infectious diseases being removed only for burial (K), the Huddersfield clause as to corpses not being carried in public conveyances without previous notification to the driver (L), the Oldham clause giving power to make by-laws as to certain sanitary purposes (M), are also in the Bill, together with a clause, borrowed from Warrington and Oldham, altering the procedure with regard to the disinfection of premises. This clause (O) provides that when the corporation are of opinion, on the certificate of their medical officer of health, or of any other legally qualified practitioner, that the cleansing and disinfection of any house or articles therein likely to retain infection, would tend to prevent or check infectious disease, the corporation, without requiring the owner or occupier to carry out such cleansing and disinfection, may themselves cleanse and disinfect the house and articles, and may for that purpose remove any such articles, recovering the expenses from the owner or occupier, or, if they see fit, defraying the whole or part of such expenses themselves.

In the *Reading* Bill, the Jarrow clauses (B, C, D, E, F) are retained, with two others, providing that no person not authorised by the corporation or the medical officer of health shall, except "in case of necessity or urgency, enter such [infected] house or part of a house" (P); and that no nurse attending on a patient in an infected house is to attend on any person in another house without medical permission (H₁); nothing, however, being said as to disinfection of clothing. The corporation are empowered, if they think fit, to establish a temporary hospital or ward for the treatment of infectious disease; and to provide proper fittings, medical attendance, and nursing (I₁). The Warrington clause (J), with regard to the removal to hospitals of infected persons without proper lodging or accommodation, is also adopted. All cases of infectious disease (defined in the interpretation clause to include small-pox, cholera, measles, typhus, typhoid, scarlet, relapsing, and puerperal fever, scarlatina, and diphtheria, and such other disease as the corporation.....may from time to time declare to be infectious or contagious) are to be compulsorily reported to the medical officer of health at his

office (A₃). If no medical attendant has been called in, the occupier or other responsible person is to give the notice; otherwise the duty of notice-giving devolves on the medical attendant. For each certificate a medical man is to be paid a shilling, with limitations as to fees in the same house during the space of thirty days. Offence against this clause is punishable by a fine of £10. The corporation are empowered to order by resolution from time to time, on the report of their health-officer, that any other infectious or contagious disease shall, either permanently or temporarily, come within the provisions of the Act (A₂). They are also empowered to make by-laws with regard to dairies (N), similar to those of Bolton and Birkenhead.

The *Salford* Bill reproduces all the Jarrow clauses (B, C, D, E, F), with the proviso that the closing of shops, dairies, or other places for the sale of provisions, clothing, etc., is to be "on the representation in writing of two duly qualified medical practitioners in the borough, and on the recommendation in writing of the medical officer of health" (E₂). A fee of five shillings may also be charged for a licence for nurses (C₂), and a reasonable sum may be charged for the nurse's services (C₁). The Huddersfield clauses (G and H), with regard to persons living in infected houses and nurses attending on infectious cases not mixing with other people, except with medical permission and after disinfection of the person and clothing, also appear. All cases of infectious disease, including "small-pox, cholera, whooping-cough, typhus, typhoid, scarlet, relapsing, and puerperal fevers, scarlatina, erysipelas, and diphtheria", and any other disease declared by the corporation to be infectious or contagious are to be compulsorily reported (A₁). Notice of such cases is to be sent both by the occupier and by the medical attendant to the medical officer of health, under a penalty of £10. For each certificate the medical man is to receive half-a-crown, with limitations as to subsequent fees in the same building. The corporation may by resolution, on the report of the medical officer of health, temporarily or permanently include other infectious diseases within the provisions of the Act (A₂). The Huddersfield clause (K), prohibiting the conveyance in a public conveyance of corpses of persons dying of infectious disease, except with due notification to the driver, etc., also appears in the Bill.

The *Stalybridge* clauses are evidently copied from those in the *Oldham* Act of last year, though only those relating to the notification of infectious cases are adopted. Every case of "small-pox, cholera, scarlet fever, diphtheria, typhus fever, enteric or typhoid fever, and puerperal fever," is to be reported by the occupier or person having charge of the house, to the medical officer of health, or the inspector of nuisances, at his office (A₁). Every medical practitioner attending on such a case is to report the particulars of it on forms to be provided by the corporation for the purpose; and for each such certificate a fee of half-a-crown will be payable. Any person who wilfully, or without reasonable cause, offends against these provisions is liable to a penalty not exceeding forty shillings. (The power to make and enforce regulations with respect to the removal to hospital of persons suffering from infectious disease, advertised in the *London Gazette* as one of the matters which the *Stalybridge* Bill would contain, does not appear in the Bill as printed.)

Need for Caution in Granting Exceptional Powers as to "Domestic Quarantine" of Infectious Disease.—For reasons which will be sufficiently obvious, I am unable, indeed it would not become me, to say how far the authorities asking for the exceptional powers contained in these local Bills are justified in asking for them. The wide and remarkable adoption by so many authorities (now thirteen in number) of the somewhat stringent provisions in the Jarrow Act of 1878, make me fear lest local authorities may have to some extent lost sight of their own obligations, whilst seeking to impose so great restrictions upon individual action as these clauses imply. They seem, indeed, to be not a little imbued with the old notions of quarantine, and to be expecting to check disease by the rigorous cutting off from the rest of the community of those who have come into contact with infection. As I said in my former report, these "Jarrow" clauses, "although valuable enough as an adjunct to the proper exercise of the powers already conferred by the Public Health Act, seem to me to have been mistaken by some of the authorities as superseding, as it were, the general Act. The restrictions which these Bills seek to impose upon individual action can surely only be reasonably enforced where the sanitary authority, as the guardian of the public health, has itself performed all its own statutory duties, by providing proper hospital accommodation, disinfecting apparatus, and the like." I would, therefore, here repeat the expression of my strong opinion that, before Parliament or the Local Government Board consents to clothe these authorities with power so widely ranging as are proposed, it should first be made clear that the authority has already provided the machinery for checking infection, which should render

possible the due performance of the duties which it seeks to impose upon individuals. It is obviously impossible for me to say what, with regard to any of these towns, is the exact state of their preparedness for epidemics, since this could only be learnt by local inquiry at the places themselves. But under any circumstances, I think the principle is all important to be maintained, that the authority must first show satisfactorily that it is prepared to carry out fully its own powers before it is allowed to shackle individual action to the extent proposed. (See BRITISH MEDICAL JOURNAL, vol. i, 1880, p. 250.)

It is the more necessary to insist upon these points, because in such discussions as have taken place on this really very important subject, the obligations of sanitary authorities to their constituents seem to have been lost sight of. An authority which has not, for example, provided proper infectious hospital accommodation, as at least three of the authorities now asking for exceptional powers have not, may almost be said to be stultifying itself in endeavouring to carry out the regulations proposed in these Bills with regard to "infected places". It would serve no useful purpose to point out in detail the anomalies which these clauses present when taken in connection with the actual sanitary arrangements of particular towns; it must suffice to criticise generally the various proposals that are made.

NOTIFICATION OF CASES OF INFECTIOUS DISEASE.

1.—*Method of Reporting.*—First, with regard to the notification of infectious disease; it will be seen that all eight authorities ask for power to compel this notification in one way or another. It is to be regretted that local authorities fail to appreciate, and that the Local Government Board fail to convince them of, the superiority of the method of the reporting that has received the sanction of this Association. In my report of October 1879, on the "Registration of Infectious Disease" (See BRITISH MEDICAL JOURNAL, vol. ii, 1879, p. 830), I have given at length the reasons which induced our Registration of Disease Committee to recommend that the householder or person in charge of the case should be the person by whom the return should be made to the authority. I need not again argue the question, but shall content myself with pointing out that in all the twenty-six districts which now have, or seek to have, compulsory notification of infectious disease, only three, Nottingham, Norwich, and now Bradford, have arranged for this notification in the way that, in the opinion of this Association, is least objectionable, viz.: by the medical attendant to the occupier, the latter being responsible for the information reaching the authority. Of the eight Bills of the present session, only one (Bradford) proposes to follow this course (A⁴). Four of the others (Barrow-in-Furness, Lincoln, Salford, and Stalybridge) have adopted the dual method of reporting, (A¹) viz.: notification by the occupier to the sanitary authority, an independent certificate being sent by the medical attendant to the sanitary authority. At Birkenhead and Reading, the occupier is only to report if no medical man is in attendance (A²); a plan which is open to the objection that, if a person knows that by calling in no medical assistance he can better conceal the existence of infectious disease in his house, he is likely to neglect or delay procuring such advice. Objections still stronger attach to the Aberdeen Bill (A), which, by imposing no duty at all upon the occupier, is likely to encourage the employment of quacks and irregular practitioners who are of course under no obligation to give notice.*

2. *Diseases to be Reported.*—As to the diseases to be reported, but little needs to be said. Small-pox, cholera, typhus, typhoid, and scarlet fevers, and diphtheria, are included in all the Bills; puerperal fever in all but the Aberdeen and Bradford Bills; relapsing fever in all but the Aberdeen, Barrow-in-Furness, and Stalybridge Bills; whilst measles only appears in the Aberdeen and Reading Bills, and erysipelas in the Salford Bill, though the Birkenhead phrase, "any contagious or infectious disease", would of course cover these. It is noteworthy that both at Aberdeen and Salford the corporations wish for particulars of cases of whooping-cough. The only previous appearance of whooping-cough in this series of local Bills is in the Preston Act of last year. The practical usefulness of information as to this complaint may be open to question; but if the Town Councils desire information as to it, there seems no reason why they should not have it.

3. *Fees Payable to Medical Practitioners.*—As to the fees for medical certificates of infectious cases, much diversity is apparent. In my previous report I disclaimed any attempt "to gauge exactly the remuneration which is proper to be given to the medical attendant", nor do I think any one scale could be generally applicable. I leave,

* It is instructive in this connection to note that at New York, where notification of infectious disease is compulsory, "physician" is, for the purposes of such notification, held to include a dentist, a midwife, and "every other person who practices about the sick and injured" (which phrase would seem to include all unqualified practitioners). See BRITISH MEDICAL JOURNAL, vol. ii, 1880, p. 1002.

therefore, this question to the liberality of the local authorities concerned, merely remarking that the difference between a shilling per certificate at Reading, with limitations as to cases of disease in the same house, and half a crown, without limitations, as at Aberdeen and Stalybridge, betokens a vastly different valuation by the authorities of the information which they thus acquire for the purposes of protecting the public health. It is to be noted, however, that at Aberdeen the fee is to be "a sum not exceeding two shillings and sixpence". Clearly the fee should be made more definite than this, and should, in fact, be a fixed sum. Otherwise the Town Council might possibly later on adopt a fee much below that at first offered, which would be a virtual breach of faith with the local medical men.

4. *Fines for Neglect to Report.*—Fines for wilful offence against the requirement of reporting infectious cases range from £2 at Barrow-in-Furness and Stalybridge, and £2 with £1 for each day of continuance of offence, at Aberdeen, to £5 at Bradford and Lincoln, and £10 at Birkenhead, Reading, and Salford.

5. *Inclusion of other Diseases.*—It will be seen that power is desired by several authorities to include other diseases within the provisions of the Act, upon a resolution of their own (A₂). It may, of course, be argued that an authority that will have to pay for such increased information is likely to be chary in adding to the list of reportable diseases. But I think there are reasons why this power of requiring information as to other diseases should have some sort of veto placed upon it; and I would therefore suggest that in all those cases (Aberdeen, Lincoln, Reading, and Salford) where the Town Council ask for power to add other diseases to their list by a resolution of their own, such addition should only take place with the assent of the Local Government Board, or, in the case of Aberdeen, of the Scotch Board of Supervision.

6. *Necessity for Compulsory Notification being Carried into Effect.*—It is necessary to touch on one more point before dismissing this subject. The authorities who have proposed to require compulsory notification of infectious cases within their respective jurisdictions must be supposed to have considered powers to compel such notification necessary, or they would not have inserted clauses on the subject in their local Bills. Moreover, they must be supposed to have gauged public opinion as to the advisability of such a measure, before proposing it. It is, then, only to be expected that, when an authority asks Parliament for certain powers, and the Legislature accords what is desired, the authority should show its *bona fides* in making the application by enforcing the powers with which it has, at its own request, been clothed. The language of the local Acts is, indeed, such that, to my reading, the authority is in fact bound to exercise these powers. I am not able to speak with confidence as to the working of the clauses as to the notification of disease in each of the now numerous towns where they have been adopted; but it is, I believe, only in one town that the local Act has not been put in force at all. This town is Nottingham, and there have recently appeared in the columns of the JOURNAL some instructive facts as to the state of affairs in that place which are of more than local interest. Nottingham, it appears, although the local Act empowering the notification of infectious cases has now been passed for two years and a half, has made no attempt up to the present to enforce such notification. I may say that the wording of the clause is that the provisions with regard to notification "*shall have effect*"; and it is, therefore, a question whether, in law, the Town Council has any discretion in the matter. Be that as it may, however, the Act has never been enforced. I do not enter at greater length upon this subject, because it has recently formed the subject of much comment in the JOURNAL*; but the experience of Nottingham should warn Parliament of the necessity of imposing some compulsion on local authorities to set and keep in motion this most important part of sanitary machinery in towns where its use has been sanctioned. I think that if, after seeking and obtaining special powers, authorities neglect to enforce them, they should be subject to the same penalties as attach to the neglect to provide proper sewerage or water-supply, or to perform the other compulsory duties imposed upon them by the Public Health Act.

II.—REGULATIONS AS TO INFECTED PERSONS, PLACES, AND THINGS.

An'cedent Duty of Local Authority to provide Proper Sanitary Appliances.—The next subject that claims attention is the clauses which all but two of these eight Bills now contain, giving the authorities certain powers—known as the Jarrow powers—with regard to infected persons, places, and things. As I have already said, these clauses, though valuable enough as an adjunct to the proper

* See BRITISH MEDICAL JOURNAL, vol. i, 1880, p. 953; vol. ii, 1880, pp. 854 and 1039; vol. i, 1881, p. 31.

exercise of the powers conferred by the Public Health Act, must not be regarded as superseding the general Act. The local authority has a duty of its own in providing proper sanitary appliances, such as hospital accommodation, disinfecting apparatus, mortuary, and the like; and, unless the authority has provided these, and shown in its general sanitary administration its earnestness for improvement, it should not be permitted to put the restrictions upon individual action which the Jarrow clauses would impose. Indeed, I cannot think how such sections can be made to work without gross injustice to individuals, unless the sanitary appliances of the authority are tolerably complete. I must disclaim pointing these remarks by reference to the unpreparedness of the authorities of any of the eight places now under consideration against an invasion of infectious disease, though it would not be difficult for me to do so. I will only say that I think the eyes of the Local Government Board ought to be opened—if by no one else, by this Committee—to the wrongheadedness of much of the legislation that is going on under cover of these local Bills. It is obvious that there must be order in these matters, and that the local authority has duties of its own to fulfil before it can with propriety, or with justice to its constituents, be clothed with the power of restriction on individual action which is the essence of the Jarrow clauses.

The Jarrow Clauses.—I will refer briefly to the subsections of the Jarrow clauses as they appear in the local Bills before us.

(1) *Temporary shelter or accommodation* (B) for the members of a family in which infectious disease has appeared would no doubt be useful, provided that there is a proper hospital to which the sick member can be sent, and be tended till he is well again. But, as regards those towns which have no fever-hospital for the reception of infectious cases, I hardly see how the clause as to temporary shelter-houses is to be usefully worked. Lincoln makes a curious blunder in asking for power to provide temporary shelter "for the member of a family in which infectious disease has appeared". The same phrase appeared in the Blackburn Act of last session. It can, apparently, only mean the provision of temporary shelter or accommodation for the infected person, and not for the healthy members of the family who have been exposed to infection, which is the obvious meaning of the clause in the Jarrow Act, as since copied by Derby, Huddersfield, Oldham, Preston, Barrow-in-Furness, Birkenhead, Reading, and Salford.

(2) *The provision of nurses* (C) by the sanitary authority is good, though I am a little doubtful as to the proposal of Barrow, Lincoln, and Salford (C₁)—following that of Huddersfield last session—to charge a reasonable fee for any nurse provided by them. I should have thought that it would have been better to make this nursing staff a purely gratuitous one, and to send the nurses to cases in which they were most needed, without any expense to the individual. Perhaps, however, a demand might grow up amongst the well-to-do for skilled nurses under the control of the sanitary authority; and for nursing services amongst this class of persons, the authority might properly expect payment. But it would seem best to regard these nurses as primarily for the poor who cannot otherwise have them, and to keep the idea of payment for their services as much in the background as possible. Lincoln and Salford, again copying Huddersfield, propose to license nurses for infectious cases, and to charge a fee of five shillings for such licence (C₂).

(3) It is right that sanitary authorities should have power to close schools and other places of public resort when such a course is needed in the interests of the public health. The part which schools play in the dissemination of infection is only too well known amongst medical men; but school-managers not unfrequently consider the spread of infection a secondary matter, compared with the loss of part of their grant from the Education Department. The question, indeed, of the increased facilities for the spread of disease afforded since the Education Act came into operation, is one of very great moment. It is so far satisfactory to find that the Local Government Board are alive to this danger; but it must be remembered that it is the Education Department, as the controlling power over school-managers, that has to be moved in the matter. In their recently issued ninth annual report, the Local Government Board observe: "We have found, in the reports of medical officers of health and elsewhere, considerable complaint of the dissemination of infectious disease through the medium of elementary schools. There is at present no legal power to enforce the closing of a school, against the will of the managers, on account of a local epidemic; and, although we are glad to recognise the readiness of most school managers to defer to the representation of the medical officer of health on this point, yet we have met with instances in which schools have been kept open, notwithstanding his advice, and where disease has appeared to be diffused from such schools. It may be necessary to consider hereafter whether some amendment of the law may not be requisite to enable sanitary authorities to deal with this source of

danger." In these remarks I quite concur; and I trust that the Board will make such representations to the Education Department as will aid in the settlement of what is undoubtedly a grave difficulty in the proper enforcement of the public health law with regard to the prevention of infection.

(4) As to the closing of shops, dairies, or other places for the sale or storage of provisions, clothing, etc., when infectious disease appears on the premises, and the prevention of the entrance of the public into such places (E), I would repeat the criticism I offered last year, that, whilst this power of closing is undoubtedly important in the interests of the public health, the sanitary authority "ought to be ready to afford all conceivable help to the people, to enable them to open the shop or other place again with as little delay as possible, and for this purpose ought to have in readiness proper hospital accommodation and disinfecting apparatus. Here, as in the next clause, important monetary as well as social considerations are involved; and it is especially necessary, in a matter of this sort, to avoid any semblance of shifting responsibility from authority to individual". The six authorities who ask for this power (Barrow, Birkenhead, Bradford, Lincoln, Reading, and Salford), copy in the main the Jarrow clause, though Lincoln proposes, like Huddersfield last year, to add places for the sale of beverages and common lodging-houses (E₁) to the list of places that may be closed; and Salford would only close the premises on the representation of two medical men, and the recommendation of the medical officer of health (E₂).

(5) The design of the clause empowering the local authority to make Regulations with regard to infected houses is evidently good, namely, to stop infected articles from being scattered broadcast over a district, as from a tailor's, milliner's, or washerwoman's. But the compensation provision still seems to me to be likely to work badly in practice, and to be very costly. It would be a direct loss to a tailor, or milliner, or laundress, to be kept out of work for six weeks or two months; whilst the house was "infected"; and meanwhile the authority must support the whole household. Up to a certain point, these regulations are no doubt valuable and important; but there is a limit to their usefulness, and certain additions which have been made to them by various local authorities savour of bygone notions about quarantine. The Reading proposal, copied indeed from the Blackburn Act of 1879, that "no person not authorised by the corporation or medical officer of health shall, except in case of necessity or emergency, enter infected houses" (P), seems to me to be of this kind. It cannot, without great expense and ceaseless watching, possibly be enforced; and the simpler and more common-sense plan would seem to be to remove at once the source of infection to hospital, and to disinfect the premises immediately, so as to impose as few restrictions upon individual movements as are consistent with the claims of the public health. Of the same class is the proposal made by Barrow, Lincoln, and Salford, that no person dwelling in an infected house "shall work at any other place in the same room with healthy persons, except with the written permission of the medical officer of health, and after disinfection of the person and clothing" (G). In commenting upon a similar proposal in the Huddersfield local Bill of last session, which was, notwithstanding its transparent absurdity, passed into law, I endeavoured to show the unworkable character of such a regulation; and, as these Barrow, Lincoln, and Salford clauses are obviously founded on the Huddersfield one, my objections would equally apply to them. Again, the proposal that no nurse attending upon an infectious case "shall either at the same time or afterwards attend as nurse upon any other person without the written permission of a registered medical practitioner, and after disinfection of the person" (H) is, in its present form, obviously too stringent. Of course, its aim is to prevent the spread of infection from the nurse's person and clothing, and to forbid nurses going straight from an infectious case to a lying-in room; but, as the clause stands, it would prohibit a nurse who was attending on a case of scarlatina in a house from treating another case of the same disease in the same house unless with "the written permission of a registered medical practitioner, and after disinfection of the person and clothing". I would suggest that this requirement should, as at Lincoln and Reading (H₁), be confined to nurses moving from one house to another in order to tend a patient sick of a different disease. Of the four authorities (Barrow, Lincoln, Reading, and Salford) who adopt this clause, one—Reading—unwisely leaves out any reference to the disinfection of the nurse's person and clothing, which I take to be the essence of the clause, and which ought certainly to be retained.

III.—HOSPITALS.

An important part of these local Bills are those clauses relating to the provision of infectious hospitals and the removal of patients thereto.

(1) *Provision of Infectious Hospitals.* Section 131 of the Public Health Act gives ample power to any local authority

to provide a hospital, to fit it up, and to keep it ready for use; yet we find Barrow-in-Furness and Lincoln proposing to give the local authority power to provide such (I); whilst Birkenhead and Reading copy a clause in the Blackpool Act of 1879 as to the provision of a temporary hospital, with the necessary appliances and medical and nursing staff (I₁). None of these clauses are necessary, and there seems no reason for their retention. I have already expressed my opinion that authorities asking for such exceptional powers as those to which I have referred in the preceding section should, as a condition precedent to the granting of such powers, have provided proper hospital accommodation, disinfecting apparatus, etc.; and I think that a clause might fairly be inserted in each Bill making the provision of these compulsory before the other clauses can come in force. It is only in this way that we can hope to prevent local authorities from altogether drifting away from their own responsibilities.

(2) *Compulsory Removal to Hospital.*—A more serious question is the utilisation of actually existing infectious hospitals for the class of people for whom they are primarily intended—viz., for that very numerous class of persons who, whilst not paupers, cannot be treated for infectious disease at their own homes without danger of the spread of infection to others. Certain officers of health have been content to shelter themselves behind the alleged difficulties of inducing this class of persons voluntarily to go to hospital in excusing the insufficient use of hospitals in their districts, or the non-existence of such buildings. While it cannot be doubted that there is often difficulty in inducing mothers to part with their children whilst suffering from infectious disease, yet, when officers of health have really endeavoured to make their hospitals useful, the difficulty has to a large extent disappeared. It is more often by persuasion than by compulsion that a politic health-officer will secure isolation in hospital; but, where the latter becomes inevitable, there are undoubtedly some legal difficulties in the way which certain of these local Bills seek to overcome. Section 124 of the Public Health Act provides that “any person who is suffering from any dangerous infectious disorder, and is without proper lodging or accommodation, or lodged in a room occupied by more than one family, or is on board any ship or vessel, may, on a certificate signed by a legally qualified medical practitioner.....be removed by order of any justice” to any infectious hospital within a convenient distance from the district. The real difficulty lies in the words which I have placed in italics. It has been held—on what principle I confess I cannot understand—that the “proper lodging or accommodation” of the section is lodging or accommodation proper for the patient himself, and not for those surrounding him. In other words, so long as the patient can be treated without danger to himself, the law can take no cognisance (*quâ* compulsory isolation) of the danger of catching the disease incurred by those around him. This view is so singular that, had it not been authoritatively promulgated, I should have hesitated to notice it. It seems unnecessary to argue against it, beyond pointing out that this Section 124 comes in a part of the Public Health Act headed “Provisions against infection”, and that the limitation of the powers of the section to cases of “dangerous infectious disorders” implies that there is a special reason, beyond getting the person, well why his removal to hospital should be made compulsory. It is monstrous to limit the action of this clause to those cases only where the lodging is improper for the patient himself. Whatever the legal view of the clause may be, it is obvious that its real intention is to check the spread of disease by compulsorily removing and isolating, away from healthy people, a person suffering from a disease capable of indefinite multiplication among his neighbours. Legal subtlety has, however, cast doubts upon this reading of the clause; and local authorities have of late been increasingly anxious to set the question at rest by an amended clause that shall be more definite in its wording. The first local Act that contained any reference to this power of compulsory removal was that of Warrington in 1879. Section 25 of this Act is in all essentials the same as that which I have marked (J) amongst the proposals of Barrow-in-Furness. It will be observed that this clause alters the procedure with regard to compulsory removal to hospital, the help of a justice's order being only called into requisition when the person, to whom notice requiring the removal of the sufferer to hospital has been given, definitely refuses to consent to such removal. But the real importance of the clause lies in the words “without proper lodging or accommodation enabling the case to be properly isolated so as to prevent the spread of the disease, or to be properly treated”—which make clear just the point that the general Act of 1875 is alleged to leave doubtful. In this clause it may be noted as significant that the prevention of the spread of the disease is put first, and the proper treatment of the case second. With the view of ascertaining the exact reasons of the Warrington corporation for including this clause in their local Act, I communicated on the subject with the then medical officer of health, Mr. G. W. Joseph, who courteously

sent me the following official statement of the town clerk. This will be read with interest in connection with my preceding remarks.

“The object of the corporation in adopting the clause referred to was to extend the operation of the clause [124] in the Public Health Act. The latter merely deals with cases ‘without proper lodging or accommodation’, leaving it a matter for decision as to what is proper lodging and accommodation, regardless of the surrounding circumstances. The clause adopted by the corporation specially applies both to proper lodging and accommodation, so as to prevent the spread of disease amongst others, and also so that the case may itself be properly treated; and in this respect it does away with the vagueness of the Public Health Act and the liability of adverse decisions of the magistrates. It will be observed that the wording of the section is, ‘without proper lodging or accommodation enabling the case to be properly isolated so as to prevent the spread of disease’. This is with reference to those surrounding the patient. Then read the other way, viz., ‘without proper lodging or accommodation enabling the case to be properly treated’, applies to the patient himself.”

Since Warrington adopted this clause, it has been followed by Oldham and Stafford, and now by Barrow-in-Furness, Bradford, Lincoln, and Reading. This, at least, shows how much the difficulty to which I have referred is felt in practice, and how necessary it is that any ambiguity in Section 124 of the general Act should be set at rest in the sense I have indicated.

(3) *Removal for Burial of Corpses of Persons dying in Hospital.*—One other point in connection with hospitals deserves notice here. Though there is no provision in either the English or Scotch Public Health Act with regard to the disposal of corpses of persons dying in hospital of infectious disease, Section 158 of the Irish Public Health Act provides that no such body shall be removed from the hospital until removed direct to a mortuary or cemetery. Any person violating, or any officer of a hospital or other person who knowingly permits the violation of this provision, is liable to a penalty of five pounds. Last year the Oldham Act contained substantially the same provision in a clause providing that if the medical officer of health certified that it was desirable, in order to prevent the risk of infection, that the body of a person dying from infectious disease in the fever hospital should not be removed therefrom except for the purpose of being forthwith buried, no person might remove the body except for burial, under a penalty of fifty pounds. This year Barrow and Lincoln ask for similar powers (K), and the same authorities also seek for power to make by-laws, *inter alia*, for regulating the mode of conveyance for purposes of interment of the body of any person dying of an infectious disease (M). I think these clauses are eminently such as to commend themselves to the approval of the Committee.

IV.—DISINFECTION OF PREMISES, ETC.

1. Lincoln is the only authority which this year has followed the example of Warrington and Oldham, in altering the procedure with regard to the disinfection of private premises. Under Section 120 of the Public Health Act, it is the duty of an authority, when they think cleansing or disinfection necessary, to give notice to the owner or occupier to do what is necessary within a specified time. If he fails to do so, he is liable to a penalty; and the authority may do the work for him, and charge him with the expense. Under the local Acts above spoken of, the authority need not wait to give the occupier notice; but may themselves cleanse and disinfect the house and articles therein, and may recover the expenses from the occupier; or may, if they choose, themselves defray the cost (O). This alteration seems to prevent the unnecessary but unavoidable delay of the procedure of Section 120 of the general Act, and as such merits approval.

2. Huddersfield is, as will have been seen, responsible for a good many of the clauses in these local Bills. Thus, from its Act of last year are taken the clauses appearing in the Barrow, Lincoln, and Salford Bills, imposing a penalty on persons hiring a public conveyance, other than a hearse, for the conveyance of the corpse of a person who has died from infectious disease, without previous notification of the fact to the owner or driver; as well as a penalty on the owner or driver of such a conveyance, who, after its use for this purpose, does not immediately have it disinfected (P). I have no observations to make with regard to this clause.

V.—BY-LAWS.

1. Following the example of Oldham last year, Barrow and Lincoln seek for power to make by-laws for certain sanitary and disease-preventing purposes (M). None of these matters need any comment from me.

2. In the Birkenhead and Reading Bills, is a proposal that the Town Council should have power to make by-laws for the regulation and inspection of dairies, shippens, and cowsheds, and for ensuring the purity

of their water-supply (N). There was reason for such an enactment when Bolton took this power in 1877, before the passing of the Contagious Diseases (Animals) Act of 1878; but, since the latter Act was passed, all town councils have the power for which Birkenhead and Reading now ask, and the clauses relating to this subject in those local Bills are, therefore, unnecessary.

VI.—HEIGHT OF ROOMS.

Before concluding, there is one other point in these local Bills which, though not strictly germane to the title of my report, I feel bound to bring under the notice of the Committee. No less than six, viz.: Aberdeen, Barrow-in-Furness, Birkenhead, Lincoln, Reading, and Stalybridge, of the eight local Bills under consideration, contain a clause providing for a minimum height of inhabited rooms. Generally a minimum of nine feet is appointed, with certain exceptions in the case of attics, and it is only at Reading that the height is as low as eight feet. That so large a proportion of the Bills should contain a clause of this nature may seem at first a little singular, looking to the general powers of the Public Health Act; but there is a reason for it, which, though not at once obvious, is instructive as showing the manifold deficiencies of the Public Health Act, or rather as showing the difficulties arising from its unsatisfactory wording. No one except a lawyer would probably doubt that Section 157 of the Public Health Act, which empowers local authorities to make by-laws "with respect to the ventilation of buildings", gives by these very words powers to regulate the height of rooms. For it cannot be doubted that the height of rooms is an element of the most important kind in real ventilation. The Local Government Board have, however, ruled that neither Section 157 nor any other section of the Public Health Act gives an authority power to appoint a minimum height for rooms; and they have systematically rejected local by-laws framed with this object. Thus it comes about that only those authorities who are rich enough to afford a local Act can have this much needed power—the necessity of which is, indeed, significantly shown by three-fourths of the Bills under consideration dealing with the matter. As has recently been said, "the ventilation of any room in such a way as to provide for the health and comfort of its occupants, must clearly depend to a great degree upon its construction, and especially upon its height. If the room be high, the air need not be changed so rapidly as when it is low. The lower the room, the quicker the change of air must be, and the greater consequent difficulty of securing ventilation without a draught, which is always undesirable, and not unfrequently dangerous, especially in cold weather. People, especially poor people, who inhabit the houses for which building by-laws are most required, are apt to think only of the length and breadth of the room in apportioning the number of its occupants; and thus, the enactment of a minimum height for rooms becomes necessary, if for no other reason, in order that overcrowding and consequent ill-health may not arise. The principle may indeed be laid down, that for the purposes of proper ventilation, a room must have a height in proportion to its length and breadth. It is therefore important that sanitary authorities should have power to regulate the height of rooms so as to secure the necessary cubic space for ventilation, and it would seem well not to take a lower standard than at least eight feet, in order that currents of air may pass over the heads of the occupants. The requirement of a minimum height of rooms was amongst the model by-laws formerly issued by the Home Office, before the Local Government Board was formed. It found a place in the Metropolitan Buildings Act of 1855, and has since been adopted by several provincial towns in their local Acts. It seems to have worked well, and without complaint, in the places where it has been adopted, and if there be any valid legal objection to it under the present law, that law should certainly be amended without delay". (See *Sanitary Record* for January 15th, 1881, page 249.)

Unnecessary Clauses in Local Bills.—The Committee will not fail to have observed that, in the course of my remarks, I have several times had to speak of clauses as unnecessary, because already contained in the general law. It is, indeed, remarkable how fond local authorities are of making trivial alterations in the general statute law in any local Bill they may happen to be promoting. Aggravated examples of this may be seen in the Huddersfield Act of last year, and in the Birkenhead Bill of the present year. Huddersfield has considered it necessary since 1871 to have three Improvement Acts of its own, all of portentous length; the first reaching to over 400 clauses, the second to 141, and the third to 117. The Birkenhead Bill of the present session contains no fewer than 522 clauses, of which it is hardly too much to say that at least half are unnecessary. Without wishing to point my remarks by reference to these two particular Bills, I may say, generally, that many local Bills presented to Parliament are simply examples of the ingenuity of the draughtsman, who has incor-

porated in them as many changes in the general law as his fancy can devise.

Effect of Local Changes of General Statute Law.—The ramifications of local legislation are rapidly becoming so extensive and confused, that I think the subject of some effective supervision of local Bills needs to be earnestly pressed upon Parliament and the Local Government Board. The latter body has, indeed, the duty of reporting to Parliament upon all these Bills, and presumably draws the attention of the members of the Parliamentary Committee, to which each particular Bill happens to be referred, to the points which it considers defective therein. But the recommendations of the Board are notoriously treated in so capricious a fashion by the Committees who virtually decide the Bills for the House, that private-bill legislation has come to be a subject almost of ridicule, so illogical and inconsistent is it. I think, therefore, that in any representations which this Committee may think proper to make to the Government on the subject, it should urge the necessity of some efficient control being instituted over those clauses in local Bills to which there is obvious objection as unnecessary or ill-considered. Certainly, local Bills were never intended to be, what they have now to a considerable extent become, media for all sorts of unnecessary and confusing alterations in general enactments, which, when passed, were intended to be of general application, and not to be altered in particular towns at the caprice of local authorities or their officers. There is no precedent for allowing an authority to override the general law in favour of one which it thinks better, by the simple expedient of smuggling its alterations into a local Bill which few people hear of, and fewer still care about, till it is actually law in the particular place to which it refers. It must be obvious that any considerable increase of legislation of this sort must needs impair very importantly the unity of the working of the Public Health Act throughout the country. It would seem by far the wiser and better plan for the Local Government Board to face the question at once, and to set to work on an amended and amplified code of public health which shall have general application, rather than to allow these local patchings of an imperfect law to be multiplied indefinitely.

Desirability of Conference with President of Local Government Board.

—These considerations seem to me to warrant action by the Parliamentary Bills Committee in the direction of conference with the President of the Local Government Board on the subject of such parts of these local Bills as touch the interests of the medical profession, and upon which the profession has a clear right to be heard. I would suggest, therefore, that Mr. Dodson be asked to receive a deputation of this Committee at an early date, for the purpose of drawing his attention to the dimensions which private legislation on the subject of the limitation of infectious disease is assuming, and to impress upon the Government through him the desirability of amending and strengthening the Public Health Act of 1875 in those parts which have been proved to be insufficient and unsatisfactory. Especially might the Committee ask for an early reconsideration of the position of the Board with regard to the notification of infectious disease, and urge the importance of facilities being given to authorities who may wish to adopt this notification in their districts without the trouble and expense of a special local Act. The Bill just introduced into Parliament by Mr. Edmond Gray, proposing to make notification of infectious disease compulsory in Ireland for any place where the sanitary authority desires and the Local Government Board approves, affords, I think, a valuable opportunity for the whole subject being referred to a Select Committee of the House, so that the question can be thoroughly sifted, and the form settled which future legislation shall take. In any case, it is clearly impossible that affairs can remain in their present anomalous position; and I think it behoves this Committee, in the interests of its constituents, to use its best efforts to have the matter set without delay upon a more satisfactory footing.

THE SANITARY CONDITION OF COUNTRY VILLAGES.—Mr. J. B. Jacob, the medical officer of health for the Plymstock district, gives a very uninviting description of the condition of some of the Devonshire villages under his charge, in his report to his authority that some of them are very dirty, dung-heaps being more plentiful than closets. It will not, therefore, be surprising to learn that in one of them (Elburton), there was an epidemic of typhoid fever, three per cent. of the entire population being attacked. In another village (Pomphlete), the population, which is about three hundred, has no supply of water nearer than half a mile. There is in the whole village but one closet, which is intended for the use of eight or nine houses, some houses containing more than one family. The rest of the village has neither closets or cesspits. At Oreston, Mr. Jacob suggests that the cemetery should be closed, as it is too close to the village, and particularly to the village-pump. Diarrhoea in the summer appeared to be almost traceable to the water of this pump.