

Mode of propagation of Cholera.

5. That such precautions as the above (never unimportant where human health is to be preserved) are supremely important when the spread of Cholera is to be prevented, is a truth which will best be understood when the manner in which Cholera spreads is considered. Happily for mankind, Cholera is so little contagious, in the sense in which small-pox and typhus are commonly called contagious, that, if proper precautions are taken where it is present, there is scarcely any risk that the disease will spread to persons who nurse and otherwise closely attend upon the sick. But Cholera has a certain peculiar contagiousness of its own, now to be explained; which, where sanitary circumstances are bad, can operate with terrible force, and at considerable distance from the sick. It appears to be characteristic of Cholera—not only of the disease in its developed and alarming form, but equally of the slightest diarrhoea which the epidemic influence can produce, that *all matters which the patient discharges from his stomach and bowels are infective*; that the patient's power of infecting other persons is represented almost or quite exclusively by those discharges; that they, however, are comparatively non-infective at the moment when they are discharged, but afterwards, while undergoing decomposition, acquire their maximum of infective power; that, if they be cast away without previous disinfection, they impart their own infective quality to the excremental matters with which they mingle, in filth-sodden earth or in depositaries and conduits of filth, and to the effluvia which those excremental matters evolve; that, if the infective material, by leakage or soakage from drains or cesspools, or otherwise, gets access, even in the smallest quantity, directly or through porous soil, to wells or other sources of drinking water, it can infect, in the most dangerous manner, very large volumes of the water; that the infective influence of choleraic discharges attaches to whatever bedding, clothing, towels, and like things, have been imbued with them, and renders these things, if not disinfected, capable (as the cholera-patient himself would be capable, under the same conditions) of spreading the disease in places whither they are sent for washing or other purposes; that, in the above described ways, even a single case of disease, perhaps of the slightest degree, and perhaps quite unsuspected in its neighbourhood, may, if local circumstances co-operate, exert a terribly infective power on considerable masses of population. "If local circumstances co-operate," however, is the stated condition for that possibility; and it will be observed that the essence of the sanitary precautions, which have been recommended to Nuisance Authorities and others, is to annihilate those "local circumstances." The choleraic infection does not seem able largely to injure any population unless a filthy state of things be pre-supposed. It is pre-supposed that the atmosphere or drinking water of the population is impure with the most loathsome of impurities,—that the infective material has had opportunities of action which decent cleanliness would not have afforded it,—that, in inefficient drains or cesspools or other like depositaries, it has had time to develop its own infective power, and to render other stagnating filth equally infective with itself,—and, that, from such foci of infection, the disgusting leaven of the disease has spread, in air or water, to be breathed or swallowed by the population. In this view of the case, it will be understood that works of sewerage, house-drainage, and water-supply, properly executed and properly used, give to town populations an almost absolute security that Cholera, if introduced among them, can have no means of spreading its infection. And equally it will be understood that, in the absence of those permanent safeguards, no approach to such security can be got without incessant cleansings and disinfections, or without extreme vigilance against every possible contamination of drinking water.

Jurisdiction in removal of Nuisances.

6. It is highly important that the public should not be under any misapprehension as to the course by which the above defined sanitary objects (so far as the law provides for them) may be attained. The administration of the Nuisances Removal Acts is a matter of exclusively local jurisdiction. Over the various NUISANCE AUTHORITIES, in whose hands it is vested, neither the Privy Council, nor any other department of Her Majesty's Government, is em-

powered to exercise control. The authorities in question are elective bodies, chosen as their constituencies will; and each constituency, in exercising its electoral right, has, in effect, the means of deciding for itself whether the district which it inhabits shall be wholesomely or unwholesomely kept. The Lords of the Council have no other function appointed for them in this matter than to inquire, and afterwards report to Parliament, what, so far as the public health is concerned, is the working of that system of administration. Incidentally to the performance of that function, their Lordships have before them the result of much former experience, in this country and elsewhere, as to the circumstances by which the spread of Cholera is determined; and having this experience, their Lordships have seen fit that its more important conclusions should be so set forth as to give to Nuisance Authorities the best assistance which this department can supply towards the task of locally dealing with the removable causes of the disease. But here their Lordships' power terminates. Their Lordships can only hope that Nuisance Authorities, having undivided and sole responsibility in the matter, will justify that very ample trust which the Legislature has seen fit to repose in them. And for the inhabitants of places where the Nuisance Authorities do not take proper measures for the protection of the public health, the Lords of the Council, in the present state of the law, can only suggest that voluntary associations should, as far as practicable, endeavour to supply the defect. Where nuisances on private premises require to be summarily dealt with, complaint may be laid by any inhabitant of the parish or place before any Justice of the Peace having jurisdiction there; but complaints addressed to this or any other Government office cannot lead to coercive interference, and may involve loss of valuable time. Of course, too, it must be remembered that, however active may be the authority, or any committee acting in its stead, every householder ought at least to be vigilant as to the state of his own premises and water-supply.

Personal precautions as to local circumstances.

7. Personal precautions against Cholera consist essentially in avoiding the unwholesome circumstances which have been described: and where that avoidance can be secured, there need not be further thought on the subject. Even where Cholera seems imminent, the danger is quite conspicuously one which ought not to give occasion to panic. Intelligence and cool decision are wanted against it. The case is no longer that of a mysterious pestilence coming (like the plagues of past centuries) on ignorant and but half-socialised populations; it is the case of a distinct and measurable attack against which definite precautions can be taken with success; and power to enforce those precautions is in the hands of local authorities throughout the country. But individual security cannot be promised apart from the security of districts; and for selfish safety, no less than for the general good, it is expedient that every man should do his utmost to promote where he dwells a vigorous sanitary administration over the largest possible area. Those who know that such an administration is at work around them need have but little apprehension as to the result.

Personal precautions as to diet, &c.

8. As to personal precautions, in a narrower sense of the words, only one general rule can be laid down: a rule, however, which is most important for persons who unfortunately find themselves in the midst of local outbreaks of Cholera, and which each individual must apply according to his experience of his own bodily habits; the rule of living as strictly as possible on that system which commonly agrees best with the health; to guard, as far as practicable, against all exhausting influences of privation, fatigue, exposure, and the like; and, as regards diet, especially to avoid all acts of intemperance, and all such eating and drinking as are likely to disturb the stomach or bowels.* But while faults of the

*Precautions against causing such disturbance to oneself by errors of diet will vary somewhat with different individuals.—Every person of ordinary discretion knows the habits of his own body, and can be tolerably confident, within certain limits of food, that he gives himself no occasion of such illness. Apart from personal peculiarities (where each man must judge for himself) the chief dangers of diet appear to lie as follows:—First, in those mere excesses of diet which (especially under circumstances of fatigue) occasion sickness to the stomach, or an in-