Memorandum, by the Medical Officer of the Privy Council, on the Precautions to be taken against Cholera, under the Regulations recently issued by the Lords of the Council, and otherwise.

Diseases Prevention Act put in force.

1. Asiatic Cholera, which for more than a year past has again been affecting in succession many parts of continental Europe, has recently shown some disposition to spread in a few parts of England. It is probable that henceforth, for some weeks or months to come, the disease will be seen, in more or less considerable groups of cases, in other parts of this country. It is possible that in some such parts, amid pre-disposing conditions, the disease may suddenly become of great local importance. And under these circumstances the Lords of Her Majesty's Council have seen fit (bý Order dated July 14th) to put in force the provisions of the Diseases Prevention Act, 1855.

Medical Relief Regulations issued.

2. Also their Lordships have seen fit to issue Regulations under the Act. Those Regulations (contained in two Orders of Council, dated respectively the 20th and the 21st July) direct the appointed local authorities to do in their respective districts, so far as necessary, certain things, which are chiefly of the nature of Medical Relief. The authorities who have to give effect to those Medical Relief Regulations are as follows:-First, within the Metropolis, with exception of the City of London, the respective Vestries or Dictrict Boards of the several parishes or districts; secondly, outside the Metropolis, and also in the three Unions of the City of London, the Boards of Guardians or Overscers of the Poor of the several Unions, parishes, and places respectively. The main object for which the Regulations purport to provide are briefly, and in the words of the Statute, as follows:-" for the speedy interment of the dead; for house to house visitation; for the dispensing of medicines, guarding against the spread of disease, and affording to persons afflicted by or threatened with such epidemic, endemic or contagious diseases such medical aid and such accommodation as may be required." In order that these objects should be promptly and adequately fulfilled in any district where Cholera may show itself, it is necessary that all Authorities who will be responsible for fulfilling them should betimes, in their respective districts, pre-consider and pre-arrange the measures which, in case of need, are to be taken. Therefore the Regulations require that in all cases (not only in cases where Cholera is actually present within the jurisdiction) an immediate meeting of the Authority shall be held, and certain preparatory directions be given. But, except to this extent, no action under the Diseases Prevention Act is required of any district, unless Cholera be actually present there.

Removal of Nuisances.

3. There are other respects, however, in which local action has to be taken against Cholera, and in which the interests of the public health require, above everything, that the action should be taken from beforehand. This precautionary action against cholera (as against many other diseases) is an object for which the Nuisances Removal Acrs enable local provision to be made. The Authorities who have to administer these Acts are in many places the same, but in many other places (chiefly wherever there are Town Councils, Improvement Commissioners, or Local Boards of Health) are not the same, as the Authorities who have to act under the Medical Relief Regulations. The Lords of the Council have no authority to issue regulations or orders for any purposes of the Nuisances Removal Acts. But a year ago, in anticipation of the danger which now threatens the country, their Lordships drew the attention of Nuisance-Authorities, and of the public generally, to the renewed presence of Asiatic Cholera in Europe, and suggested the precautionary proceedings which under the circumstances were called for. It was their Lordships' hope, that, after this warning, the interval which might elapse before a re-appearance of Cholera in England would be vigorously used by the Nuisance-Authorities of the country in preparing their respective districts for the contingency which has now come. The paper which was circulated on the above occasion by the Lords of the Council (the "General Memorandum, on the proceedings which are advisable in places attacked or threatened by epidemic disease".) is now again commended by their Lordships to the consideration of Nuisance-Authorities and of the public. And, on the present occasion, parts of it must be specially insisted on.

Nuisances specially relative to Cholera.

4. In relation to Asiatic Cholera, as now threatening us, there are two principal dangers against which extreme and exceptional vigilance ought to be used. First, there is the danger of drinking WATER which is in any (even the slightest) degree tainted by house-refuse or other like kinds of filth: as where there is out-flow, leakage or filtration, from sewers, house-drains, privies, cesspools, foul ditches, or the like, into streams, springs or wells, from which the supply of water is drawn, or into the sub-soil in which the wells are situate: a danger which may exist on a small scale, as at the pump or dip-well of a private house, or on a large scale, as in the sources of supply of public waterworks. And secondly, there is the danger of breathing AIR which is made foul with effluvia from the same sorts of impurity. Information as to the high degree in which those two dangers affect the public health in ordinary times, and as to the extreme degree of importance which attaches to them at times when any diarrheal disease is epidemic, has now for so many years been set before the public, by this Department and otherwise, that the larger works of drainage and water-supply by which the dangers are permanently obviated for large populations, and also the minor structural improvements by which separate households are secured against the dangers, ought long ago to have come into universal use. It is to be feared that on a very large scale this wiser course has not been adopted, and that even yet, in very many instances,

temporary security has to be found in measures of a palliative kind. So far as such is the case, attention is most earnestly called to those parts of the General Memorandum which relate to the matters in hand. All chief sources of the one danger may be held in check, as follows:—by immediate thorough removal of every sort of house-refuse and other filth which is now accumulated, by preventing future accumulations of the same sort, by attention to all defects of house-drains and sinks by which offensive smells are let into houses, by thorough washing and lime-whiting of uncleanly premises, especially of such as are densely occupied, and by disinfection, very freely and very frequently employed, in and round about houses, wherever there are receptacles or conduits of filth, wherever there is filth-sodden porous earth, wherever anything else, in, or under, or about the house, tends to make the atmosphere foul. As provision against the other danger, it is essential that immediate and searching examination of sources of water-supply should be made in all cases where the source is in any degree open to the suspicion of impurity: examination both of private and of public supplies: and that where pollution is discovered, everything practicable should be done to prevent the pollution from continuing, or, if this object cannot be attained, to prevent the water from being drunk.* The examination of sources of water-supply should of course extend to all receptacles of water-storage, such as the tanks and reservoirs of public supply, and the butts and cisterns of private houses.

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 distances 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 diarrhea 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

^{*} If, unfortunately, the only water which for a time can be got should be open to suspicion of dangerous organic impurity, it ought at least to be boiled before it is used for drinking, but then not to be drunk later than twenty-four hours after it has been boiled. Or, under medical or other skilled direction, water in quantities sufficient for one day's drinking in the house may be disinfected by a very careful use of Condy's red disinfectant fluid. This should be added to the water (with stirring or shaking) in such number of drops that the water an hour afterwards shall have the faintest pink colour which the eye can distinctly perceive. Filtering of the ordinary kind cannot by itself be trusted to purify water, but is a good addition to either of the above processes. It cannot be too distinctly understood that dangerous qualities of water are not obviated by the addition of wine or spirits.

of infecting other persons is represented almost or quite exclusively by those discharges, that they, however, are comparatively non-effective 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 presupposed that the atmosphere of the 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

empowered 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 Prevautions 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 latter kind are peculiarly apt to be hurtful, it must not therefore be supposed that the customary healthful habits need be changed. For instance, there is no reason to suppose that fruits and vegetables, of such kinds and in such states as would be wholesome in ordinary seasons, are unwholesome when Cholera is present; nor (subject to what will directly be said about premonitory diarrheea) is there any reason to believe that persons in good health ought in Cholera times, with a notion of fortifying themselves against the disease, to take drugs or drams which they would not take in ordinary times. Anything to be wisely done in this direction ought to be done under the advice of skilled medical practitioners, and except with such advice, people ought to be most chary both of drugging themselves and of taking such pretended preservatives as are extensively offered for sale.

Premonitory Diarrhæa.

9. In places where Cholera is present or threatening, one particular bodily ailment requires exceptional vigilance. That ailment is Diarrhœa. For the most part in this country Cholera begins somewhat gradually; so that, for some hours or even days before the symptoms become alarming, a so-called "premonitory diarrhœa" may be observed. Where cholera is tending to be epidemic, there always exists, side by side with it in the district, a large amount of epidemic diarrhœa, representing in part the earlier stages, in other part the slighter degrees, of the same insidious and infectious malady. This Diarrhœa (painless and apparently trivial though it be) may in any case suddenly convert itself into Cholera; and, apart from the very serious significance of the symptom as regards the patient himself, it must be remembered that every such diarrhœal patient may be a well-spring of infection to others. It also seems pro-

bable that accidental diarrhoea, originally independent of the epidemic influence, is, of all known personal conditions, the one on which the cholera-infection can most easily fix itself. And thus on all accounts it is of the most essential importance that no looseness of bowels should be neglected in places where Cholera exists. A very important part of their Lordships' Medical Relief Regulations enjoins the making of local arrangements by which this object shall be secured for all the poorer inhabitants of infected districts; and other classes of the population are warned to be also vigilant for themselves. In any infected district, every looseness of bowels, or sickness of stomach, ought, as quickly as possible, to be brought under skilled medical treatment; and if the symptoms begin at all sharply, or if they (however mild) do not very promptly yield to treatment, the patient ought invariably to remain in bed.

Disinfection.

10. Too much importance cannot be attached to the duty of thoroughly disinfecting, without delay, with chloride of lime or otherwise, all discharges from the stomach and bowels of persons under the epidemic influence, as well as all bedding, clothing, towels and the like, which such discharges may have imbued; and all privies and other like places to which such discharges may have access should be kept flooded with solution of sulphate of iron, or solution of carbolic acid.

Organization for Medical Relief in Infected Districts.

11. With reference to the medical care of the sick, and to all such other kinds of medical action and organization as the circumstances of infected districts may require, the Lords of the Council have every hope and belief that the appointed Medical Relief Authorities of the country will be duly conscious of the very grave responsibility which is thrown upon them by the Diseases Prevention Act, and the regulations thereunder issued, and will be anxious to acquit themselves of the responsibility in a manner commensurate with its importance. But if unhappily any particular district should suffer a sudden and extensive epidemic, it may be that the Authority, though with every disposition to discharge its duty, will have difficulty in providing for all requirements of the case, and will be in danger of finding itself over-tasked. It is to be hoped that in any such crisis, if anywhere it should arise, voluntary local assistance will not be wanting to the Authority. Among the duties which would have to be discharged, some do not require skilled officers, but may with equal propriety be devolved on any discreet and intelligent persons; and it might be of great local service that such persons, in Committees or otherwise, should be ready to co-operate with the Authority. Especially the authority would then be enabled to extend, beyond limits which would else be possible, that system of House-to-House Visitation which in various ways may be the most important of local agencies for stopping the progress of an epidemic: not only as providing for the prompt medical treatment of the sick, but equally as spreading information and exercising influence against conditions which tend to multiply the disease. Apart from action which may be wanted

^{*} 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 increased labour of digestion; secondly, in taking food, solid or fluid, which is midway in some process of chemical transition-half-fermented beer and wine, water containing organic impurities, meat and game and venison no longer fresh and not completely cooked, fish and shellfish in any state but the most perfect freshness, fruit or vegetables long gathered or badly kept, and the like; thirdly, in the excessive or unseasonable use of refrigerent drinks or ice; fourthly, in partaking largely of those articles of diet which habitually, or by reason of imperfect cooking, pass unchanged through the intestinal canal; and fifthly, in the indiscreet use of purgative medicines, or in taking any article of diet which is likely to produce the same effect.

to supplement any inaction of the Nuisance Authority, the room for voluntary work in aid of the Medical Relief Authority may, in the supposed circumstances, be very great:—the local arrangements for medical relief have to be told and explained; the proper use of disinfectants has to be taught and enforced; many other sorts of useful information have to be given; unreasonable alarm has to be quieted; the less educated and the destitute parts of the population have to be led and assisted to do what is needful for their safety. The larger the staff of competent visitors who can be employed in any infected district, the easier will be this task. And any educated person who would wish to take part in it can easily qualify himself to render, in case of need, a really important service to his neighbourhood.

By direction of the Lords of the Council,

(Signed)

JOHN SIMON.

Medical Department of the Privy Council Office; 8, Richmond Terrace, London, S.W. July 24th, 1866.

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