

Cholera : orders, directions, and regulations of the Privy Council, under the Diseases Prevention Acts, and memoranda by their Medical Officer, with the particulars of the treatment recommended by the Royal College of Physicians, at the request of the Privy Council, and an introductory summary / by J.B. Hutchins.

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CHOLERA.

ORDERS, DIRECTIONS, AND REGULATIONS
OF THE PRIVY COUNCIL,

UNDER THE

DISEASES PREVENTION ACTS,

AND

Memoranda by their Medical Officer,

WITH THE PARTICULARS OF

THE TREATMENT RECOMMENDED BY THE ROYAL
COLLEGE OF PHYSICIANS,

AT THE REQUEST OF THE PRIVY COUNCIL,

AND

AN INTRODUCTORY SUMMARY.

BY

J. B. HUTCHINS, Esq.,

OF THE MEDICAL DEPARTMENT OF THE PRIVY COUNCIL.

LONDON:

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1866.

CHOLEA.

ORDERS, DIRECTIONS, AND REGULATIONS

OF THE HUNT COMMISSION

FOR THE

DISEASES PREVENTION ACTS

PREPARED BY THE HUNT COMMISSION

AND THE HUNT COMMISSION

OF THE HUNT COMMISSION

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OF THE HUNT COMMISSION

J. H. HITCHING, Esq.

OF THE HUNT COMMISSION

OF THE HUNT COMMISSION

1861

INTRODUCTORY SUMMARY.

Now that Cholera is unhappily among us in an epidemic form, and consequently all Local Authorities are seeking information as to the best steps to be taken for arresting its spread in those places where it unfortunately exists, and also for protecting as much as possible those places which have hitherto escaped this terrible invader, this pamphlet has been printed, containing the various Official Papers which have been published on the subject, together with a summary of their contents.

In addition to the Orders of Council made under the provisions of the Diseases Prevention Acts, I have appended a "Memorandum on the Precautions to be taken against Cholera;" "a Memorandum on Disinfection;" and a "General Memorandum on the Proceedings which are advisable in Places attacked or threatened by Epidemic Disease." All these papers have been drawn up by the Medical Officer of the Privy Council.

By the Diseases Prevention Act, 1855, the same Authority was appointed to carry out its provisions as was appointed to execute the provisions of the Nuisances Removal Act, but by Sec. 11 of the 23 & 24 Vict. c. 77, that portion of the Act of 1855 which named the Authority was repealed, and the following Authorities were substituted.

In the Metropolis the execution of the Diseases Prevention Acts and of the Regulations issued under those Acts, was entrusted to the Vestries and the District Boards, as constituted by the Metropolis Local Management Act, 1855, within their respective parishes and districts. In all other parts of England the Authorities charged with the execution of the Diseases Prevention Acts are the various Boards of Guardians of the Poor within their respective Unions and Parishes.

But in this section (23 & 24 Vict. c. 77, sec. 11) power, however,

is reserved to the Privy Council of appointing, should it see fit, in any district in which some other body than the Board of Guardians is the Authority for executing the provisions of the Nuisances Removal Acts, that other body to be the Authority for carrying into execution, within its district, the provisions of the Diseases Prevention Acts, and all Orders and Regulations issued in pursuance of those Acts, so that, wherever the Privy Council shall so order, there will then be one and the same Local Authority for the two objects, namely, for the Removal of Nuisances and for the Prevention of Disease.

The Local Authorities, therefore, under the Diseases Prevention Acts are;—In EVERY PART OF ENGLAND (except the Metropolis) the Board of Guardians of the Union or Parish, unless an Order of Council as above-mentioned be issued to the contrary.

In the METROPOLIS, the Vestries and District Boards as constituted by the Metropolis Local Management Act, 1855.

The City of London is not for this purpose considered a part of the "Metropolis," and therefore the Boards of Guardians of the City Unions are the Local Authorities.

The only place for which, as yet, a Nuisance Authority has been substituted for the Board of Guardians, is the Town of Southampton.

The following is a summary of the Orders of Council and other Official Memoranda above referred to.

I.—Order of Council of the 14th July, 1866, putting the Diseases Prevention Acts in force for six months, within the whole of England.

This Order simply puts the Diseases Prevention Acts in force, and states the reasons for doing so.

II.—Order of Council of the 20th July, 1866, issuing Regulations and Directions to be in force in all places not within the Metropolis.

This Order, after reciting the above Order putting the Diseases Prevention Act in force, directs in the preliminary part (I.) that the Clerk of every Board of Guardians shall forthwith summon a Special Meeting

of the Board to take the Regulations into consideration, and also to make arrangements for carrying them into effect. It then goes on (Part II.) to direct that certain steps shall be taken and things done in any Union or Parish in which Cholera is prevailing. Those directions are contained in the sections then following, and of which a summary is here given.

1. Local Authority to meet daily.
2. Local Authority to meet at ordinary Board Room and other necessary places.
3. Medical Adviser to be appointed.
4. Medical Visitors (legally qualified Medical Practitioners) and Medical and other Assistants to be appointed.
5. Reports to be made.
6. Local Authority, if not also Nuisances Removal Authority, to report Nuisances to Nuisance Authority.
7. Visitors to report cases of destitution to Relieving Officers.
8. Local Authority to provide Dispensaries and necessary appliances.
9. Local Authority to provide Medical Aid for the poor.
10. Local Authority to provide Nurses.
11. Local Authority to provide Hospitals in certain cases.
12. Local Authority to provide for the separation of the Sick from the Healthy in the same dwelling.
13. Local Authority to provide for disinfection.
14. Infected things to be destroyed in certain cases.
15. Drinking-water to be kept pure.
16. Burials to be facilitated.
17. "Wakes," &c., prohibited.
18. Corpses to be kept separate from the living.
19. Ships and vessels within District to be dealt with the same as inhabited houses on shore, except as affected by Quarantine Laws.
20. Provision for ships with Cholera on board, in parts and arms of the sea.
21. Returns to be made to Privy Council.
22. Notices to be published.

- 23. Information and aid to be given to Local Authority.
- 24. Provision for parishes not in Union nor under a Board of Guardians.
- 25. Interpretation Clause.

III.—*Order of Council, of the 21st July, 1866, issuing Directions and Regulations to be in force in the Metropolis.*

This Order, like the Order of the 20th July, after reciting that the Diseases Prevention Acts have been put in force in the whole of England, directs in the preliminary part (I.) that the Clerk of every Vestry or District Board in the Metropolis shall summon a Special Meeting for the purpose of making the arrangements necessary for carrying the Regulations into immediate effect. The Regulations for the Metropolis are not, however, so voluminous as those for the rest of the country. They have been specially adapted to the wants and requirements of the Metropolis, as defined by the Metropolis Local Management Act. The Directions are as follows:—

- 1. Local Authority to meet daily.
- 2. Local Authority to meet at ordinary Board Room, and other necessary places.
- 3. Medical Officer of Health to be Medical Adviser.
- 4. Medical Visitors (legally qualified Medical Practitioners) and Medical and other Assistants to be appointed.
- 5. Reports to be made.
- 6. Visitors to report cases of destitution to Relieving Officers.
- 7. Local Authority to provide Dispensaries and necessary appliances.
- 8. Local Authority to provide Medical Aid for the poor.
- 9. Local Authority to provide Nurses.
- 10. Local Authority to provide Hospitals in certain cases.
- 11. Local Authority to provide for the separation of the Sick from the Healthy in the same dwelling.
- 12. Local Authority to provide for disinfection.

13. Infected things to be destroyed in certain cases.
14. Drinking-water to be kept pure.
15. Burials to be facilitated.
16. "Wakes" &c., prohibited.
17. Corpses to be kept separate from the living.
18. Ships and vessels within District to be dealt with the same as inhabited houses on shore, except as affected by Quarantine Laws.
19. Returns to be made to Privy Council.
20. Information and aid to be given to Local Authority.

IV.—*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.*

This Memorandum calls attention to the following subjects:—

1. Diseases Prevention Act put in force.
2. Medical Relief Regulations issued.
3. Removal of Nuisances.
4. Nuisances specially relative to Cholera.
5. Mode of propagation of Cholera.
6. Jurisdiction in Removal of Nuisances.
7. Personal precautions as to local circumstances.
8. Personal precautions as to Diet, &c.
9. Premonitory Diarrhœa.
10. Disinfection.
11. Organisation for Medical Relief in infected Districts.

V.—*Memorandum on Disinfection.*

This Memorandum, after advocating as essentials, which no amount of disinfection can replace, cleanliness, efficient ventilation and drainage, whether in private houses or in public sewers, and the use of pure drinking-water, gives particulars as to the agents which most commonly prove useful for the purposes of disinfection, and as to the best ways of employing them. It then particularises (in nine sections) certain methods for disinfecting certain places and things, as under:—

1. Emptying of Privies and Cesspools.
2. Heaps of Manure or other Filth,

3. Running Sewage.
4. Evacuations from the Bowels of Persons suffering from Cholera or Typhoid Fever.
5. Linen and Washing Apparel.
6. Woollens, Bedding, or Clothing.
7. Interiors of Houses.
8. Rooms no longer occupied.
9. Ships.

VI.—*General Memorandum on the Proceedings which are advisable in Places attacked or threatened by Epidemic Disease.*

This memorandum, though drawn up more particularly for the guidance of Local Authorities in procuring the removal of nuisances, is one which will prove worthy of the attention of all classes of society,—private individuals as well as public bodies—and treats of the necessity there is for complete sanitary conditions, as well in the house as in the town.

A reference to some of the Acts bearing upon the question may, perhaps, be useful at the present time, though as there is now a Bill before Parliament for amending the law relating to public health, this portion of the pamphlet will want revising in the event of the Bill becoming law. Still, as a guide to the proceedings which can be taken for improving the sanitary condition of places in which nuisances are found to exist, the following Acts of Parliament may be referred to as bearing upon the question of nuisances and upon the legal measures which may be adopted to procure their abatement.

“The Nuisances Removal Act for England, 1855,”—18 & 19 Vict. c. 121.

“Diseases Prevention Act, 1855,”—18 & 19 Vict. c. 116.

“Nuisances Removal and Diseases Prevention Acts of 1855 Amendment Act,”—23 & 24 Vict. c. 77.

It will be found that the Local Authority for the removal of nuisances, and for executing the Diseases Prevention Act, is the Board of Guardians, excepting where otherwise provided for. See 23 & 24 Vict. c. 77, secs. 2 and 11.

The nuisances which come within the operation of the Act 18 & 19 Vict. c. 121, sec. 8, are—

Any premises in such a state as to be a nuisance, or injurious to health;

Any Pool, Ditch, Gutter, Watercourse, Privy, Urinal, Cesspool, Drain, or Ashpit, so foul as to be a nuisance, or injurious to health;

Any Animal so kept as to be a nuisance, or injurious to health;

Any accumulation or deposit (with certain exceptions) which is a nuisance, or injurious to health.*

The Penalties imposed under the Act 18 & 19 Vict. c. 121, are to be found as follow:—

For disobeying the orders of the Justices, sec. 14.

For causing Water to be fouled by Gas Washings, sec. 23.

For the continuance of such offence, sec. 25.

For the sale of Unwholesome Food, sec. 26.

For carrying on Offensive Trades, sec. 27.

For permitting the Overcrowding of residences, sec. 29.

For obstructing persons in the execution of this Act, sec. 36.

For obstructing the owner of the premises in obeying the provisions of this Act, sec. 37.

Under the Act 18 & 19 Vict. c. 116—

For obstructing persons in the execution of this Act, sec. 14.

Under 23 & 24 Vict. c. 77—

For Damaging or Fouling any Fountain or Water, sec. 8.

The powers and mode of procedure under 18 & 19 Vict. c. 121, are set forth in sections, 5, 10, 11, 12, 13, 17, 18, 20, 21, 22, 26, 27, 29, 30, 31, 33, 34, 38, and 43.

Under 18 & 19 Vict. c. 116—

In sections 4, 5, 6, 8, 9, and 15.

And under 23 & 24 Vict. c. 77—

In sections 4, 5, 7, 9, 12, 13, 14.

Especial attention is called to sec. 13, of the 23 & 24 Vict. c. 77,

* The application of the term Nuisance will be extended should the Bill, now before Parliament, pass into law.

which enables any Inhabitant of the same Parish or place to obtain an Order from the Justices for the removal of any nuisance on private premises; and empowers the Justices to order an examination of the premises, and an entry thereon; as well as to enforce the Order, and to charge the Costs to the party on whom the Order is made.

The Sewage Utilization Act (28 & 29 Vict. c. 75) may also be referred to as giving certain powers to Vestries (not in the Metropolis, and not of a parish in a part of which parish either the Public Health Act, 1848, or the Local Government Act, 1858, was in force on the 29th June, 1865*) to deal with the question of Sewage.

Medical Treatment of Cholera.

As numerous inquiries are constantly being made as to a mode of treatment to be adopted in cases of Diarrhoea or Cholera, the following information may, perhaps, be useful. The course which it is wisest to adopt is, on the slightest symptom of being attacked by either of these diseases, to *immediately* apply for medical advice. But, as in some cases, the patient may be so placed that Medical advice is not obtainable (such as, for instance, on board ships at sea which do not carry a Surgeon) the following statement may serve as a guide to those who should unfortunately be so circumstanced.

The Lords of Her Majesty's Privy Council having by their Medical Officer addressed a letter to the College of Physicians relating to the instructions which their Lordships deemed it expedient to issue to captains of merchant vessels directing them how to "act when proper Medical attendance cannot be procured, so as to provide for the Health of their Crews against attacks of Cholera," the following is the substance of the reply which the College forwarded, being contained in the report of the Committee of the Council of the College to which the question had been referred by the College:—

Their Lordships requested to be informed "whether, in the opinion of

* See 28 & 29 Vict. c. 75, s. 2.

the College, any, and if so, what suggestions might be issued as representing the present state of medical knowledge and experience with regard to the drugs which should be given, or other treatment which should be adopted, in attacks of Cholera, and especially in the beginnings of the disease, when proper medical attendance cannot be procured." Their Lordships, at the same time, submitted to the College a copy of the instructions issued on previous occasions. To which the College replied—

"With reference to that part of the instructions on which their Lordships particularly request the opinion of the College—viz., that which relates (1) to the necessity of avoiding purgative medicines during the prevalence of Cholera, and (2) the measures to be adopted when Cholera appears on board ship, the Committee think that,

When opening medicine is required the mildest should be selected, as castor oil or rhubarb. Glauber's salts and Epsom salts are dangerous. The common belief that prolonged costiveness should not be interfered with during the prevalence of Cholera is erroneous. The master should ascertain by inquiry, morning and evening, whether any of the crew are labouring under such looseness, and if so the following recommendations are subjoined for his guidance:—

If a man be attacked with looseness of the bowels he should, whenever it is possible, be sent to bed and kept warm, and some aromatic and astringent medicine, containing a small quantity of opium, should be given to him at once, and should be repeated every hour or two, according to the severity of the purging.

It is suggested that ten grains of the aromatic powder of chalk and opium (of the *British Pharmacopœia*) should be so given in half a glass of peppermint water or weak brandy and water. Should this medicine not be at hand, five measured drops of laudanum may be substituted for each dose of the powder.

Large doses of opium or of ardent spirits should be avoided.

If the looseness should result from bad or obviously indigestible food, or if the discharges are unnaturally offensive and attended with griping pain, it would be desirable to give a dose of either of the gentle laxatives above named before administering the opiates.

The diet should consist mainly of beef-tea or broth, gruel or rice.

If the stools become colourless and watery (the purging being

of the kind commonly called 'rice-water purging') and be accompanied with vomiting and coldness, the opiates should no longer be persisted in, and spirituous liquors should be avoided. The patient should be strictly kept in the recumbent position, he should be allowed to drink water freely, and should be abundantly supplied with fresh air. Warm applications should be used to the feet and legs, and a mustard poultice should be applied to the pit of the stomach. Cramps may be treated by rubbing the affected parts with the warm hand.

In all cases, medical advice, when obtainable, should be procured as soon as possible."

In cases where medical attendance can be procured, no particular mode of treatment has been recommended by the Privy Council.

J. B. H.

Medical Department of the Council Office,
8, Richmond Terrace, Whitehall, S.W.
August 4, 1866.

ORDERS, DIRECTIONS, &c.,

ISSUED BY THE PRIVY COUNCIL.

I.—*Order of Council of the 14th July, 1866, putting the Diseases Prevention Acts in force for six months within the whole of England.*

AT THE COUNCIL CHAMBER, WHITEHALL,

The 14th day of July, 1866.

BY THE LORDS OF HER MAJESTY'S MOST HONOURABLE
PRIVY COUNCIL.

PRESENT,

LORD PRESIDENT.

LORD PRIVY SEAL.

MR. SECRETARY WALPOLE.

SIR JOHN PAKINGTON, BART.

MR. GATHORNE HARDY.

WHEREAS by the "Diseases Prevention Act, 1855," it is, amongst other things, enacted that whenever any part of England appears to be threatened with, or is affected by, any formidable epidemic, endemic, or contagious disease, the Lords and others of Her Majesty's Most Honourable Privy Council, or any three or more of them (the Lord President of the Council, or one of Her Majesty's Principal Secretaries of State being one) may, by Order or Orders, to be by them from time to time made, direct that the provisions therein contained for the prevention of diseases be put in force in England, or in such parts thereof as in such Order or Orders respectively may be expressed, and may from time to time, as to all or any of the parts to which any such Order or Orders extend, and in like manner revoke or renew any such Order; and that, subject to revocation and renewal as aforesaid, every such Order shall be in force for six calendar months, or for such shorter period as in such Order shall be expressed; and that every such Order of Her Majesty's Privy Council, or of any members thereof as aforesaid, shall be certified under the hand of the Clerk in Ordinary of Her Majesty's Privy Council, and shall be published in the London Gazette; and such publication shall be conclusive evidence of such Order, to all intents and purposes:

And whereas in an Act passed in the twenty-third and twenty-fourth years of Her Majesty's reign, chapter seventy-seven, certain provisions are contained as to what shall be the Local Authority for executing the said Diseases Prevention Act:

And whereas it is deemed expedient to put in force the provisions of the above recited Acts within the whole of England:

Now, therefore, the Lords of Her Majesty's Most Honourable Privy Council do hereby, in exercise of the powers given by the said Acts, order and direct that the provisions contained in the said Acts for the prevention of diseases shall, from and after the date of this present Order, be put in force within the whole and every part of England:

EDMUND HARRISON.

II.—*Order of Council of the 20th July, 1866, issuing Regulations and Directions to be in force in all places not within the Metropolis.*

AT THE COUNCIL CHAMBER, WHITEHALL,

The 20th day of July, 1866.

BY THE LORDS OF HER MAJESTY'S MOST HONOURABLE
PRIVY COUNCIL.

PRESENT,

LORD PRESIDENT.		SIR STAFFORD NORTHCOTE,
MR. SECRETARY WALPOLE.		BART.
MR. CORRY.		MR. GATHORNE HARDY.

WHEREAS the Lords of Her Majesty's Most Honourable Privy Council, by an Order made the 14th day of July instant, in exercise of the powers given by the "Diseases Prevention Act, 1855," and the Amending Act of the 23rd and 24th years of Her Majesty, chap. 77, did order and direct that the provisions contained in the said Acts for the prevention of diseases should, from and after the date of that Order, be put in force within the whole and every part of England;

And whereas the Lords of Her Majesty's Privy Council have thought fit under the authority conferred upon them by the said first cited Act and all other Acts in such behalf to issue certain directions and regulations, to be in force in all Unions and Parishes of England not within the Metropolis, and in all parts and arms of the sea lying within the jurisdiction of the Admiralty, so long as the provisions aforesaid shall be in force under the said Order;

Now, therefore, in exercise of the powers conferred upon them by the above-named Acts, the Lords of the Council order, and it is hereby ordered as follows, that is to say:—

I.—PRELIMINARY.

Preliminary Arrangements.

Forthwith on the issuing of the present Regulations, the Clerk of every Board of Guardians shall summon a special meeting of the Board, in order that the present Regulations may be brought before them, and that the Board, may make (as they are hereby required to do) such preliminary arrangements as will enable them, if sudden need shall arise, to carry the following regulations into immediate effect; and the Board at such meeting shall direct the

Clerk, by instructions to the Medical Officers, and by circular letters of request addressed to all legally qualified Medical Practitioners in the Union or Parish, and in such other ways as the Board may think necessary, to take measures for causing the Board to be made acquainted with any presence of Cholera or unusual amount or severity of Diarrhoea in the Union or Parish, or any part of it, if such be existing or should thereafter exist : and the Board, if apprised of any such presence of Cholera or Diarrhoea, shall thereupon forthwith, so far as the circumstances require, do the several things hereinafter ordered.

II.—WHEN CHOLERA IS IN AN UNION OR PARISH.

Meetings of the Local Authority.

1. Every Board shall make arrangements for meeting, in districts where the disease is actually prevailing, daily, either in a body or in one or more Committees, according to the exigencies of the district, for the purpose of exercising the powers conferred upon them by the Act.

Place of Meeting.

2. The meetings may be held at the ordinary board-room, and where necessary, at such other places as shall appear to be most convenient for dealing with the disease, and the Board shall cause proper minutes of all proceedings to be made and duly recorded.

Appointment of Medical Adviser.

3. Where the Union or Parish forms part of any town of more than 60,000 inhabitants, or contains a town of more than 40,000 inhabitants, according to the report upon the last Census, or where several parts of the Union or Parish are at one time suffering from Cholera, the Board shall appoint some legally qualified Medical Practitioner, to attend at the meetings and render his advice thereat and superintend all the medical arrangements for preventing and treating the disease.

Appointment of Medical Visitors.

4. In each district in which Cholera is present, or, if the quantity of work to be done renders it desirable to subdivide the district, then in each of such subdivisions, a legally qualified Medical Practitioner shall be put in charge of the district or subdivision for the medical purposes of these Regulations ; and to each such Medical Practitioner shall be allotted all needful Medical Assistants and such other Assistants as the Board see fit.

Such District Medical Practitioner, or one of his Assistants, shall at least once daily visit those parts of the district which are inhabited by the poorer classes and wherein the disease is, and shall there inquire at every house as to the existence of Diarrhoea or Cholera, and shall enter in a book to be kept for the purpose the facts as to all cases he may meet with, and shall without delay

give, or take the proper steps for causing to be given, all necessary medical assistance to the sick. And the Medical Practitioner or Assistant shall, when visiting the part assigned to him, be provided with medicines for immediate administration in urgent cases, and shall be held to be in medical charge of all cases of Diarrhoea or Cholera with which he may meet until he is relieved by such other provision for their medical attendance as may be made or sanctioned by the Board.

Their Report.

5. Such Medical Practitioner shall, by transmitting his above-required book, or otherwise, report daily to the Board of Guardians, or to the Committee of the district for which he acts, the result of his own and his Assistants' inquiries and shall make such suggestions as to the state of the district as he shall deem advisable.

Board to report Nuisances.

6. In places where the Board of Guardians are not the Nuisances Removal Authority, the Board shall, without delay, cause report to be made to such Authority, and, if the Board see fit, shall complain to the justices of every case where any Committee, Medical Practitioner or Assistant, employed by the Board, shall find any nuisance injurious to health existing in any premises visited by them.

Visitors to report Cases of Destitution to the Relieving Officer.

7. The Visitors shall, where they find it expedient, communicate to the Relieving Officer of the district any case of destitution requiring relief, which is not entered in his relief list, and such Officer shall forthwith visit the same and give such relief as in his judgment the case shall require.

Board to provide Dispensary and Stations.

8. The Board shall provide a sufficient number of Dispensaries, to be open night and day, at convenient places within their district, with an adequate supply of such medicines, medical appliances and disinfectants, as their medical adviser shall recommend, and with a legally qualified Medical Practitioner or skilled assistant always in attendance at each; and such medicines, medical appliances and disinfectants, shall be dispensed without charge by such Medical Practitioner or Assistant to persons bringing orders for the same from the District Medical Practitioners and to other persons who apply for immediate medical treatment. And the names and addresses of all such applicants shall be sent to the District Medical Practitioner of the place in which they reside.

Board to supply Medical aid to poor Cholera Patients.

9. In every case of Cholera or Diarrhoea, where the patient is not under medical care and treatment, the Board shall cause medical assistance to be

rendered with the utmost expedition, and such aid and comfort, nourishment and accommodation, as the circumstances of the case will admit, with the object of restoring health.

To Provide Nurses.

10. The Board shall provide competent Nurses to aid every District Medical Practitioner in his attendance upon the patients suffering from the disease.

To Provide Hospitals in Certain Cases.

11. When the Medical Adviser recommends, the Board shall, with as much despatch as practicable, provide fit and proper accommodation for the reception of such patients as have no home, or cannot properly be treated at home, and may with advantage to themselves be removed, and shall cause the same to be provided with all appliances, medicines, furniture, and other things necessary for the emergency, and shall appoint a legally qualified Medical Practitioner with or without Assistant, as the case may require, to attend to the same.

To provide for the Separation of the Sick from the Healthy in the same Dwelling.

12. If Cholera or Choleraic Diarrhœa exist in any dwelling whereof the Medical Practitioner reports that the sick and healthy cannot therein be properly separated, the Board shall forthwith cause adequate accommodation to be procured for the reception of the healthy; and, when the Medical Practitioner recommends that the sick person shall not be removed, but that the healthy shall be removed, from the same room in which the sick person is lying, the Board shall cause the other inmates of such room to be removed to some convenient place of reception.

To provide Disinfectants and to cause things and places to be Disinfected.

13. The Board shall, in dwellings where Cholera or Diarrhœa exists, cause proper disinfectants to be used in sufficient quantities for the purpose of disinfecting the discharges from the sick, and the bedding, clothing and other things thereby infected, and the utensils and privies in which such discharges may have been received.

To cause infected Goods to be destroyed.

14. The Board shall cause every article of clothing, bedding, or furniture which shall have been infected with any such discharge, and which they shall find incapable of being speedily disinfected, to be forthwith destroyed, the Board within a reasonable time replacing all such articles, or paying the reasonable value to the owner.

To Procure good Water in place of that which is polluted.

15. If it be shown to the Board that any drinking-water used in their district is polluted, they shall take measures, with as much expedition as possible, for procuring wholesome water to be supplied in its stead, so far as the case requires, to the inmates of the houses in their district, and for preventing, as far as possible, the further use of the polluted water. And every Board owning or having possession of any waterworks for the supply of water shall cause the reservoirs, cisterns, pipes, pumps and other apparatus belonging thereto, to be carefully examined, cleansed and purified, and other necessary measures to be taken, so that the water may be supplied without impurity.

Provision for Burials.

16. The Board shall make due arrangements with undertakers and with the proper authorities of the churchyards, burial grounds, and cemeteries of their district, so that coffins may be ready to be supplied immediately on demand and interments speedily take place in the cases of deaths arising from Cholera or Diarrhoea, and the Board shall, when informed of any such death, cause the corpse to be buried with the earliest possible dispatch.

Assemblage of Persons at Waking the Dead prohibited.

17. Where any death shall occur from Cholera or Choleraic Diarrhoea, no collection of persons shall assemble in the room where the corpse is, and no waking of the dead shall be allowed.

Corpses to be kept separate from the Living.

18. The Board shall cause the immediate removal, from any room which living persons inhabit, of the corpse of every person dying from Cholera or Choleraic Diarrhoea, until the time of its interment, and shall cause such means to be adopted for preventing the spread of infection from the corpse as their Medical Adviser shall recommend.

Guardians to take Precautions as to Ships and Vessels lying within their Union or Parish.

19. If the Guardians shall be informed that Cholera or Choleraic Diarrhoea exists, or within three days previously has existed, in any Ship or Vessel which may be lying within their Union or Parish, they shall cause the same to be forthwith visited, inspected, and otherwise dealt with, according to the circumstances of the case, in like manner as if it were an inhabited house on shore, and shall give all such medical and other directions in reference to the persons in such Vessel or Ship, as shall be requisite for preventing the spread of the disease, and for the disinfection or disposal of any things which may be infected

or may have been exposed to infection, subject always to the provisions of any Order of Council issued under the Quarantine Laws for the time being in force in such Union or Parish.

Provision for Ships or Vessels in Parts or Arms of the Sea having Cholera on Board.

20. The captain, master, or other officer in charge of any ship or vessel lying in any part or arm of the sea within the jurisdiction of the Admiralty, but not comprised within any Union or Parish, in which ship or vessel any case of Cholera or Choleraic Diarrhœa exists, or within three days previously has existed, shall obey every direction in writing addressed to him by the Guardians of the nearest Union or Parish signed by their Chairman or Clerk, in reference to the Medical and other treatment of the sick and other persons on board, with the view of preventing the spread of the disease, or to the disposal of the body of any person dead of the disease, or to the disinfection and disposal of the things infected with the disease, or otherwise to the removal of any unhealthy condition of the ship or vessel.

Statistical Returns to be obtained.

21. The Clerk of the Board shall every Monday send by post to the Medical Officer of the Privy Council, a Return of the number of new cases of Diarrhœa or Cholera which have, during the week ended on Saturday midnight last, come under the cognisance of the Board, and of the number of recoveries, and the number of deaths, with such other particulars as such Medical Officer shall from time to time require. The Return shall be in the following form or to the like effect:—

——— *Union or Parish.*

Weekly Return of Cases of Cholera or Diarrhœa for the Week ending on Saturday last.

New Attacks during the Week	-	-	-	-	-
Deaths during the Week	-	-	-	-	-
Recovered during the Week	-	-	-	-	-
Total number of Cases now under treatment	-	-	-	-	-

Date ——— 1866.

(Signed)

——— *Clerk of the Board.*

Board to publish Notices.

22. The Board shall, from time to time, as they shall find expedient, issue, publish and distribute in placards, hand-bills or other communications, such admonitory notices to the owners and occupiers of property within their district as to the provisions of the Acts for the Removal of Nuisances as shall appear to be requisite, and in a like manner publish all such medical advice and such directions and instructions as in their judgment shall be necessary to afford aid to persons attacked with Cholera or Diarrhœa, or for the carrying of these Regulations into execution, and inform the public what special arrangements have been made for affording medical or other assistance in the district.

General Order and Exhortation for aid to the Board.

23. All Officers, Assistants, and Servants of the Board are ordered, and all Medical Practitioners and other persons inhabiting within the district of the Board are requested, to supply information and give their aid to the utmost of their ability to the Board in the execution of these Regulations and Directions.

Provision for Parishes not in Union or under a Board of Guardians.

24. In Parishes and Townships not comprised in a Union or under a separate Board of Guardians, the Clerk, Governor, or the Overseers, as the case may be, shall, so far as they can according to the extent and circumstances of their Parish or Township, carry the foregoing Regulations into execution.

Interpretation Clause.

25. The word "Union," as used herein, shall be taken to include not only a Union of Parishes formed under the provisions of an Act passed in the fifth year of the reign of His late Majesty King William the Fourth, entitled "An Act for the Amendment and better Administration of the Laws relating to the Poor in England and Wales," but also any union of Parishes incorporated or united for the relief or maintenance of the poor under any Local Act of Parliament.

And the word "Guardians," as used herein, shall be taken to include not only Guardians appointed or entitled to act under the provisions of the said last-mentioned Act, but also any Governors, Directors, Managers, or Acting Guardians entitled to act in the ordering of relief to the poor from the Poor Rates under any Local Act of Parliament.

ARTHUR HELPS.

III.—*Order of Council, of the 21st July, 1866, issuing Directions and Regulations to be in force in the Metropolis.*

AT THE COUNCIL CHAMBER WHITEHALL,

The 21st day of July, 1866.

BY THE LORDS OF HER MAJESTY'S MOST HONOURABLE
PRIVY COUNCIL.

PRESENT :

LORD CHANCELLOR.
LORD PRESIDENT.
LORD PRIVY SEAL.

MR. SECRETARY WALPOLE.
GENERAL PEEL.
MR. CORRY.

WHEREAS the Lords of Her Majesty's Most Honourable Privy Council, by an Order made the 14th day of July instant, in exercise of the powers given by "The Diseases Prevention Act, 1855," and the Amending Act of the twenty-third and twenty-fourth years of Her Majesty, chapter seventy-seven, did order and direct that the provisions contained in the said Acts for the prevention of diseases should, from and after the date of that Order, be put in force within the whole and every part of England :

And whereas the Lords of Her Majesty's Privy Council have thought fit under the authority conferred upon them by the said first cited Act and all other Acts in such behalf, to issue certain directions and regulations, to be in force within the Metropolis so long as the provisions aforesaid shall be in force under the said Order :

Now, therefore, in the exercise of the powers conferred upon them by the above named Acts, the Lords of the Council order, and it is hereby ordered, as follows, that is to say :

I.—PRELIMINARY.

Preliminary Arrangements.

Forthwith on the issuing of the present Regulations, the Clerk of every Vestry or District Board (as the case may be) under the Act of the Session holden in the eighteenth and nineteenth years of Her Majesty, chapter one hundred and twenty, shall summon a special meeting of the Vestry or Board,

in order that the present Regulations may be brought before them, and that the Vestry or Board may make, as they are hereby required to do, such preliminary arrangements as will enable them, if sudden need shall arise, to carry the following regulations into immediate effect; and the Vestry or Board at such meeting shall direct the Clerk, by circular letters of request addressed to all legally qualified Medical Practitioners in the Parish or District, and in such other ways as the Vestry or Board may think necessary, to take measures for causing the Vestry or Board to be made acquainted with any presence of Cholera or unusual amount or severity of Diarrhoea in the Parish or District, or any part of it, if such be existing or should thereafter exist: and the Vestry or Board if apprised of any such presence of Cholera or Diarrhoea shall thereupon forthwith, so far as the circumstances require, do the several things hereinafter ordered:

II.—WHEN CHOLERA IS IN A PARISH OR DISTRICT.

Meetings.

1. Every Vestry or Board shall make arrangements for meeting, where the disease is actually prevailing, daily, either in a body or in one or more Committees, according to the exigencies of the Parish or District, for the purpose of exercising the powers conferred upon them by the Act.

Place of Meeting.

2. The meetings may be held at the ordinary Board-room, and where necessary, at such other places as shall appear to be most convenient for dealing with the disease, and the Vestry or Board shall cause proper minutes of all proceedings to be made and duly recorded.

Medical Officer of Health.

3. The Medical Officer of Health shall, as far as practicable, attend the meetings of the Vestry or Board, and of its Committees, to render his advice thereat, and shall superintend all the medical arrangements for preventing and treating the disease.

Appointment of Medical Visitors and Assistants.

4. In each Parish or District in which Cholera is present, or, if the quantity of work to be done renders it desirable to subdivide the parish or district, then in each of such subdivisions, a legally qualified Medical Practitioner shall be put in charge of the Parish or District or subdivision for the medical purposes of these Regulations; and to each such Medical Practitioner (hereinafter named the Medical Visitor) shall be allotted such Assistants as the Vestry or Board see fit.

Such Medical Visitor, where practicable, or, in other cases, one of his Assistants, shall at least once daily visit those places assigned to him which are

inhabited by the poorer classes and wherein the disease is, and shall there inquire at every house as to the existence of Diarrhœa or Cholera, and shall enter in a book to be kept for the purpose the facts as to all cases he may meet with, and shall without delay give, or take the proper steps for causing to be given, all necessary medical assistance to the sick. And the Medical Visitor or Assistant shall, when visiting the places assigned to him, be provided with medicines for immediate administration in urgent cases, and shall be held to be in medical charge of all cases of Diarrhœa or Cholera with which he may meet until he is relieved by such other provision for their medical attendance as may be made or sanctioned by the Vestry or Board.

Their Report.

5. Such Medical Visitor shall, by transmitting his above required book, or otherwise, report daily to the Medical Officer of Health the result of his own and his Assistants' inquiries, and shall report any nuisances which he or they find existing in any premises visited by him or them, and shall make such suggestions as to the state of the Parish or District as he shall deem advisable.

Visitors to report cases of destitution to the Relieving Officer.

6. The Visitors shall, where they find it expedient, communicate to the Relieving Officer of the District any case of destitution requiring relief, which is not entered in his relief list; and such officer shall forthwith visit the same and give such relief as in his judgment the case shall require.

To provide Dispensary Stations.

7. The Vestry or Board shall provide a sufficient number of Dispensaries, to be open night and day, at convenient places within their Parish or District, with an adequate supply of such medicines, medical appliances and disinfectants, as their Medical Officer of Health shall recommend, and with a legally qualified Medical Practitioner or skilled Assistant always in attendance at each; and such medicines, medical appliances and disinfectants shall be dispensed without charge by such Medical Practitioner or Assistant to persons bringing orders for the same from the Medical Visitors, and to other persons who apply for immediate medical treatment. And the names and addresses of all such applicants shall be sent to the Medical Visitor of the place in which they reside.

To Supply Medical Aid to poor Cholera Patients.

8. In every case of Cholera or Diarrhœa, where the patient is not under medical care and treatment, the Vestry or Board shall cause medical assistance to be rendered with the utmost expedition, and such aid and comfort, nourishment and accommodation, as the circumstances of the case will admit, with the object of restoring health.

To Provide Nurses.

9. The Vestry or Board shall provide competent Nurses to aid every Medical Visitor in his attendance upon the patients suffering from the disease.

To provide Hospitals in certain Cases.

10. When the Medical Officer of Health recommends, the Vestry or Board shall, with as much despatch as practicable, provide fit and proper accommodation for the reception of such patients as have no home, or cannot properly be treated at home, and may with advantage to themselves be removed, and shall cause the same to be provided with all appliances, medicines, furniture, and other things necessary for the emergency, and shall appoint a legally qualified Medical Practitioner, with or without Assistant, as the case may require, to attend to the same.

To provide for the Separation of the Sick from the Healthy in the same Dwelling.

11. If Cholera or Choleraic Diarrhoea exist in any dwelling whereof the Medical Officer of Health reports that the sick and healthy cannot therein be properly separated, the Vestry or Board shall forthwith cause adequate accommodation to be procured for the reception of the healthy; and, when the Medical Officer of Health recommends that the sick person shall not be removed, but that the healthy shall be removed, from the same room in which the sick person is lying, the Vestry or Board shall cause the other inmates of such room to be removed to some convenient place of reception.

To provide Disinfectants and to cause Things and Places to be Disinfected.

12. The Vestry or Board shall, in dwellings where Cholera or Diarrhoea exists, cause proper disinfectants to be used in sufficient quantities for the purpose of disinfecting the discharges from the sick, and the bedding, clothing, and other things thereby infected, and the utensils and privies in which such discharges may have been received.

To cause infected Goods to be destroyed.

13. The Vestry or Board shall cause every article of clothing, bedding, or furniture which shall have been infected with any such discharge, and which they shall find incapable of being speedily disinfected, to be forthwith destroyed, the Vestry or Board within a reasonable time replacing all such articles, or paying the reasonable value to the owner.

To procure good Water in place of that which is polluted.

14. If it be shown to the Vestry or Board that any drinking-water used in their Parish or District is polluted, they shall take measures, with as much expedition as possible, for procuring wholesome water to be supplied in its stead, so far as the case requires, to the inmates of the houses in their Parish or District, and for preventing, as far as possible, the further use of the polluted water. And every Vestry or Board owning or having possession of any water-works for the supply of water, shall cause the reservoirs, cisterns, pipes, pumps, and other apparatus belonging thereto, to be carefully examined, cleansed and purified, and other necessary measures to be taken, so that the water may be supplied without impurity.

Provision for Burials.

15. The Vestry or Board shall make due arrangements with undertakers, and with the proper authorities of the churchyards, burialgrounds, and cemeteries of their Parish or District, so that coffins may be ready to be supplied immediately on demand, and interments speedily take place in the cases of deaths arising from Cholera or Diarrhoea; and the Vestry or Board shall, when informed of any such death, cause the corpse to be buried with the earliest possible despatch.

Assemblage of Persons at Waking the Dead prohibited.

16. Where any death shall occur from Cholera or Choleraic Diarrhoea, no collection of persons shall assemble in the room where the corpse is, and no "waking" of the dead shall be allowed.

Corpses to be kept separate from the Living.

17. The Vestry or Board shall cause the immediate removal, from any room which living persons inhabit, of the corpse of every person dying from Cholera or Choleraic Diarrhoea, until the time of its interment, and shall cause such means to be adopted for preventing the spread of infection from the corpse as their Medical Officer of Health shall recommend.

To take Precautions as to Ships and Vessels lying within their Parish or District.

18. If the Vestry or Board shall be informed that Cholera or Choleraic Diarrhoea exists, or within three days previously has existed, in any Ship or Vessel which may be lying within their Parish or District, they shall cause the same to be forthwith visited, inspected, and otherwise dealt with, according to the circumstances of the case, in like manner as if it were an inhabited house on shore, and shall give all such medical and other directions in reference to the persons in such Vessel or Ship, as shall be requisite for preventing the spread of

the disease, and for the disinfection or disposal of any things which may be infected or may have been exposed to infection, subject always to the provisions of any Order of Council issued under the Quarantine Laws for the time being in force in such Parish or District.

Statistical Returns to be obtained.

19. The Clerk of the Vestry or Board shall, every Monday, send by post to the Medical Officer of the Privy Council a return of the number of new cases of Diarrhœa or Cholera which have during the week ended on Saturday midnight last come under the cognizance of the Vestry or Board, and of the number of recoveries, and the number of deaths, with such other particulars as such Medical Officer shall from time to time require. The return shall be in the following form, or to the like effect :—

——— *Parish or District*

Weekly Return of Cases of Cholera or Diarrhœa for the Week ending on Saturday last.

New Attacks during the Week	-	-	-	-	-
Deaths during the Week	-	-	-	-	-
Recovered during the Week	-	-	-	-	-
Total number of Cases now under treatment	-	-	-	-	-

Date ——— 1866.

(Signed) ——— *Clerk to the Vestry or Board.*

To Publish Notices.

20. The Vestry or Board shall, from time to time as they shall find expedient, issue, publish, and distribute in placards, hand-bills or other communications, such admonitory notices to the owners and occupiers of property within their Parish or District as to the provisions of the Acts for the Removal of Nuisances as shall appear to be requisite, and in a like manner publish all such medical advice and such directions and instructions as in their judgment shall be necessary to afford aid to persons attacked with Cholera or Diarrhœa, or for the carrying of these Regulations into execution, and inform the public what special arrangements have been made for affording medical or other assistance in the Parish or District.

General Order and Exhortation for Aid to the Vestry or Board.

21. All Officers, Assistants, and Servants of the Vestry or Board are ordered, and all Medical Practitioners and other persons inhabiting within the Parish or District of the Vestry or Board are requested, to supply information and to give their aid to the utmost of their ability to the Vestry or Board in the execution of these Regulations and Directions.

ARTHUR HELPS.

IV.—*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 (by 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 *District 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 *Overseers 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 ACTS 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, cess-pools, 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 water-works. 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 diarrhoeal 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 through 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

* 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 Condly'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.

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 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 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 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 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 diarrhoea) 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

* 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.

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 Diarrhœa.

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 probable that accidental diarrhœa, 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 measures, as advised in Section 4, for keeping all privies and like places in a thoroughly clean and uninfected state, become more and more important in proportion as the discharges in question are likely to have access to the places. [For detailed advice on Disinfection, see the Office Memorandum on that subject.]

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 there-under 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 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.

V.—*Memorandum on Disinfection.*

N. B.—It is to cleanliness, ventilation and drainage, and the use of perfectly pure drinking water, that populations ought mainly to look for safety against nuisance and infection. Artificial disinfectants cannot properly supply the place of those essentials: for, except in a small and peculiar class of cases, they are of temporary or imperfect usefulness. That no house-refuse—not only no excremental matter, but also no other kind of dirt or refuse, should remain on or about inhabited premises, is a first rule against infection. That the air within the house should never in any part of the house be stagnant, but should always be in course of renewal from without by uninterrupted and abundant supplies of fresh air, is a condition of equal importance. And that all water meant to be used for drinking or cooking should be drawn from sources which cannot have been polluted by any kind of refuse-matter, is a third most important rule for the avoidance of infection.

If dwelling-places have within them any odour of drainage, particular examination should be made (1) whether the filth which house-drains are meant to carry away is retained in or near the premises in ill-made drains, or sewers, or cesspools, or perhaps is leaking from house-drains within the house; and (2) whether, inside the house, the inlets of drains and sinks are properly trapped; and (3) whether the drains and sewers are sufficiently ventilated outside the house. All water-closets within houses should have free openings for ventilation from and into the outer air. Of a cesspool, the only true disinfection is to abolish it. In country-places, where proper drainage is not provided, the nuisance of open privies may be best avoided by the use of the so-called earth-closet.

If a sewer is much complained of, as stinking into the public way, generally the presumption is, that, from original ill-construction or some other cause, it does not properly fulfil its object, but has filth accumulated and stagnant in it; and such a sewer, besides occasioning nuisance in the public way, may be the source of serious danger to the inhabitants of houses which drain into it. It is most important that all sewers should be well ventilated at points where their effluvia will be least injurious; and ordinary drain-pipes may be used to conduct the effluvia to a distance.

For convenience, in this memorandum, the word “disinfectants” is used to cover, not only those true disinfectants which permanently destroy infective matter, but also those agents which merely arrest the process, or absorb the offensive products, of organic decomposition.

For artificial disinfection on a large scale, *the agents which most commonly prove useful* are—quick-lime, chloride of lime, carbolic acid, sulphate of iron, perchloride of iron, and chloride of manganese. The following are also efficient disinfectants, but, as being dearer, are less suited for large operations: sulphate of zinc, chloride of zinc, chloride of soda, permanganate of potash. In certain cases chlorine gas, or nitrous acid gas, or sulphurous acid gas, may advance

tageously be used ; and, in certain other cases, powdered charcoal or fresh dry earth.

Quick-lime ought to have been recently burnt, and may be used, either in the form of dry powder, or, stirred up with about ten times its bulk of water as milk of lime. *Chloride of lime* is best used with water, and thoroughly mixed with it, in the proportion of a pound to the gallon ; or, of the solution, as commonly sold, about two pints may be mixed with a gallon of water. *Carbolic acid* (in the fluid form in which it is commonly sold) should be dissolved in about eighty times its volume of water, with which it must be mixed by strong shaking in a closed vessel. *Sulphate of iron* should be dissolved in ten times its weight of water ; a solution which is best effected by employing hot water and stirring. Of *perchloride of iron* and *chloride of manganese*, the common concentrated solutions may be used, diluted with ten or twelve times their bulk of water. *Sulphate of zinc* should be dissolved in about ten times its weight of warm water. Of *chloride of zinc*, the common concentrated solution may be diluted with eight or ten times its bulk of water.* Of *chloride of soda*, the common solution may be used like that of chloride of lime. Of *permanganate of potash* an ounce may be dissolved in a gallon of water.†

All disinfectants must be used in *quantities proportionate* to the amount of matter or surface to be disinfected. When the matters requiring to be disinfected have an offensive smell, the disinfectant should be used till this smell has entirely ceased ; and as often as the smell recurs, the disinfectant must again be used.

1. During the *emptying of privies and cesspools*, and whenever else temporary disinfection is required for them, carbolic acid, or sulphate of iron, or perchloride of iron, or chloride of manganese, or chloride of zinc, will be found available. A dilute solution (as above) of one of those agents should be poured into the privy or cesspool, from a quart to a pailful at a time, till the desired effect is obtained. Especially where cholera or typhoid fever is present, privies and cesspools ought to be very frequently flooded in this manner. The best test of their being adequately disinfected, is the entire absence of fæcal or ammoniacal odour.

2. *Heaps of manure or other filth*, if it be for the time impracticable or inexpedient to remove them, should be covered, to the depth of two or three inches, with a layer of freshly burnt vegetable charcoal in powder. Freshly burnt lime may be used in the same way, but is less effective than charcoal. If neither charcoal nor lime be at hand, the filth should be covered with a layer,

* Or the preparations respectively known as Burnett's and Crewe's disinfectant solutions may be employed.

† Or Condry's disinfectant fluids, which contain manganic and permanganic salts, may be used.

some inches thick, of clean dry earth. For a *privy which has only solid contents*, the same sort of treatment is applicable. *Earth near dwellings*, if it has become offensive or foul by the soakage of decaying animal or vegetable matter, should be treated on the same plan.

3. If *running sewage*, about to be used in agriculture, require to be disinfected, the chloride of manganese or perchloride of iron may be best used;* but if the sewage is to pass into a river, or into any pond or canal, where it might again become offensive, chloride of lime is to be preferred; and in this case a pound of good chloride of lime will generally suffice to disinfect 1,000 gallons of the sewage. For foul ditches and other stagnant drainage, chloride of lime is also the proper disinfectant.

4. Where it is desirable to disinfect, before throwing away, the *evacuations from the bowels of persons suffering from cholera or typhoid fever*, some of the disinfectant (which here may best be chloride of lime) should be put into the bed-pan or other vessel before it is used by the patient, and some more should be added immediately after. Its thorough mixture with the evacuation should be ensured. Care should also be taken that portions of the discharges do not remain about the patient's body, or in his dress.

5. *Linen and Washing Apparel* requiring to be disinfected may be set to soak in water containing per gallon about an ounce either of the common clear solution of chloride of lime, or of that of chloride of soda. Or the articles in question may be plunged into boiling water, and afterwards, when at wash, be actually boiled in the washing water.

6. *Woollens, Bedding, or Clothing*, which cannot be washed, may be disinfected by exposure for two or more hours, in chambers constructed for the purpose, to a temperature of F. 210°-250°. When this cannot be done, the natural disinfecting process of prolonged exposure to air, sun, and rain, ought to be had recourse to.

7. For the disinfection of *interior of houses*, the ceilings and walls should be washed with warm quick-lime water. The wood-work should be cleansed with soap and water, and subsequently washed with water containing in each gallon about two ounces of the clear solution of either chloride of lime or chloride of soda.

8. *A room no longer occupied* may be disinfected by chlorine gas, or nitrous acid gas, or sulphurous acid gas. And for this purpose the gases may be produced in the room as follows:—*chlorine gas*, by pouring over a quarter of a

* In some such cases McDougall's process, as practised by him at Carlisle, may be applicable. And his powder may also be applicable to cases mentioned in § 1.

pound of finely powdered black oxide of manganese, contained in a jar, half a pint of muriatic acid previously mixed with a quarter of a pint of water, or by pouring over a quarter of a pound of chloride of lime, contained in a jar, a quarter of a pint of muriatic or dilute sulphuric acid;—*nitrous acid gas*, by pouring over an ounce of copper shavings or turnings, contained in a deep jar, three ounces of concentrated nitric acid;—*sulphurous acid gas*, by burning an ounce or two of flower of sulphur in a pipkin. The process of disinfecting a room by any of these gases requires several hours; and while it is going on, all doors, chimneys, and windows of the room must be kept carefully closed. Precautions to this effect should have been taken before the chemicals are mixed, as the person who starts the process (having to avoid the gases) must not afterwards loiter in the room. When the process is at an end, doors and windows should be fully opened.

9. *Ships* (except the class of cattle-ships, for which special treatment is required) may be disinfected on the same plan as houses. The process should be conducted as distantly as may be from the shore and from other vessels. All the compartments of the ship should first be fumigated with some disinfectant gas, best with chlorine or nitrous acid, and then all the accessible wood-work (in and out) should be washed with a solution of chloride of soda or lime. The bilges require particular attention, and before they are first pumped, some pounds of chloride of lime in water, or some gallons of solution of perchloride of iron, should be poured into them, for the purpose of disinfecting the bilgewater. All permanent shingle and small-grained ballast should be replaced by fresh.

It is most frequently with reference to the infection of yellow fever that ships require to be disinfected, and generally in such cases the cargo requires the same treatment as the ship. So far, therefore, as the cargo has not been completely disinfected in the course of the disinfection of the ship, and so far as is practicable, it ought, before it is landed, and part by part as it is moved, to be disinfected by free sprinklings with the solution of chloride of lime or soda. Also in these cases it is to be remembered that persons from on board the infected ships (especially those who have been most in its hold) may carry infection about their persons—in precaution against which danger it is desirable that the persons should have complete baths of soap and water, and that their clothes should partake of the general fumigation of the ship. The person who conducts the fumigation of a ship (especially where there is question of yellow fever) ought not at first to enter the hold, but merely to hang down the hatches, or otherwise place within the hold, the vessel which contains his chemical mixture.

JOHN SIMON.

*Medical Department of the
Privy Council Office,
July, 1866.*

VI.—General Memorandum on the Proceedings which are advisable in Places attacked or threatened by Epidemic Disease.

1. Wherever there is prevalence or threatening of Cholera, Diphtheria, Typhus, or any other Epidemic Disease, it is of more than common importance that the powers conferred by the Nuisances Removal Acts, and by various other laws for the protection of the public health, be well exercised by those in whom they are vested.

2. If the danger be considerable, it will be expedient that Local Authorities, in taking measures against it, avail themselves of the best medical advice which their district or its neighbourhood can supply.

3. Proper precautions are equally proper for all classes of society. But it is chiefly with regard to the poorer population, therefore chiefly in the courts and alleys of towns, and at the labourers' cottages of country districts, that Local Authorities are called upon to exercise vigilance, and to proffer information and advice. Common lodging-houses, and houses which are sub-let in several small holdings, always require particular attention.

4. Wherever there is accumulation, stink, or soakage, of house refuse, or of other decaying animal or vegetable matter, the nuisance should as promptly as possible be abated, and precaution should be taken not to let it recur. Especially all complaints which refer to sewers and drains, or to foul ditches, and ponding of drainage, or to neglect of scavenging, should receive immediate attention. The trapping of house-drains and sinks, and the state of cesspools and middens, should be carefully seen to. In slaughter-houses, and other places where beasts are kept, strict cleanliness should be enforced.

5. In order to guard against the harm which sometimes arises from disturbing heaps of offensive matter, it is often necessary to combine the use of chemical disinfectants with such means as are taken for the removal of filth; and in cases where removal is for the time impossible or inexpedient, the filth should always be disinfected. Disinfection is likewise desirable for unpaved earth close to dwellings, if it be sodden with slops and filth. Generally where Cholera or Typhoid Fever is in a house, the privy requires to be disinfected.

6. Sources of water-supply should be well examined. Those which are in any way tainted by animal or vegetable refuse, above all, those into which there is any leakage or filtration from sewers, drains, cesspools, or foul ditches, ought no longer to be drunk from. Especially where the disease is Cholera, Diarrhœa, or Typhoid Fever, it is essential that no foul water be drunk.

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 Condry's red disinfectant fluid; which 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.

7. The washing and lime-whiting of uncleanly premises, especially of such as are densely occupied, should be pressed with all practicable despatch.

8. Overcrowding should be prevented. Especially where disease has begun, the sick-room should, as far as possible, be free from persons who are not of use or comfort to the patient.

9. Ample ventilation should be enforced. It should be seen that window-frames are made to open, and that windows are sufficiently opened. Especially where any kind of infective fever has begun, it is essential, both for patients and for persons who are about them, that the sick-room and the sick-house be constantly well traversed by streams of fresh air.

10. The cleanliest domestic habits should be enjoined. Refuse-matters which have to be cast away should never be let linger within doors; and things which have to be disinfected or cleansed, should always be disinfected or cleansed without delay.

11. Special precautions of cleanliness and disinfection are necessary with regard to infective matters discharged from the bodies of the sick. Among discharges which it is proper to treat as infective, are those which come, in cases of small-pox, from the affected skin; in cases of cholera and typhoid fever, from the intestinal canal; in cases of diphtheria, from the nose and throat; likewise, in cases of any eruptive or other epidemic fever, the general exhalations of the sick. The caution which is necessary with regard to such matters must, of course, extend to whatever is imbued with them; so that bedding, clothing, towels, and other articles, which have been in use by the sick, do not become sources of mischief, either in the house to which they belong, or in houses to which they are conveyed. Moreover, in typhoid fever and cholera, the evacuation should be regarded as capable of communicating an infectious quality to any night-soil with which they are mingled in privies, drains, or cesspools; and this danger is best guarded against by thoroughly disinfecting

them before they are thrown away: above all, they must never be cast where they can run or soak into sources of drinking water.

12. All reasonable care should be taken not to spread infective disease by the unnecessary association of sick with healthy persons. This care is requisite, not only with regard to the sick house, but likewise with regard to day schools and other establishments wherein members of many different households are accustomed to meet.

13. Where dangerous conditions of residence cannot be promptly remedied, it will be best that the inmates, while unattacked by disease, remove to some safer lodging. If disease begins in houses where the sick person cannot be rightly circumstanced and tended, medical advice should be taken as to the propriety of removing him to an infirmary or hospital. In extreme cases, special infirmaries may become necessary for the sick, or special houses of refuge for the endangered.

14. Privation, as predisposing to disease, may require special measures of relief.

15. In certain cases, special medical arrangements are necessary. For instance, as cholera in this country almost always begins somewhat gradually in the comparatively tractable form of what is called "premonitory diarrhœa," it is essential that, where cholera is epidemic, arrangements should be made for affording medical relief without delay to persons attacked, even slightly, with looseness of bowels. So again, where small-pox is the prevailing disease, it is essential that all unvaccinated persons (unless they previously have had small-pox) should very promptly be vaccinated; and re-vaccination should also be offered, both to persons above puberty who have not been vaccinated since childhood, and to younger persons whose marks of vaccination are unsatisfactory.

16. It is always to be desired that the people should, as far as possible, know what real precautions they can take against the disease which threatens them, what vigilance is needful with regard to its early symptoms, and what (if any) special arrangements have been made for giving medical assistance within the district. Especially in case of small-pox or of cholera, such information ought to be spread abroad by printed hand-bills or placards. In any case where danger is great, house-to-house visitation by discreet and competent persons may be of the utmost service, both in quieting unreasonable alarm, and in leading or assisting the less educated and the destitute parts of the population to do what is needful for safety.

17. The present Memorandum relates to cases of emergency. Therefore the measures suggested in it are all of an extemporaneous kind; and permanent provisions for securing the public health have not been in express terms insisted

on. It is to be remembered, however, that in proportion as a district is habitually well cared for by its sanitary Authorities, the more formidable emergencies of epidemic disease are not likely to arise in it.

18. For detailed advice on Disinfection, see the Office Memorandum on that subject.

JOHN SIMON.

Medical Department of the Council Office ;
July, 1866.



