

RULES AND REGULATIONS

PROPOSED BY THE

BOARD OF HEALTH

FOR THE PURPOSE OF PREVENTING THE INTRODUCTION AND SPREADING
OF THE DISEASE CALLED

CHOLERA MORBUS,

The early symptoms of the Disease in its most marked form, as it occurred to the observation
of Dr. Russell and Dr. Barry at St. Petersburg, and
corroborated by the accounts from other places where the Cholera has prevailed, with

THE MOST APPROVED TREATMENT.

Published by a Committee of the Lords of his Majesty's Privy Council.

TO WHICH ARE ADDED,

A WARNING TO THE BRITISH PUBLIC
AGAINST THE ALARMING APPROACH OF THE INDIAN CHOLERA.

BY SIR GILBERT BLANE, BART. F. R. S.

AND THE

HISTORY OF THE EPIDEMIC CHOLERA
OF INDIA,

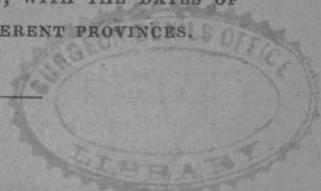
FROM ITS FIRST APPEARANCE IN THE YEAR 1817, TO 1831, AND THE
DREADFUL RAVAGES IT HAS COMMITTED, WITH THE DATES OF
ITS FIRST APPEARANCE IN THE DIFFERENT PROVINCES.

LONDON :

BURGESS AND HILL, 55, GREAT WINDMILL STREET,
HAYMARKET.

1831.

Price Sixpence.



IMPORTANT WORK ON CHOLERA.

Just Published, price 14s, boards,

In one closely printed Volume 8vo., with a Map exhibiting the Progress of the Epidemic Cholera over the principal parts of India, by the dates of its appearance at numerous places, with the Great Roads, &c. &c.

AN ESSAY
ON THE
EPIDEMIC CHOLERA OF INDIA.

BY
REGINALD ORTON,

Surgeon H. P. late of His Majesty's 34th Regiment of Foot.

CONTENTS.

- CHAP. I.—Description of Cholera. SECT. I, Of the Severer Form of Cholera, or the Common Form of the Epidemic. SECT. II, Of the Milder Form of Cholera. SECT. III, Of the more infrequent and anomalous Symptoms of Cholera.
- CHAP. II.—Of the Information derived from Dissection in Cholera. SECT. I, Appearances on Dissection. SECT. II, Inferences from the Appearances on Dissection, and General Observations.
- CHAP. III.—Of the Proximate Cause of Cholera.
- CHAP. IV.—Analysis of the Symptoms of Cholera. SECT. I, Of the Affections of the Muscles. SECT. II, Of the Affections of the Secretions. SECT. III, Of the Affections of the Senses. SECT. IV, Of the Affections of the Circulating System. SECT. V, Of the Affections of Respiration and the Changes of the Blood.
- CHAP. V.—Of the Relations of Cholera to other Diseases. SECT. I, To the Sweating Sickness. SECT. II, Of the Relations of Cholera to some other Epidemics. SECT. III, Of the Relations of Cholera to the Effects of Poisons. SECT. IV, Of the Relations of Cholera to some other Diseases of the Class Neuroses.
- CHAP. VI.—Of the Remote Causes of Epidemics in General.
- CHAP. VII.—Of the Meteorological Occurrences attending the Epidemic.
- CHAP. VIII.—Of Sol-Lunar Influence.
- CHAP. IX.—Of the Primary Remote Cause of the Epidemic.
- CHAP. X.—Brief Sketch of the Treatment of Cholera.

SUPPLEMENT TO THE SECOND EDITION.

- SECT. I.—Of the Contagious Nature of the Disease.
- SECT. II.—Of the Influence of the Seasons and evident States of the Atmosphere, in producing or favouring the Prevalence of the Disease.
- SECT. III.—Of the Influence of Marching or Travelling in producing the Disease.
- SECT. IV.—Of the Influence of Localities on the Prevalence of the Epidemic.
- SECT. V.—Of the Prevalence of other Diseases in connection with that of Cholera.
- SECT. VI.—Of the Susceptibility or Predisposition of the Subject to the Disease, and of its Exciting Causes.
- SECT. VII.—Comparison of the Epidemic Cholera of India with that of Europe, and Concluding Observations.

APPENDIX.

- No. I.—Report on the Prevailing Diseases in His Majesty's 34th Regiment, for the months of May, June, and July, 1820.
- No. II.—Report dated Sytar, Southern Division, September 15, 1820.
- No. III.—Report, dated Wallajabad, 22d of June, 1822.

Councillor Spittal

REPORT

BY

THE COMMITTEE

OF THE

ROYAL COLLEGE OF PHYSICIANS,

APPOINTED TO CONSIDER ANY BILLS THAT MAY
BE BROUGHT INTO PARLIAMENT

FOR THE

IMPROVEMENT OF THE HEALTH OF TOWNS,

AND THE

APPLICABILITY OF SUCH MEASURES TO SCOTLAND.

*(Approved, and ordered to be printed by the Royal College,
19th February 1848.)*

EDINBURGH:

PRINTED BY NEILL AND COMPANY.

MDCCCXLVIII.

The College appointed the following Committee to consider and report on any Bills that may be brought into Parliament for the improvement of the Health of Towns, and the applicability of such measures to Scotland, viz. :—

Professor CHRISTISON.

Professor ALISON.

Professor GREGORY.

Dr STARK.

Dr SPITTAL.

Professor ALISON, *Convener.*

REPORT, &c.

THE Committee have examined particularly the "Bill for improving the Health of Towns in England," ordered by the House of Commons to be printed 13th May 1847, and the "Towns Improvement Clauses Act," dated 21st June 1847; and they have considered likewise the Draft of the "Edinburgh Police Consolidation and Sanitary Improvement Bill," and the proposed "Edinburgh Police Act," both of date 1848, in so far as they profess to be adapted to the sanitary improvement of this City.

The following appear to be the most important provisions of the two former measures :—

I. A Board of Commissioners of Health and Public Works is to be appointed in London, two of whom are to have salaries. Inspectors are to be appointed by these Commissioners, with salaries, and with full powers of inquiry,—who are to visit and report upon towns and districts, as to supply of water and drainage, and the prevalent causes of disease therein; and on the report of these Inspectors, or on petition from the inhabitants, towns or districts are to be put under the operation of these acts, by orders in Council.

These acts are then to be put in execution in such towns and districts by certain Commissioners, viz., the Mayor, Aldermen, and Burgesses in Corporate Boroughs, and in other places by Town Commissioners, to be appointed by the Queen, on the report of the Commissioners of Health and Public Works, after being elected by the rate-payers of the districts; but all proceedings of the Councils or Town Commissioners to be subject to the visitation and inspection of the Commissioners of Health and Public Works, and their Inspectors; the rates levied by the Councils or Town Commissioners to be such only as are sanctioned by the Board of Health and Public Works,—their accounts to be examined by auditors appointed by that Board,—and any works, such as the lighting of towns, or supplying them with

water, undertaken by the Councils or Town Commissioners to be subject to the approval of the said Board.

II. The Commissioners of Health and of Public Works are to appoint physicians or surgeons of skill and experience, to be Officers of Health in the towns in which these acts shall be enforced, with salaries not exceeding £800, whose duty shall be "to ascertain the existence of diseases within their prescribed limits, and especially of epidemic and contagious diseases, and to point out any nuisances or local causes likely to cause or continue such diseases, or otherwise injure the health of the inhabitants; and to point out the best means for the ventilation of churches, chapels, schools, registered lodging-houses, or other public buildings, and from time to time, as required by the Town Commissioners, to report on those matters, and to perform such other duties of a like nature as may be required of them."

The Councils or Town Commissioners are to appoint—subject to the approval of the Board of Health and Public Works—Engineers to act as Local Surveyors, and likewise Inspectors of Nuisances—the two offices being combined when it is thought expedient—with salaries, for the execution of these acts.

III. The Councils or Town Commissioners, acting under this system of inspection and control, and with these provisions for their counsel and aid, are required to have maps of their districts carefully made, and open to inspection; with levels for sewerage and drainage; and are invested with full powers to enforce, by suitable penalties, regulations on the following subjects:—

1. As to all sewers and drains, and privies, ashpits, or cesspools connected with them,—which, when public, are to be vested in them—when private, shall be under their control, and in both cases shall be provided with traps or coverings, and shall be kept in repair, and efficient, and hindered from becoming nuisances; and in the case of all new streets or buildings, shall be constructed to the satisfaction of the Commissioners.

2. As to the paving and maintaining of all streets and footways with such materials as they may think fit.

3. As to the laying out of new streets, the levels of which are to be fixed by their Inspectors ; and the width of which, if intended as carriage-roads, shall not be less than 30 feet—if not to be carriage-roads, shall not be less than 20 feet.

4. As to the improvement of existing streets, by removing projections, &c., and by regulating the form of any houses that may be rebuilt, and pulling down ruinous or dangerous buildings,—making compensation to owners in cases requiring it.

5. As to the cleansing and watering of streets and footways, all the dust and filth removed from which shall be their property.

6. As to the prevention or abatement of nuisances of all kinds (although private property) allowed to accumulate in the premises occupied by any person within their districts ; and particularly dung of stables, cowhouses, or pig-sties, or other collections of refuse matters, which shall not be allowed to accumulate, elsewhere than in a farm-yard, for more than thirty days ; nor for more than seven days if a quantity exceeding one ton has been collected ; and if not removed within forty-eight hours after notice by an officer of the Commissioners, shall become their property ; and if declared by the Officer of Health, or (where there is no such officer) by two medical practitioners, to be injurious to the health of the inhabitants, must be removed within twenty-four hours, under the same penalty.

7. As to the whitewashing and purifying of houses, and the regulation of manufactories, which may be certified by Officers of Health to be dangerous to the health of the neighbours.

8. As to the construction of houses, so as to secure the prevention of fire, and of fire-places of factories, &c., so as to secure the consumption of their own smoke, after the passing of the Acts.

9. As to the construction of all public buildings, so as to secure ventilation, the provisions for which shall be always subject to their approval.

10. As to the gradual abolition of the practice of letting cellars as dwelling-houses.

11. As to the registering of lodging-houses, and the laying down and enforcing, by inspection, and by suitable penalties, rules for the cleanliness and ventilation, and to prevent over-crowding, of these houses.

12. As to the supply of water to towns, and even to all their individual houses (all the works employed for the gratuitous supply of which shall be vested in them), and for the supply of public baths and wash-houses, where these can be established; for which purposes they may contract with the owners of any water-works.

13. As to the arrangement of slaughter-houses and knackers'-yards, and the inspection and destruction of any unwholesome meat.

14. As to the lighting of towns by gas or oil, for which purpose they may contract with the owners of gas-works or others.

The Committee highly approve, on the whole, of the provisions of the Acts for all these purposes, and of the duties to be imposed on the Commissioners, and the powers granted to them, for carrying all these objects into effect; and they have no doubt that in all the larger towns in Scotland similar regulations are much wanted, and would be very beneficial; but they beg to suggest the following emendations or additional provisions, as, in their opinion, of very considerable importance:—

1. As to the duty of the *Officer of Health*, they think it should not be restricted to “ascertaining the existence of “diseases within the prescribed limits, particularly epidemic “and contagious diseases,” &c., but should distinctly require of him to observe their prevalence and degree of mortality, in each portion of the district as compared with others, or with other places; and in each year, and each season of the year, as compared with others; and endeavour to ascertain the cause of any local or temporary increase of mortality; and besides “pointing out nuisances or local causes of disease, and the “means of ventilation of public buildings,” he should have a

more general instruction, to suggest from time to time any such regulations as he may think fitted for improving the sanitary condition of his district. On the other hand, as much has been said in some recent publications on the importance of the Officer of Health being called on, by personal inquiry, to verify the fact, and ascertain the cause, of death in every instance, the Committee think it right to state their opinion, that it would be an unwarrantable application of public money to employ so many Officers of Health as would be required for this purpose over the country, for an object which, in so far as it can be satisfactorily accomplished at all, may be much better attained, without such expense, by a well-devised Registration Act.

2. As to the *sewers*, public or private, to be ordered by the Commissioners, it appears reasonable that their *form*, if not their size (as proportioned to the streets), and the materials of which they should be composed (unless in special cases), should be specified in the Act, in order that the advantages which seem to be well ascertained to belong to the *tubular sewers* may be secured.

3. As to the paving or repairing of streets and footways, they think it highly important that (unless in special cases) all footways in inhabited courts or closes should be ordered in the Act to be *flagged* and not causewayed, as giving greatly more facility for sweeping such pavements clean and dry. The only exception to this regulation, as far as the Committee know, should be in the case of closes having a considerable slope.

4. As to the laying out of new streets, it appears of the utmost importance, that besides the general regulation that a street in which there is a carriageway should be 30 feet broad, &c., there should be a general order in the Act, as to the height to which houses may be raised, as proportioned to the interval between them; that height being less as the breadth of the street or footway between them is less,—otherwise there is no security against buildings being raised so high as to frustrate all attempts to enforce ventilation and cleanliness. Indeed, if a regulation could be added to the effect that, in *rebuilding* streets or closes, such a proportion

should always be observed, the Committee believe that it would be a most important enactment, with a view to the health of this and many other towns.

5. As to the construction of buildings, the Committee are of opinion that, for safety in cases of fire, all stairs should, in general, be constructed of incombustible materials.

6. As to the cleansing of streets and footways, and the vesting in the Commissioners the property of all the dust and filth found in them, it appears necessary to prohibit the Commissioners themselves from forming depots of this filth in "any *inhabited* courts or closes, or within a certain distance "of any habitation."

7. As to the regulations for the accumulation of dung which is private property—"elsewhere than in a farm-yard," or mews-lane,—the Committee think it quite necessary to prohibit entirely any such accumulation in *inhabited courts or closes*, or within a certain distance of any habitation.

8. The Committee object to the clause in reference to graves in which burial is permitted if "30 inches" of soil be left above the upper surface of the coffin; and are of opinion, that interment in towns, and especially in crowded parts of any town, should be *prohibited*. But, in the event of this object being unattainable at present, they consider that no adult body should be allowed to be buried, in cemeteries within towns, nearer to the surface of the earth than four feet. They are also of opinion, that such graves should *not be disturbed* for a period of about *ten* years; for which purpose it is desirable that a space of not less than *two* feet should be left between the graves. In the present circumstances of this and many other towns,—with their recently formed cemeteries beyond the inhabited portions of such towns,—these objects, the Committee think, could be easily accomplished.

9. Besides the provision for securing the "ventilation of *public* buildings," it seems important to consider whether there should not be a general regulation, prohibiting the construction of *private* houses in a manner precluding the possibility of thorough ventilation; and likewise, whether there might not be a general rule as to the admission of good, if not direct solar light, particularly to the houses of the poor.

10. Approving entirely of the enactment as to the consumption of the smoke of furnaces, the Committee consider it important to have the power of enforcing, in certain cases, the carrying of chimneys in connection with furnaces, or otherwise, to an additional height, if necessary, for the purpose of *carrying off noxious or offensive effluvia, gases, or vapours*.

11. As to the registration and regulation of lodging-houses for the labouring classes, which the Committee consider a matter of great importance, in reference to the spread of epidemic diseases, they are somewhat doubtful as to the propriety of introducing a regulation limiting *precisely* the number of inmates to be received—which, in some circumstances of towns, cannot be strictly enforced ; but they are clearly of opinion that two provisions, not contained in the Acts before them, are essentially necessary for the purposes in view :—

1. That the keepers of such lodging-houses should be required, under a penalty (as was the case in the former Edinburgh Police Bill), *to give information*, either to the police, the parochial authorities, or to some public medical institution, of every case of a person confined to bed by illness for twenty-four hours in any such house ; and, 2. That the Commissioners should have power, on the representation of the Officer of Health, or of two medical practitioners, of the existence of contagion in any such house, *to shut it up entirely* ; and not allow it to be re-occupied until it has been fumigated and its furniture cleansed.

12. As to the supply of water to towns, the Committee think it would be right to make it the duty of the Commissioners, whenever the supply of water is sufficient for the purpose, to direct *flushing* of all the drains and sewers from time to time, so as to secure their being, as far as possible, kept clear.

13. As to the levying of rates for these different purposes, the Committee think it doubtful whether any of these rates can be equitably exacted from the proprietors only of those portions of the towns or districts which are to be immediately benefited by them,—as directed in these Acts, particularly as to public sewers and drains ; the distribution of wealth

and poverty being very unequal in the different parts of all towns,—and the wealth that exists in one portion of a town, being the real cause which determines the existence of a population, requiring all these regulations for health and comfort, in other, and often distant portions of the same.

In regard to the sanitary clauses in the proposed Bill for the City of Edinburgh, these are generally analogous to those on which the Committee have given their opinion in the other Bills,—equally deserving, as the Committee think, of general approbation, and equally liable to the objection of partial inefficiency in the points above stated; but the Committee regret to observe two more general deficiencies in this Bill, viz., 1. That there is no provision at all for the appointment of an Officer of Health; and, 2. That there is no regulation whatever, either as to the breadth of streets or footways (*i. e.*, closes), which may be made out anew or altered, or as to the height to which the houses in these streets or closes may be carried; although the peculiarity of construction of great part of this City, in this respect, appears to the Committee to be one great cause of the peculiar liability of many of its inhabitants to epidemics.

The Committee think it necessary to add, that while they fully concur in the importance of the measures in question, they do by no means indulge in any such sanguine anticipations, as to their immediate consequences, as are contained in the Report of the Committee of the Health of Towns Association in London, and in other recent publications; and they consider this a point of great importance, because, if the public are led to form such expectations of the result of these measures as cannot be realised in practice, the necessary consequences must be, *first*, that other measures, which may be equally necessary for the health and comfort of the inhabitants of towns may be neglected; and *afterwards*, that a little experience of the state of the public health, after these measures shall have come into operation, may cause a general and hurtful feeling of distrust, as to the principles on which they are founded. Thus there is a great risk of the real efficacy of such measures being first over-estimated, and

afterwards undervalued—in both cases to the public disadvantage.

In particular, the Committee cannot concur in the statement (at § 10 of the Report above quoted), that “science might secure to the whole population of this country such sanitary measures (involving protection from disease, suffering, and premature death), as are actually extended to the inmates of well-regulated prisons;” where, it is to be remembered, the diet, clothing, and whole mode of life, and intercourse with the rest of the community, are completely under the power of the authorities regulating those institutions.

The Members of this Committee have witnessed too many and too extensive epidemics of fever, and are too well aware of the varying circumstances under which these may be diffused, to entertain any expectation, that, by all the sanitary measures here proposed, such epidemics can be prevented from recurring occasionally; or their symptoms and mortality from varying, as they often do, in all ranks of society, or their extension among the poorest people—who will inevitably crowd together, particularly in cold weather, in rooms, the atmosphere of which will necessarily become foul and offensive—be controlled as in a barrack or prison. They very much doubt whether the “slaughter of the living by the dead;” *i. e.*, the extension of epidemic disease by the retention of dead bodies in inhabited houses, has been a material cause of the propagation of fever in the great towns of Scotland, which are known to have suffered much more from this cause than those in England. And they cannot concur in the general and unqualified assertion, that, “wherever animal and vegetable matters are in a state of decomposition, a poison is generated,”* capable of producing fever or other epidemic disease. If this last assertion had been correct, there are many parts of this town in which such diseases would constantly prevail; or, at least, always be apt to affect strangers taking up their abode there; whereas it consists with the knowledge of this Committee, that there are no parts of the town constantly liable to such diseases; that although these spread

* Report of Committee in London, section 73.

most rapidly and most extensively in the filthiest and worst-aired parts, yet, even in these, they prevail only occasionally; and that when they do prevail, their origin may generally be traced to *importation* from places previously affected, and their extension to the effluvia arising from the *living subjects*, applied, directly or indirectly, to those who become successively affected.

All that these sanitary measures can effect will not purify the air of the interior of the crowded rooms, inhabited by the dissipated and improvident poor, or by the destitute poor; or do more than diminish the variety of disease and suffering, which may be ascribed, in part, to the impurity of that air. And although much may be done by religious and moral instruction,—by an enlightened and general system of *improved secular education*, especially as addressed to those who stand most in need of sanitary improvement,—and by the well-regulated relief of destitution, to correct the evils which spring from dissipation or from indigence, yet it is only necessary to advert to the great mass of suffering, permanently included under the name of the Irish Poor, in every large town in this country,—to the effects of stagnation of trade in any of the manufacturing districts,—or to the faulty construction of large portions of such a town as this, which are private property, and cannot be rapidly altered,—in order to perceive that any such measures, for a long time to come, can only be partially successful.

But if the public expectation, as to the effect of these measures, be not raised above a reasonable height,—if it be only affirmed that the health of all towns may be gradually but materially improved; the extension of epidemics in them be restrained; the probability of life, even in large and ill-situated towns, be very considerably increased; and the comfort and happiness of all classes of the inhabitants be materially promoted;—the Committee have the greatest pleasure in saying, that they think all these benefits may be confidently anticipated from these measures.

W. P. ALISON, *Convener*.