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# City Document.—No. 16.

# CITY OF BOSTON.

### QUARANTINE.



In Common Council, May 13, 1841.

The Committee to whom was committed the subject of altering the Ordinance in relation to Quarantine and Rainsford Island, submit the following Report and Ordinance, which Ordinance was read by its title, passed to a second reading, and together with the said Report and the Report accompanying the same, of the Board of Consulting Physicians, ordered to be printed for the use of the Council.

Attest, RICHARD G. WAIT, Clerk C. C.

## In City Council, May 13, 1841.

The Joint Special Committee who were ordered to consider and report what alterations are necessary in the Ordinance relating to Quarantine, and the care of Rainsford Island, have attended to that duty, and

#### REPORT:

By the second section of an Ordinance regulating the Quarantine of vessels, passed August 10, 1833, it is provided that a Resident Physician shall be chosen, whose duty it shall be to reside at Rainsford Island, from the first day of June, to the first day of October, in each year, and at such other times, as the Mayor and Aldermen may direct; to visit every vessel arriving liable to Quarantine, to direct in what manner she shall be cleansed, what articles from her shall be landed, washed, buried, or destroyed; to direct the care and attendance of the sick, for whom he shall prescribe, according to his best skill. And, by the sixth Section of the same Ordinance it is provided that a Quarantine shall be had of all vessels, their officers, and crews, passengers and cargoes, that come within the harbor of Boston, on board of which any person shall, or may have been sick of any contagious, infectious, or malignant disease during the passage to Boston, or which are foul, or infected after their arrival; or which are from, or have brought their present cargo, or part thereof, from any port, or place where any infectious, contagious, or malignant disease doth prevail, or recently

hath prevailed. And by the seventh Section of the aforesaid Ordinance, it is provided that the Quarantine, before mentioned, shall be had and performed at an anchorage ground, near Rainsford Island, under the direction of the Resident Physician, and shall continue on every such vessel until the master shall receive a certificate from the Resident Physician that he may be discharged.

The Committee find that the number of vessels which have performed Quarantine at Rainsford Island, in conformity to the before named Ordinance, has been gradually diminishing for the last seven years; and that but three were anchored there during the last year by the direction of Resident Physician, no one of which was detained more than 14 hours; although many were boarded by said Physician and suffered at once to proceed.

The Physician found it unnecessary to pass as much of his time at the Island, during the last year as at some former periods. From the first of June to the first of October he usually remained on the Island during the night, but passed the principal part of the day time in the City, where, in his judgment, and in the opinion of the Quarantine Committee, he could perform a more valuable service.

The diminution in the number of vessels which have of late been ordered into Quarantine, has been caused, in part, at least, as the Committee believe, by the better condition in which vessels have lately arrived from foreign ports; owing to recent improvements in the health police in other countries; and, perhaps, to the fact that the Resident Physician has been able to exercise a freer judgment, as the

laws which regulate disease are better understood

by the public.

The Committee are of opinion that but little good would accrue to our City from a continued and rigid enforcement of the present Ordinance relating to Quarantine, even should they admit the contagion, or infection of all those diseases which have heretofore been classed, by a majority of the medical profession, as such.

The facility and rapidity of intercommunication between all the great Cities of the United States, and the British provinces, by land, renders our City liable to all the diseased influences introduced into any port, by the arrival at such port, of any vessel on board of which any infection, or contagion may exist.

But the Committee have reason to believe that most of the diseases which in certain periods, have been deemed contagious are merely epidemic, and cannot be generated out of the diseased atmosphere which produced them; and in support of this opinion, they ask leave to submit, as a part of their report, the opinion of the Board of Consulting Physicians, which report has been referred to this Committee.

The Committee after an examination of all the evidence in their possession, in relation to this subject, are of opinion that the Quarantine Ordinance should be essentially modified:—That no vessels should be stopped at the Quarantine ground, but that when any vessel may arrive within the harbor of Boston, which is foul and infected, or whose crews, or passengers, are sick with any malignant disease, the Port Physician shall report the same to the Mayor and Aldermen, and, if directed by them, cause

such vessel to be removed to Rainsford Island, to be cleansed and purified; and the passengers, or crew who may be diseased, to be provided for in the Hospital on said Island. And that it should be the duty of the Port Physician to examine skins, furs, rags, &c., arriving from any port within the Straits of Gibralter, and from some other places, and to cause the same if foul, or infected to be purified before landing.

The Committee are of opinion that the establishment at Rainsford Island should be retained under certain modifications, one of which they think may be the reduction of the expense heretofore incurred; and that this should be done not only for the purposes before named, but for the benefit of the poor of the City, who may be laboring under contagious disease, and who may be desirous of availing themselves, during their illness, of the greater advantages which the Hospital may afford them.

The Committee submit the following Ordinance.

For the Committee,

ABRAHAM T. LOWE.

### CITY OF BOSTON.

An Ordinance to establish the office of Port Physician.

Be it ordained by the Mayor, Aldermen, and Common Council of the City of Boston, in City Council assembled, as follows:

Sect. 1. There shall be appointed in the month 2 of May or June annually, by concurrent vote of 3 the City Council a Port Physician, who shall be 4 removeable by the said Council, and shall hold his 5 office until another is appointed in his place; and 6 who shall receive such salary, as the said Council 7 may from time to time fix and determine,—And 8 in case of any vacancy occurring in the said of 9 fice the same shall be forthwith filled, in manner 10 before stated.

Sect. 2. It shall be the duty of the said Physi2 cian to examine into all nuisances, sources of
3 filth and causes of sickness which may be on
4 board of any vessel within the Harbor of Boston,
5 or which may have been landed from any vessel,
6 on any wharf or other place; and under the di7 rection of the Mayor and Aldermen, to cause the
8 same to be removed or discharged.

SECT. 3. There shall be provided, by the City 2 Council in the City Hall, or some other con-3 venient place, a suitable apartment for the said 4 Physician free of expense to himself, and it shall 5 be his duty to attend there, at such times as the 6 Mayor and Aldermen may direct, and there to

7 vaccinate all persons, who may apply for that pur-8 pose, without charge—and he shall keep a cor-9 rect record of all cases of vaccination by him per-10 formed at that place or elsewhere, and make a 11 regular return of the same to the City Council as 12 often as once in three months.

Sect. 4. The said Physician shall always have 2 on hand, as far as is practicable, a sufficient quan-3 tity of vaccine matter, and he shall supply the Phy-4 sicians residing in the City, with the same, without 5 expense to them.

Sect. 5. Whenever any vessel shall arrive in 2 the Harbor of Boston which is foul and infected, 3 or whose cargo is foul and affected with any ma-4 lignant or contagious disease, or any of whose 5 crew or passengers are sick with any malignant 6 or contagious disease, it shall be the duty of the 7 Port Physician, forthwith to report the same, to 8 the Mayor and Aldermen, and if directed by them, 9 to cause the said vessel, her cargo and crew or 10 either or any part thereof to be removed, to the 11 anchorage ground at Rainsford Island, and the 12 said vessel and cargo to be thoroughly cleansed 13 and purified at the expense and charge of the 14 owners, consignees or possessors of the same. 15 And also, when directed as aforesaid, to cause all 16 or any persons arriving in such vessel, who are 17 sick of any malignant or contagious disease to be 18 removed to the Hospital on the said Island, and 19 all expenses incurred on account of such persons 20 shall be paid by themselves.

SECT. 6. Whenever any vessel shall be removed 2 to Rainsford Island, as is mentioned in the pre-3 ceding section, a Quarantine shall be had of the 4 same, and the Port Physician shall deliver a copy 5 of these regulations, to the master and a flag to 6 be carried by his vessel; he shall direct in what 7 manner she shall be cleansed, and what articles 8 shall be landed, washed, buried or destroyed, he 9 shall direct the care and attendance of the sick, 10 for whom he shall prescribe and supply medi-11 cine, and report to the Mayor and Aldermen, 12 every day, the situation of every sick person.

Sect. 7. Whenever any skins, furs, rags, hair 2 wool, carpets and goods of woolen or cotton fab-3 ric and feathers shall arrive at the Port of this 4 City, from any place within the Straits of Gibral-5 ter, or any place on the Atlantic coast of Africa, 6 or the eastern coast of South America, the same 7 shall not be landed in this City, or be removed 8 from the vessel, in which either of them shall be 9 brought, before the same have been examined, 10 by the Port Physician, and purified in such man-11 ner as he shall direct, and a permit granted by 12 him for the same.

Sect. 8. All vessels which shall be removed to 2 Rainsford Island, in manner before provided, 3 shall remain there until the master shall receive a 4 certificate from the Port Physician, that he may 5 be discharged. And no person shall go on board 6 thereof without a permit from the said Physician, 7 and in case of an unreasonable delay, by the said 8 Physician, in granting such certificate, the Mayor 9 and Aldermen may issue the same.

Sect. 9. The master of every vessel discharged 2 as aforesaid, from quarantine, shall within twenty 3 four hours after such discharge, deliver at the 4 Mayor's Office the certificate and flag he shall

5 have received from the Port Physician, and pay 6 the sum of ten dollars.

Sect. 10. Any person offending against any of 2 the provisions of this Ordinance, shall pay a sum 3 not less than three, nor more than twenty dollars, 4 to be recovered by complaint before the Justices 5 of the Police Court, and, in addition thereto, 6 shall be liable to all the penalties, provided by 7 the several acts of the Commonwealth, "to em-8 power the Town of Boston to choose a Board of 9 Health and to prescribe their power and duty," and 10 also "an act concerning the regulation of the 11 House of Correction in the City of Boston, and 12 concerning the form of actions commenced under 13 the by-laws of said City, and for filling vacancies 14 in the Board of Aldermen.

Sect. 11. An Ordinance establishing and reg-2 ulating the Quarantine of vessels, passed August 3 10, 1833, and all other Ordinances and By-laws 4 on the subject are hereby repealed. To the Committee of the Board of Aldermen on External Health.

GENTLEMEN,

The Consulting Physicians of the City have received from your Board a request, that agreeably to a vote of the Board of Aldermen, they would state their opinion of "the necessity or utility of any Quarantine regulations or a Quarantine establishment as a means of preventing, or arresting the progress of, contagious or infectious diseases."

The importance of this subject has induced the Board of Consulting Physicians not to return an immediate answer to the application, but to take time sufficient for a deliberate and cautious survey of the facts on which their opinion is to be based. They are fully aware that great diversity of sentiment has existed and still exists, in regard to the matters involved in the question; and they do not expect to be able to give a reply which will be universally satisfactory.

Quarantine establishments were erected at a remote period, when the laws which regulate the diffusion of malignant epidemics were less understood than they now are. A dread of the sweeping mortality which these diseases bring with them, naturally led to the introduction of every possible measure supposed to be adapted to prevent their dissemination.

The scrutinizing spirit, which of late years has been applied to the investigation of facts connected with this subject, has wrought a great change in the minds of medical men and even of the whole community in regard to it.

In consequence of very careful researches, some of the formidable diseases, reputed to be contagious, have been found, according to the opinions of most physicians, not to be so, such as the Yellow Fever, Cholera, Leprosy, &c.: others, whose non-contagious character is not so well settled have been discovered to be contagious only in particular localities, where an epidemic disposition existed; such as some of the forms of Typhus Fever.

The facts, from which the conclusions alluded to have been derived, are too numerous to be cited here; but we can refer you to documents, in which they may be found.

Furthermore, we must notice that the diseases generally believed to be communicable by contact, that is by the touch, as small-pox, measles, &c., are more frequently introduced by land than by sea; and that, to oppose an effectual barrier to these diseases we must establish a *cordon* around the City, and wholly cut off our communication with places, where these diseases exist.

Whether even these means, if adopted, would be effectual, we consider to be most doubtful.

Contagious or infectious disease in order to be propagated, requires the co-existence of two circumstances.

- 1. The existence of a contagious or infectious principle.
- 2. A disposition to disease, or *predisposition* in the subject.

The principle of contagion or infection, has its seat, so far as we know, in the atmosphere, and is either generated in the infected spot, or carried to it from a distance, through the air. Now it is perfectly obvious that Sanitory Cordons and Quaran-

tines can have no efficacy in resisting the transmission of a noxious principle through the atmospheric air.

The terms Contagion and Infection have been employed above as synonimous in conformity with common usage. Their meaning, in a strict medical sense, is however essentially different; and this difference should be clearly understood in order to prevent confusion.

A contagious disease, in the sense we use it, is one propagated by contact of the skin of one person with that of another. An infectious disease is one transmissible through the air from the person of one individual to the respiratory organs of another.

Strictly speaking, there are no contagious diseases: that is, none which are propagated by simple contact. The Author of Nature has kindly provided the body with a covering, which prohibits the admission of any morbid matter, while the skin remains entire, and when the contact is of momentary duration. If the skin should be broken, or the poison long applied to it, absorption may take place.

A careful analysis of the mode of transmission of the most frightful epidemics, such as plague, yellow fever, and cholera, shows that they never are communicated by *contact*, either with animate or inanimate substances. Even those diseases, which, with certain conditions, can be made to enter the human body through the skin, as small-pox, &c., are not imbibed by mere contact, but require friction or a prolonged application to penetrate into the system.

The itch must be placed on a different footing from other diseases propagated by contact, since it is probably communicated by the transmission of the itch insect or acarus. This animal seems to require time and convenient circumstances to effect a lodgement, for we find physicians and others daily handle itch patients without getting the disease.

It will be understood that we mean to say that the common cuticle or Epidermis is a general protection against morbid poisons. But where this covering is thin, as in the lips, eyes, lungs, &c., a poison may be imbibed. The abundant mucus of the membranes lining the alimentary canal or some other cause secures them from the absorption of these substances. Hence the saliva of the mad dog and other morbid poisons have been swallowed with impunity.

The statements, briefly made above, are not founded on vague suspicions and popular prejudices. They are derived from the careful and laborious observation of the course of disease and the result of experiments, especially instituted to settle the doubtful questions connected with this subject. According to the best of our knowledge they will, we believe, authorize the following conclusions.

- 1. That the great Epidemics against which Quarantines and Sanitary Cordons have been established, the Plague, Yellow Fever and Cholera, are neither contagious nor infectious.
- 2. That Typhus Fever is not *contagious*; and not *infectious* out of its proper or *Epidemic* atmosphere.
- 3. That the diseases commonly believed to be contagious, such as small-pox, measles, &c., are not generally contagious. They are infectious. That is, they are not diffused through the community by personal contact; but are transmitted through the atmosphere from an infectious living body and received through the lungs by the infected person.

The considerations above stated are we conceive conclusive against "the necessity or utility of a quarantine establishment as a means of preventing or arresting the progress of contagious or infectious diseases."

The total abolition of the present system of quarantine regulations seems to us therefore to be demanded by the public good.

If the Quarantine Establishment should be given up, we think it would be necessary to have a proper Hospital for the reception of the poor affected with small pox and for those arriving by ship-board, who may be visited with alarming and loathsome diseases. Also there should, we think, be a City Physician to attend this hospital; to vaccinate the poor and to keep a watchful eye on such sources of impurity in the atmosphere, as are constantly arising in a large city.

It might be a question, whether it would not be judicious to maintain some form of quarantine, in order to satisfy the public feeling in regard to the introduction of supposed infectious disease from abroad.

To this question we should reply in the negative. Such a measure it is obvious would keep up the ancient prejudice in regard to contagion and thus cherish in the public mind a groundless and dangerous apprehension. Nothing is better known than that fear is one of the most powerful auxiliary predisposing causes to the reception of infectious epidemics. When a disease of this kind prevails, those who are the most alarmed, are the most likely to become its victims: while others who fearlessly expose themselves to its attacks, remain unhurt amidst the widely spreading destruction. To this cause we must attribute the comparative immunity of physicians, who deriving security from the habit of seeing

disease, are thought to suffer in a smaller proportion from these calamities, than others less exposed to them.

We are happy in the belief that our community is too well informed to require to be amused by fictitious appearances and unnecessary regulations.

The best protection we are able to obtain against the ravages of those tremendous visitations, which are now and then sent to scourge our race, is to be found neither in Cordons nor Quarantines: but in the removal, as much as possible, of substances which vitiate the atmosphere; in the preservation of personal cleanliness; in the cultivation of temperate habits of living; in a fearless performance of our duties whenever they may call us; and in a perfect confidence in an all-wise overruling power.

By order of the Board of Consulting Physicians of the City of Boston.

JOHN C. WARREN, Chairman.

Boston, April 24th, 1841.

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