

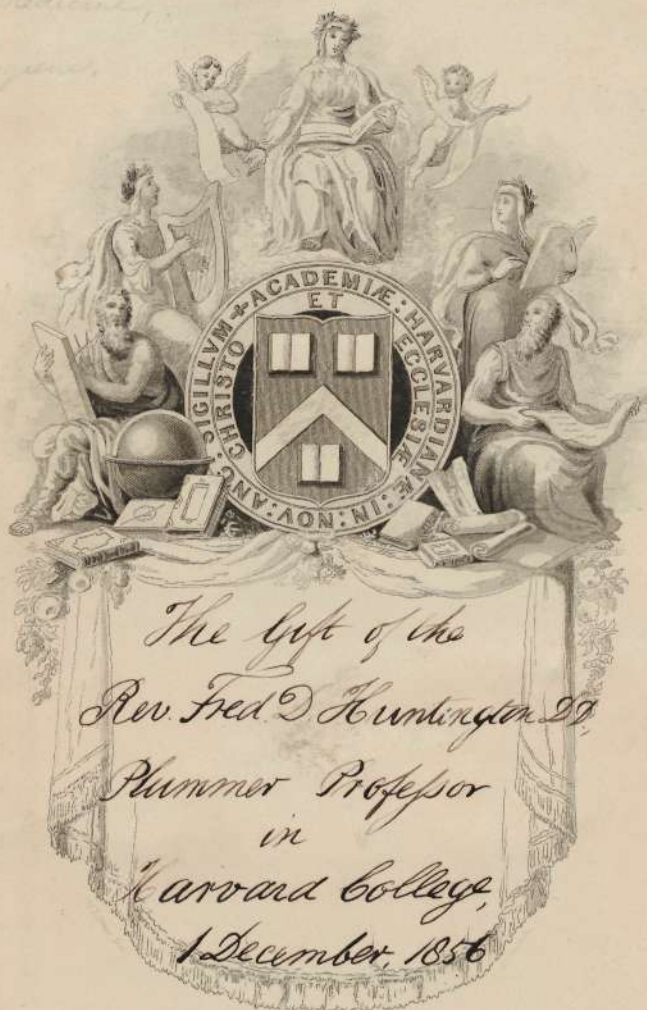
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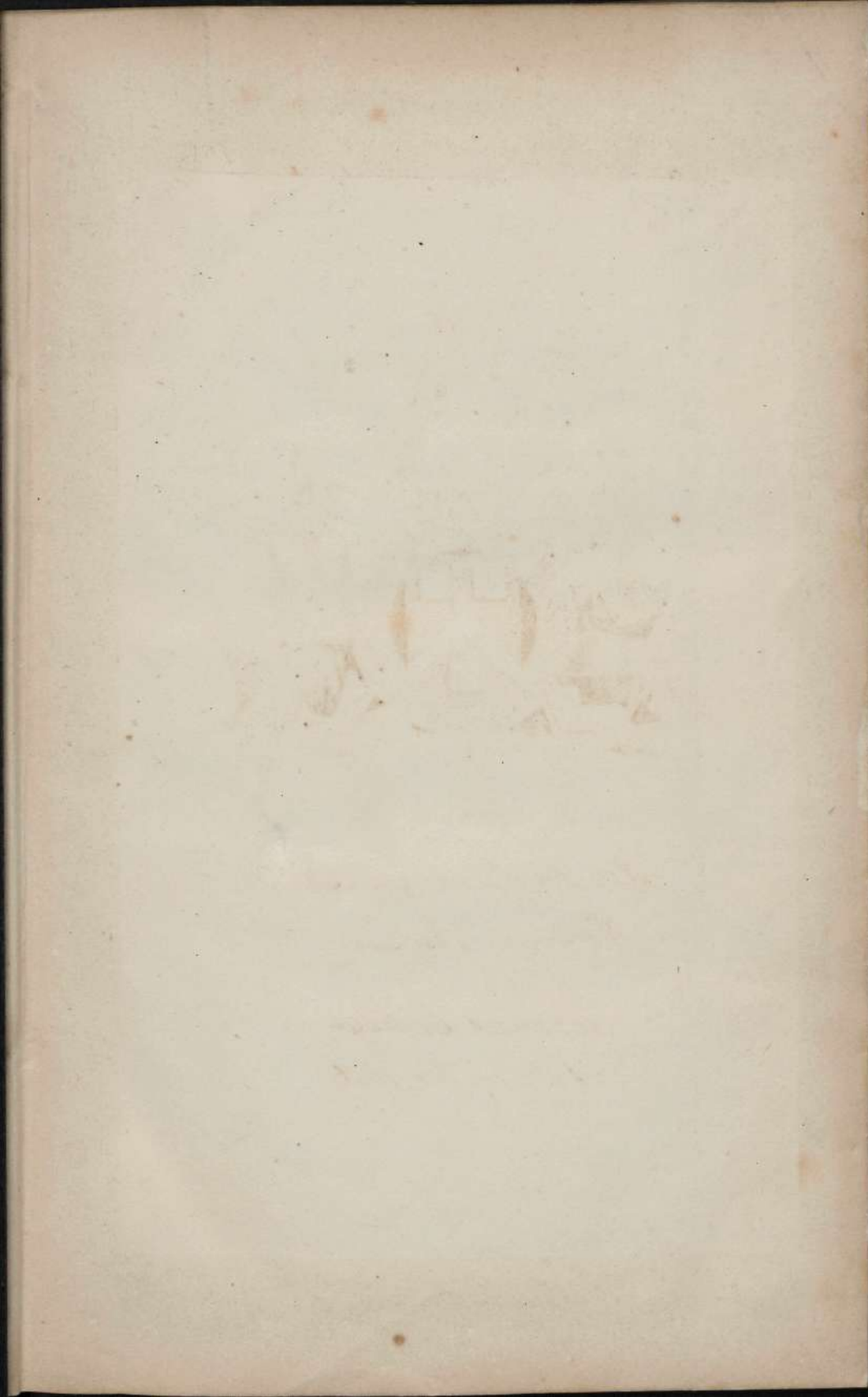
SICKNESS & MORTALITY  
ON  
EMIGRANT SHIPS.

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REPORT

THE SELECT COMMITTEE

ON THE STATE OF THE UNITED STATES

IN THE SENATE OF THE UNITED STATES

REPORT

WASHINGTON  
GOVERNMENT PRINTING OFFICE

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REPORT

OF

THE SELECT COMMITTEE

*Hamilton Fish, Chairman,*

OF

THE SENATE OF THE UNITED STATES

ON THE

SICKNESS AND MORTALITY ON BOARD EMIGRANT SHIPS.

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AUGUST 2, 1854.

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IN THE SENATE OF THE UNITED STATES.

AUGUST 2, 1854.—Ordered to be printed, and that 5,000 extra copies be printed for the use of the Senate.

Mr. FISH made the following

REPORT.

[To accompany Bill S. 489.]

*The Select Committee appointed under an order of the Senate of the United States, passed on the 7th of December, 1853; "to consider the causes and the extent of the sickness and mortality prevailing on board the emigrant ships on the voyage to this country, and whether any, and what, legislation is needed for the better protection of the health and lives of passengers on board such vessels"—to whom were also referred a petition of the American Medical Association, and a petition of inhabitants of New York—respectfully report:*

Under a full sense of the importance of the matter submitted to their consideration, as well as with reference to the business interests of the country as to the cause of humanity at large, the committee have spared no trouble in collecting information from such sources as appeared to them best entitled to their confidence and respect. With a view to the procuration of accurate *data* upon which to form a correct judgment in the premises, a circular was prepared containing fourteen questions relative to the police and sanitary management of emigrant ships, to which specific answers, based as far as practicable upon experience, were requested. Copies of this circular were addressed and sent to members of the medical profession, (whose opportunities of forming correct opinions on the subject had been furnished by experience, and therefore are entitled to consideration,) merchants, navigators who had been engaged in the passenger trade, persons connected with the collection of the customs, presidents of benevolent societies for the relief of indigent emigrants, and others throughout the country and in the cities at which the landing of foreign passengers has chiefly taken place. The answers which have been received to these communications are very numerous, and, in many instances, drawn up with great ability, particularly those from physicians, who, referring to the diseases which have caused the suffering on board of passenger ships, have very properly deemed it necessary to treat of their nature and the causes which have given rise to them.

In disposing of the information thus brought under their consideration, the committee have deemed it best to adopt the course indicated by the order under which they were appointed, and to treat the subject under three distinct heads, to wit:



1st. The diseases on board of emigrant ships, and their causes.

2d. The extent of the sickness and mortality.

3d. The means of prevention.

According to the information laid before the committee, the three diseases by which passenger ships have been chiefly scourged, are—typhus, or ship fever, as it is called when it takes place at sea, cholera, and small-pox.

Of the first named of these, typhus or ship fever, it is said that “it is the product of a miasm as distinct as that of marshes, which produces intermittent fever; and this miasm is itself as necessary a result of certain prior circumstances as the marsh miasm is the product of marshes. And further, the means for its prevention are as clear and controllable in the one case as the other. Thus, if an offensive marsh be thoroughly drained and dried, its peculiar miasm, and the disease which it caused, will disappear; and so, by preventing the formation of the miasm of ship fever, (as easy of accomplishment as the other,) that disease will in like manner be prevented or avoided.”

The circumstances referred to are stated to be:

1st. The confinement of a number of people together in apartments disproportioned in size to their requirements of wholesome respiration.

2d. The retention in the same apartments of the excretions from the bodies of individuals thus confined; such as the matter of perspiration, the carbonic acid gas and moisture from the breath, and other more offensive excretions. These, acted on by the artificial heat of the apartment, or even by the natural heat of the bodies alone, will become decomposed and produce an effluvium which will react poisonously on the persons living in it.

3d. Too great exclusion of pure air.

Some, if not all, of these causes are found to exist on board of every passenger ship in a greater or less degree, and the consequence has been the mortality which has taken place of late years, the weakness and enfeebled condition of emigrants generally at the time of embarkation, operating as a predisposing cause of the evil, by rendering them less able to resist the impression of the poison existing on board of ship.

It appears to be a peculiarity of this miasm that it attaches itself to everything that it touches—to clothing, bedding, furniture, and the walls of apartments—by which it is absorbed, and becomes more virulent in its action in proportion to the length of time during which it is permitted to remain. It is stated, upon the highest authority, that this poison may last in “fomites” for six months, and even for two or three years. Dr. Wilson Phillip, in his standard and elaborate work on fevers, in his chapter on typhus, says:

“Fomites often retain contagion for a great length of time, and may convey it any distance. It is a general opinion that *fomites* more readily communicate the disease, and convey it in a *worse form*, than the sick themselves.” Dr. Cullen says “the effluvium constantly arising from the living human body, if long retained in the same place without being diffused in the atmosphere, acquires a singular virulence.” And Dr. Parr, in his medical dictionary, asserts that “fevers caught by recent infection are mild compared with those which arise from contagion long pent up, styled *fomites*.”



In his examination before a committee of the British House of Commons, Dr. William Gladstone states that "men-of-war were formerly ballasted with shingles; that this ballast was often not shifted for many years; that when it was turned out it produced fever in several of the ships; and that this fever assumed the character of the prevailing fever of the station, (whatever it might be,) at which the vessel happened to be at the time."

*Cholera.*—The second named of the diseases by which passenger ships have been infested, is of Asiatic origin. It first made its appearance in western Europe, in or about the year 1832, and committed its fearful ravages without regard to the rank or station of its victims. What at first appeared to be but temporary, has, of later years, assumed the character of a regular disease, to which mankind are subject, in common with the other maladies that flesh is heir to. In one respect, it seems to differ from the typhus fever, being generally an epidemic, which typhus never is. The open air always puts an end to typhus or ship fever, whereas, cholera is controlled by no such corrective, but wings its deadly flight over the prairie and the prison-house alike. Although this fearful disorder confines itself to no precise localities, there appear to be circumstances under which it is peculiarly apt to make its appearance. These circumstances have been ascertained to be in a great degree similar to those which give rise to typhus fever. The poor and vicious, whose vital powers are enfeebled by want of wholesome nutritious food and close confinement, or criminal excess, are found to be much more liable to its fury than persons who have good nourishing food in abundance, take regular exercise, and abstain from indulgences that weaken the general tone of the system, whilst they add to the nervous excitability of the body. Dr. Griscom, of New York, whose opportunities of observation have been very numerous as agent of the board of commissioners of emigration, to whom the charge of this class of patients is entrusted, thinks that the miasm of typhus is the direct product of the vitiated excretions of the human body, pent up within a small space, and made to engender a malaria, the inhalation of which, to a certain degree, produces this peculiar disease; whereas cholera, by disabling the system, renders it liable to be overcome by the choleric poison at an earlier period than that at which typhus fever makes its appearance. Your committee do not propose to discuss this point, as it is not necessary to inquire whether human life be destroyed directly or indirectly, provided that exemption from destruction can be procured by the removal of the exciting causes of disease and death. Cholera, it is true, often appears and disappears without any apparent cause, a fact the reason for which is still hidden from the eye of science, and can only be explained by time and experience. It is sufficient to know that if the body be kept in a healthy well-balanced condition, and its functions be not interrupted by any disturbing causes, it may, in the generality of cases, bid defiance to the assaults of disease, in these or any other forms. It is believed that the same rules of conduct are necessary for the prevention, so far as practicable, of both of these maladies, with perhaps the exception of those relating to disinfection; unless, as some suppose, cholera be contagious, as well as typhus fever. As to the theories, entertained by some, that



cholera on ship board arises from the virus of the disease having been imbibed by the persons or clothing of passengers, previously to embarkation, or that it is met with in certain zones, through which the ships pass in reaching the western continent, your committee will only remark that all that can be done by the owners of passenger ships is to prevent the existence of any exciting cause of sickness on board of them, or of any state of things by which it may be nourished and sustained if contracted elsewhere. In reference to the idea that disease is caused by passing through certain zones, it is proper to remark, that the hypothesis appears to be contradicted by the fact, that it frequently happens that vessels leaving the same port on or about the same day, and arriving at their point of destination about the same time, are differently affected by sickness. If there be anything in the atmosphere of particular zones or belts, it must be encountered alike by ships sailing probably within a few miles of each other, propelled by the same winds and standing on the same courses. Admitting the poison to be in the air, the natural inference would be that the same cause would affect all ships within the same limits, similarly situated on the bosom of the ocean, in the same way; and that sickness would be produced on board of all alike. Such, however, appears not to be the case. The ship *Lucy Thompson*, after a passage of 29 days, arrived at New York, from Liverpool, on the 11th of September, 1853, with the loss of 40 out of 835 passengers by cholera. The *William Stetson*, arrived on the same day, after a passage of 31 days, with 355 passengers, having lost none on the passage, and the *Great Western* arrived on the day previous, 10th September, after a passage of 31 days, with 832 passengers, no death having occurred on board. On the 19th of September, 1853, the *Isaac Webb* arrived at New York from Liverpool, with 773 passengers, 77 having died of cholera, after a passage of 29 days. On the next day, the *Roscius* arrived from the same port with 495 passengers, after a passage of 35 days, 6 days longer than that of the *Isaac Webb*, no death having taken place. On the 21st of September the *Leviathan* arrived at New York, from the same port, after a passage of 35 days, with 559 passengers, and without any deaths on board, and the *Northern Chief*, arrived on the same day from the same port, after a passage of the same, with 626 passengers, and no deaths.

On the 15th of October the *Montezuma* arrived at New York, from Liverpool, in forty-one days, with four hundred and four passengers, and a loss of two; while the *Marmion* arrived on the same day, after a passage of twenty-five days, with two hundred and ninety-five passengers, and a loss of thirty-six by cholera.

On the 29th of October the *Lady Franklin* arrived, after a passage of forty-four days, with seven hundred and forty-one passengers, and without loss; while the *Albert Gallatin*, which sailed from the same port on the same day with the *Lady Franklin*, arrived on the 30th, the day following, after a passage of forty-five days, with seven hundred and fifty-six passengers, lost thirty-eight by cholera.

On the 1st of November the *Constitution* arrived at New York, from Liverpool, after a passage of fifty-three days, with six hundred and seventy-one passengers, and without loss; while the *Forest King* arrived



on the same day, after a passage of forty-eight days, with five hundred and fifty-eight passengers, and a loss of forty-two by cholera.

The New York arrived at New York, from Liverpool, on the 21st of October, after a passage of forty-three days, with a loss of sixteen out of four hundred and thirty-four passengers. The Progress arrived on the same day, from the same port, after a passage of forty-five days, and with a loss of seventeen out of four hundred and twenty-eight passengers by cholera; while the William Nelson, which arrived on the same day, after a passage of forty-six days, with four hundred and twenty-eight passengers, had not a single death. The State Rights also arrived on the same day, after forty-seven days' passage, with three hundred and sixty-two passengers, and without a death.

The Washington arrived at New York on the 23d of October, after a passage of forty-one days, with nine hundred and fifty-two passengers, and a loss of eighty-one; while the Guy Mannering arrived on the 25th of the same month, after thirty-seven days' passage, with seven hundred and eighty-one passengers, and without loss.

These examples might be multiplied almost at pleasure, showing that vessels which left the same port almost at the same time, and reached the same point of destination about the same time, and consequently may be supposed to have been in the same latitudes, and subject to the same winds at the same moment, suffered very differently. If the state of the external air produced the disease, why, your committee would ask, were not ships similarly situated affected in the same manner, and to something like the same extent? The cases presented show to the minds of the committee conclusively that the disease on board of these vessels is to be attributed to some exciting cause which existed within themselves, and cannot be referred, with any show of reason, to the condition of the atmosphere or the prevalence of certain winds on the ocean.

Of small pox—the last named of the three diseases from which passenger ships have suffered most extensively—no description is deemed necessary, as, unfortunately, its peculiar characteristics are but too well known. The frightful ravages of this disorder, prior to the discovery by the great benefactor to his kind, (Jenner,) that the introduction of the vaccine virus would produce a disease which would disarm small pox of more than half of its terrors, have left traces in the Old World not to be effaced and never to be forgotten. It is sufficient to say that the rules which apply to the prevention of typhus or ship fever and cholera are, in the main, also applicable in the case of small pox.

The next branch of the subject to which the committee would respectfully call the attention of the Senate is the extent of the sickness and mortality on board of emigrant ships.

In prosecuting their inquiries and investigations upon this head, the committee have been met by many and serious difficulties. The sources of information to which they looked with most confidence for accurate details have been the records of the custom-houses at the ports at which the greater portion of the emigrant ships arrive. Even in that quarter disappointment has to an important extent attended their labors, although circulars were addressed to the collectors of the ports of Boston, New York, Philadelphia, Baltimore, Charleston, and New Orleans, and also



to the municipal and local authorities at some of these and other places and elsewhere. The gentlemen to whom these circulars were addressed have responded to the call thus made upon them with a promptness and alacrity which do them honor, and lay the committee under great obligation. Unfortunately, however, the returns received are not so full, detailed, and accurate as could have been desired. This deficiency is not to be referred to any want of care on the part of the officers alluded to, whose reports are in accordance with the requisitions of the acts of Congress in which their respective duties are defined, but rather to the peculiar character of the information required by the committee, and to the insufficiency and inaccuracy of the reports made to the collectors by the masters of vessels. The requisitions under the laws for the collection of the revenue having for their object, in the first place, the ascertainment of the value of the merchandise to be assessed with a view to the revenue to be collected, the returns relating to the health of passengers have engaged but a secondary importance.

Generally speaking, the health of those "who go down to the sea in ships" has been so great, until of late years, that the mortality prevailing on ship board has not excited interest enough to require sufficient statistics in regard to it to form a part of the regular returns to the government. Hence it has occurred that the reports at the various custom-houses have not been either accurately or uniformly made. Even at New York, the great commercial emporium of the country, the list of arrivals furnished by the collector does not always state the number of deaths, while it omits entirely to notice those who are landed sick, a point of much importance in connection with the duties of the committee. In this respect the return of the health officer of New York, who holds his appointment under the authority of that State, is more full and satisfactory. In order to overcome the difficulty that here presented itself, the committee determined to adopt as their guide the report of the collector, who, being an officer of the federal government, may be considered as more immediately connected with Congress, and at the same time to note the discrepancies between it and the report of the health officer, adopting such features of the latter as are not presented in the former.

With this view a table has been prepared, marked C, including the last four months of the year 1853, during which the sickness and mortality prevailed to the greatest extent, shewing the number of arrivals at New York of passenger ships, the number of passengers according to the report of the collector, the number of deaths during the passage as stated by him, designating the number reported to have arisen from cholera, and the number landed sick at New York, as stated by the health officer, so as to present at one glance the state of the whole matter.

It will be seen by table marked A that, according to the annual reports of the Secretary of State to Congress, the whole number of passengers arrived in the United States during the last ten years, say from October 1, 1843, to December 31, 1853, is 2,270,847. These statements do not give the number of deaths during the passage, nor of those landed sick. According to the above authority the number of arrivals in 1853 was 400,777.



The reports of the collectors of the ports of Boston, New York, Philadelphia, Baltimore, Charleston, and New Orleans show an aggregate of passengers arrived at those ports during the year 1853 of 370,902, and of deaths during passage of 2,444, as will be seen on reference to table marked —, the returns made by the collectors to the Secretary of State under the act of 1819, and embodied in his annual report to Congress, (Ex. Doc. No. 78, H. R., 1st sess. 33d Cong.,) show the number of arrivals during the year at those ports to have been 395,325. In the reports from Boston and New York the aggregates, as given by the superintendent of alien passengers at the former, and the health officer at the latter, do not agree with those of the collectors, but, for the reasons already assigned, the committee have thought proper to base their calculations upon the returns of the collectors, they being officers of the federal government.

From the above returns it appears that the number of deaths, as well as the per centage of mortality among the passengers on board of New York vessels, has been considerably greater than those of vessels trading to Boston and other ports. This might have been, perhaps, expected, for a variety of reasons. New York being the great commercial emporium of the Union, passengers from every country in Europe have been induced to regard it as the point to which they should direct their courses. Hence the huge structures furnished by the enterprise of that great metropolis for the transportation of passengers have been crowded to excess, and, as a necessary consequence, the causes of disease have existed on board of those vessels to a greater extent than on any other. In general the per centage of deaths decreases in proportion as the numbers of passengers are less, and it is found that where passengers have been distributed in smaller numbers, disease and death have been less prevalent. The table shows that the smallest per centage of deaths has occurred on vessels from ports of Europe other than those of Liverpool, London, Bremen, Hamburgh, and Havre, which, being out of the great thoroughfares of commerce, have presented fewer attractions to the great mass of emigrants. The vessels from these ports, being less crowded, are more easily ventilated and kept clean, and present greater facilities for the proper preparation of the food of the passengers, and for their exercise in good weather.

During the four last months of 1853, 312 vessels arrived at New York from European ports, with 96,950 passengers. Of these vessels 47 were visited by cholera, and 1,933 passengers died at sea, while 457 were sent to the hospitals on landing, there, in all probability, to terminate in a short time their miserable existence, making nearly two per cent. of deaths among the whole number of persons who had embarked for the New World, and nearly two and a half per cent. if those who were landed sick be included. On board of the 47 vessels attacked by cholera the number of passengers was 21,857, of whom 1,821 (being 8.48 per cent.) died on the passage, and 284 were landed sick, making 9.68 per cent. of dead and diseased in an average passage of 39 days. (See annexed table marked C.)

Of the arrivals above mentioned 112 were from Liverpool, with an average of 435 passengers on each. Twenty-four of these vessels, with an average of 577 passengers, or an average excess of 142 pas-