

different social conditions, indicated important practical measures of prevention; but it appeared to us to be desirable, before the adoption of any systematic plan of prevention, to ascertain whether the disease presented the same characters as on its former visitation, or, should it have undergone any change, in what respects it had become modified. In order to obtain authentic information on this point, we decided on sending our two medical inspectors to Hamburg and Berlin, the nearest cities on the Continent in which the pestilence was at that time prevailing. They were on their way to Hamburg, when they were stopped by an outbreak of cholera at Hull, which took place among a Prussian crew who had passed through Hamburg on their way to England, whither they were coming to navigate a vessel which had been detained in the port of Hull owing to the Danish blockade. It appeared that these sailors had come from a healthy port in the Baltic, and that they had passed only a single night near the town of Hamburg, where cholera had been for some time epidemic. The appearance of cholera in the port of Hull excited considerable apprehension, which seemed to be justified by the position of the town on the east coast, in which cholera, in the year 1831, first broke out—namely at Sunderland. The event appeared to us to be of so threatening a nature as to require a careful inquiry into the circumstances of the case as well as into the state of the town. This was undertaken by Dr. Sutherland and Mr. Grainger, who reported that the general sanitary condition of Hull at that time, as compared to former periods, was favorable; and they gave it as their opinion that, apart from the position of the town, it was in no particular danger of an outbreak of cholera; the correctness of which conclusion was confirmed by the fact that these imported cases did not spread, and that they were not followed by any appearance of the disease among the townpeople.

#### EVILS OF QUARANTINE.

While engaged with the authorities of the town in advising on such provisions as seemed practicable for preventing the extension of the disease, if fresh cases of it should occur, the attention of the inspectors was called to the subject of quarantine, and particularly to the cruel position in which certain quarantine regulations, as enforced at Hull, placed passengers and crews coming from infected ports; instances being brought under their notice in which experience had proved that it was impossible to afford to vessels under quarantine medical assistance until all hope of relief had passed away. The peril in which considerable numbers of persons were thus placed, and the loss of life which had actually occurred, induced us to address a special report on this subject to the Privy Council.

Having, as above stated, suggested what precautions seemed available for the town of Hull, the inspectors were on the point of embarking for Hamburg, when we received information that an outbreak of cholera had occurred at Sunderland. This circumstance induced us to direct Dr. Sutherland to proceed to that town and Mr. Grainger to go on to Hamburg. Dr. Sutherland was prevented from joining Mr. Grainger on the Continent, his presence, after his visit at Sunderland, being urgently required at Edinburgh, and subsequently at other towns in Scotland, where his labors have continued up to a recent period.

#### BAD SANITARY CONDITION OF MERCHANT SHIPS.

Meanwhile, on arriving at Hamburg, one of the first circumstances which attracted Mr. Grainger's notice was the great severity of the epidemic among the crews of numerous vessels lying in the harbor, a large proportion of the ships being English. He found that the number of English seamen amounted to upwards of 800, among whom, being in a foreign port, and often unable to obtain assistance until they were in a hopeless condition, the mortality was excessive.

In order to afford what assistance seemed available, we requested Mr. Grainger to consult with the naval officers, and, with their advice, to draw up instructions for the guidance of the masters and crews of the English traders, to cause proper medicines to be provided at convenient stations in Hamburg, and to circulate notices of this among the brokers and others connected with shipping, as well as to the captains themselves.

These instructions were widely circulated among merchant seamen in different parts of the United Kingdom by authorities and companies connected with shipping, and, with the sanction of Lord Palmerston, among seamen in foreign ports.

It appeared, in the course of the investigation into the state of the colliers and other English vessels at Hamburg, that they were in a most defective condition as to health; that the forecabin, where the sailors sleep, was unprovided with any means of ventilation, and in fact that the men were, in those wretched berths, exposed to all the evils resulting on shore from filthy, crowded, and ill-ventilated dwellings; and in the instructions issued as above stated, especial attention was directed to the necessity of cleansing and ventilating these vessels, as constituting a much better security against the progress of the epidemic than any quarantine regulations. The evidence as to the greater efficiency of such measures of precaution and prevention have been fully set forth in our report on quarantine.

From the observations made on the earlier groups of cases of the disease that occurred on its re-appearance in this country, and still more from the information communicated in the reports of Mr. Grainger, as to its character and progress in Hamburg (see report in appendix), it appeared that no essential change had taken place in the nature of the epidemic; but, on the contrary, the further and more recent experience of it afforded decisive confirmation of the views promulgated in the metropolitan sanitary reports, as to the condition which favor its localisation and spread, and as to the general existence of premonitory diarrhoea.

#### INTENTION OF THE LEGISLATURE.

Seeing that, when the mortality from the developed cases of this disease that have occurred in any country comes to be summed up, it is proved to be similar in all climates, and under all modes of treatment, we arrived at the conclusion that it was our duty to regard the impending epidemic less as a disease to be cured by medicine, than as a pestilence to be checked by measures of prevention. But the whole tenor of the evidence presented under the metropolitan sanitary commission corroborated by that subsequently received by us, led to the conviction that the same measures of prevention were applicable to cholera as to other epidemics, which, though less dreaded, increase the absolute mortality in a higher degree, and are regarded with less terror only because they are slower in their progress, and more constant in their presence. In order, therefore, to carry out what appeared to us to be the intention of the legislature, we endeavored to embody in our regulations and orders the results of the most extensive experience with reference to the entire class of epidemic diseases, and to found upon that experience practical measures of prevention. Among the most available and needful measures of this description, were those of cleansing. We therefore called the earnest attention of the boards of guardians, the authorities principally charged with the execution of the Nuisances Act, to this subject. In our first notification, bearing date October 5, 1848, we represented to them that experience having shown that preventive measures against cholera are also preventive against typhus and other epidemic and endemic diseases, it would be the duty of the guardians to carry into immediate effect all practical measures of external and internal cleansing, especially in the ill conditioned districts; and by an