

## ORIGINAL COMMUNICATIONS.

OPERATION AND RESULTS OF QUARANTINE  
IN BRITISH PORTS SINCE THE BEGINNING  
OF THE PRESENT CENTURY.

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*(Read before the Epidemiological Society, June 6th, 1853.)**[Continued from page 583.]*

I HAVE next to consider the relations of quarantine to yellow fever. Various circumstances within the last few years,—more especially the case of H.M.S. *Eclair*, the recent publication of an Official Report on the disease by the General Board of Health, and the still more recent occurrences connected with the arrival of the West India mail steamers at Southampton—serve to give much interest, at the present time, to this part of my inquiry.

Fortunately, there is not any lack of evidence upon the subject; and although, as usual, there has been on most occasions no little discrepancy of statements, not to say of opinion as to the bearing of the statements, it will be easy to steer clear of controversy by appealing, almost exclusively, to the testimony of those writers, who have been the most zealous upholders of quarantine as a trustworthy defence against the invasion of the pestilence under consideration.

I select the visitations of Gibraltar, as affording perhaps the best means of testing the point. Since the beginning of the present century, Gibraltar has been five times the scene of epidemic attacks of yellow fever; viz:—in 1804, 1810, 1813, 1814, and 1828. These successive occasions present a singularly favourable opportunity for careful investigation; and as the Rock is all but separated from the mainland of Spain—being connected with it only by a narrow sandy isthmus which is easily watched—it may be regarded, for our purpose, as strictly insular, with every facility for complete isolation and rigorous quarantine. During the first three years of the century, yellow fever had prevailed in several towns on the southern shores of Spain, especially in Cadiz, Malaga, Alicante, and Carthage. There was a recurrence of it in the following year.\* In consequence of the great dread of the disease at Gibraltar (which had hitherto escaped), a most stringent quarantine had been perseveringly kept up against all arrivals from the neighbouring infected or suspected ports. Sir William Pym was then the quarantine officer of the harbour. In the month of July, he left his post on leave of absence, and did not return till the middle of October, when he found that yellow fever had fairly broken out in the town. The earliest suspicious cases had been observed about the beginning of September, in a notoriously filthy and unhealthy spot on the Rock; and to this spot the disease was for some time confined. The disease then rapidly spread, and eventually caused an immense loss of life. In less than three months, 6000 persons, out of a population, including the troops, not exceeding 16,000, perished. By the end of November, the pestilence had greatly abated; and it ceased entirely before the end of the year. As to the manner in which the pestilence has been alleged by some parties to have eluded the vigilance of the quarantine establishment, the following explanation is proposed by Sir William Pym,—not however, be it remarked, as the result of his own personal inquiries on the spot, but merely on the oral authority of one of the medical officers of the artillery, forming part of the garrison:

“A shopkeeper, named Santos (who resided in Boyd’s Buildings), arrived from Cadiz on the 28th of August, 1804, and was taken ill on the 29th; he had lodged in a house at Cadiz, where some persons died of the then prevailing fever.

\* It may be worthy of notice, as indicating a wide spread sickness in distant parts of the world, that in 1804 the yellow fever was extremely prevalent in the West Indies, and caused very great mortality among our fleet, etc. Between seven and eight hundred died of it in the naval hospitals of Jamaica and Antigua alone, during this year.—Sir G. Blane’s *Observations*.

Mrs. Fenton (wife to bombardier Fenton, of the Royal Artillery) was the second person attacked; she was taken ill on the 3rd of September. Her husband and a child of the name of Roland were taken ill on the 8th, and died on the 12th. Mrs. Boyd, who had visited Mrs. Fenton, was taken ill on the 13th, and died on the 19th; her husband was taken ill on the 14th, and died on the 16th. All those families were neighbours. The disease was confined for some time to this particular part of the town, and to those who had intercourse with them.”

Such a loose unconnected statement as this can scarcely be received as evidence to prove anything beyond the alleged date of the first case, and the circumstance of the disease being limited for some time to the locality where it first appeared, and which is known to have been the most filthy and insalubrious on the “Rock”. No intercommunication, it will be observed, between the first and second cases is even so much as mentioned; the connexion of the one with the other is merely guessed at. Unless medical evidence on so important a point of inquiry as that of the introduction of a pestilence be different from such a specimen as this, I fear that it will never command public confidence or respect.

Fortunately, there is another historian of this epidemic, Sir J. Fellowes, who was at Gibraltar during the greater part of its prevalence. Sir James, it is to be remembered, was a most zealous upholder of the contagion of yellow fever, and of the necessity of strict quarantine measures for its exclusion. His testimony is, therefore, the more valuable. Now, from his work, it clearly appears that there was no recognised or known yellow fever in Cadiz either at the time when the man Santos was there or when he left it; and moreover, it is certain that he obtained a passport from the British Consul there, before he went on board the vessel in which he took his passage for Gibraltar. The vessel too, it seems, remained quite free from sickness. All, therefore, that can be made out is simply that a man, arriving in apparently good health, at the usual sickly season—in a year, too, characterised by remarkable atmospheric dis-temperature—went to reside in a confined and crowded house, in a notoriously filthy locality of a very unwholesome garrison town, and that, within a few days subsequently, he had an attack of fever, from which he recovered; also, that other cases of fever occurred immediately afterwards in the immediate neighbourhood of the said locality.

It must not, moreover, be omitted to be mentioned that Sir James Fellowes had pretty strong grounds for believing that a fatal case of fever had occurred ten days before the man Santos’ arrival, in the person of a smuggler from Malaga, who, if the authenticity of the case is to be admitted, must also have managed to have evaded the regulations of the port. Whatever view be taken, it is, at all events, quite obvious that the quarantine precautions failed in giving that security to the town which it was their object to impart.

Dr. Nooth, who acted as health officer of the harbour during the temporary absence of Sir Wm. Pym, as well as many other medical practitioners in Gibraltar at the time, and of the ships of war in the bay, were of opinion that the disease was of local development, and that foreign importation had nothing to do with it. It should always be borne in mind that there was not, perhaps, a more unwholesome garrison town in the British dominions than Gibraltar was then, and continued to be for many years afterwards. The unnecessary sacrifice of life among the troops there, not to mention the civil population, during the first fifteen years of the present century, must have been enormous.

After the cessation of the severe visitation of 1804, the Rock remained free from the pestilence in an epidemic form for the next five years and a half, although occasional cases of the ordinary endemic fever of the place, accompanied with a dark yellow suffusion of the surface and sometimes also with black vomit, occurred in most years, even when the garrison was declared to be healthy. During the whole of this time, the Spanish ports, which had suffered so severely during the first four years of the century, were equally exempt. This cessation or lull in the course of

pestilential visitations, is a very suggestive and significant fact in epidemiology; and the fact is the more important as regards our present inquiry, as, during the very same period that the yellow fever disappeared from the southern shores of Spain, not only (as already mentioned) was epidemic plague absent from Egypt and Turkey, but there was also a very remarkable diminution of typhus fever in England at the same time. Whether there be any connexion between these coincident occurrences in distant countries, is a question of the utmost interest, but one as yet nearly quite unexplored.

In the summer of 1810, yellow fever re-appeared in most of the Spanish seaports which had been previously affected; nor did Gibraltar escape. The atmospheric peculiarities of the season were very similar to those which had been observed in 1804. Upon this occasion, it was believed that the disease was imported from Carthage, as it was thought to have been on the former occasion from Cadiz. The facts related by Sir W. Pym, who was the quarantine officer of the port at the time, are these. Four transports, with deserters from the French army, arrived from Carthage on the 19th of September. One man had already died from the fever on board one of the vessels, and there were several others seriously ill. The transports were anchored at least half a mile from the shore, and kept under the strictest quarantine. Sir W. Pym applied to the Governor to send them off to Minorca, as there was a lazaretto on shore there, and there was not one at Gibraltar. But this severe measure, very fortunately, could not be carried into effect. Sir W.'s narrative proceeds: "During the time that the disease had been going on on board the transports in the bay, the garrison continued in perfect health till the 20th of October, when, in consequence, as I must suppose, of a breach of quarantine regulations (which, however, could not be detected), a Minorcan family, in the south district, belonging to the dockyard, was attacked with the disease." A story was afterwards circulated, that some intercommunication had taken place between the person first attacked and the transports; but it could not be substantiated; and, as Sir W. Pym himself candidly admits that the pestilence found its way into Gibraltar through some undiscovered channel, while a most rigid quarantine was maintained all the while under his own directions, it is scarcely necessary to dwell any longer on the subject. Most of the medical practitioners on the Rock considered it to be of local and indigenous origin. It will be observed, too, that the fever again appeared about the same time of the year; and Sir W. Burnett, who was then principal medical officer of the Mediterranean fleet, mentions that, after very heavy rains in September, which had brought down a prodigious quantity of putrid decomposing matter from the upper parts of the town to the beach, the weather had set in very warm, with a prevalence of the oppressive easterly wind. Dr. Hennen states that, in the months of July and August, bilious remittent fever was more than usually prevalent in the town, and that the type of the disease became more malignant and fatal in September.

It may not be undeserving of passing notice, that some of the physicians in Carthage alleged that their epidemic in 1810 was brought to them from Gibraltar; while the quarantine authorities of the Rock attributed their visitation to their Spanish neighbours. This sort of mutual in-credulity is far from being infrequent in the history of quarantine.

The next time that yellow fever broke out in Gibraltar was in September 1813—the year, it will be remembered, of the plague in Malta. This epidemic proved much more fatal than the preceding one. Sir W. Pym, who was still at the head of the quarantine department there, states that "it was again traced to importation"—"that the individuals who brought the disease into the garrison were ascertained"—"that one of them was ill when he arrived"—

"that the disease was communicated to the persons residing in the same house, and speedily on both sides of the street in which the house was situated". Unfortunately, he has omitted to give any particulars respecting these several allegations; nor does he state who were the parties that brought the disease, or whence they came, or when they arrived. We are necessitated, therefore, to look elsewhere for information as to the origin of this epidemic; and, happily, there is good evidence at hand. That most truthful writer, Dr. Hennen, who, when principal medical officer of the garrison, examined with great care all the official documents in the public archives touching the previous epidemics, states that cases of the disease had occurred a couple of months prior to the date assigned to its appearance by Sir W. Pym. "One neighbourhood", he says, "viz., *Boyd's Buildings*, was, as usual, the theatre where the disease made its early appearance in the town; and, on the 6th of July, Mr. Frazer met with a case of highly suspicious fever, which proved rapidly fatal: there is little doubt that it was a genuine instance of that fever which afterwards committed such ravages." The accuracy of this important statement is verified by Sir W. Burnett and by Mr. Amiel; who, with all other writers on this epidemic, have alluded in the most emphatic manner to the notoriously unwholesome condition of the town of Gibraltar at the time, from the excessive crowding of the population, and the horribly filthy state of the lanes and houses, aggravated, as on former occasions, by the continued prevalence of easterly winds.

It is scarcely requisite to specify the stories that have been related by those who seem to imagine that, whenever a disease, which is only of occasional occurrence, appears in a place, it must necessarily have been introduced by some person or another, forgetting all the time that the atmosphere is the readiest vehicle of all. One of the rumours was, that the pestilence had been brought from Cadiz, by a vessel which arrived in the bay on the 11th of August: but, upon referring to Sir James Fellowes's history of the fever of that year in Cadiz, where he was the principal medical officer of the British garrison at the time, it appears that the earliest recognised cases there were not observed before the beginning of September. His words are: "Early in September, I heard that a suspicious case of fever had occurred in the well known *Barrio de Sta. Maria*"; the very locality in Cadiz where the disease first showed itself in 1800, and again in 1804. Sir James does not so much as even hint the idea that the disease had been this year imported into Cadiz *ab extra*. Moreover, Mr. Frazer, who was at the head of the medical staff in Gibraltar at the time, candidly admitted, notwithstanding his decided opinion as to the contagiousness of the disease, that he had great doubts as to its importation in 1813.

It was upon the cessation of this epidemic, that the series of queries, which elicited so large an amount of valuable information respecting the sanitary state of Gibraltar, was addressed by the medical department of the army to the medical practitioners, civil as well as military, on the Rock.

In the following year, during the autumnal season, there was a fresh outbreak of the disease. It has never been alleged, as far as I know, that, upon this occasion, importation from abroad had any share in its development. The early cases appeared in the filthy, crowded localities, affected in former years.

After 1814, Gibraltar remained exempt from any epidemic visitation of yellow fever till 1828, a period of fourteen years; although sporadic cases, having all the characters of the true pestilence, occurred now and then in the autumn months. It was in 1828 that the plague prevailed in various parts of Greece, and in Wallachia, Moldavia, and other countries in the north of European Turkey. The Russian army, engaged at the time in war with the Turks, experienced disastrous losses from the ravages of the disease. At Gibraltar, the yellow fever appeared about the same season of the year as upon all the former visitations—a circumstance that is highly suggestive in an epidemiological point of view. The earliest cases occurred about the

\* It deserves to be noticed, that in consequence of the known presence of the plague in Malta this year, the vigilance of the quarantine authorities at Gibraltar was even greater than usual.

beginning of August. Dr. Hennen was the principal medical officer of the garrison at the time; he was also health officer of the port. Unfortunately for medical science, he fell a victim himself to the fever. He left, however, very ample notes respecting the circumstances connected with its development; and his son, who edited the valuable work on the *Topography of the Mediterranean*, informs us that his father had quite satisfied himself that the disease could not be traced to importation. Sir Wm. Pym (who then occupied the post which he now fills) was sent out by the Colonial Secretary of the day, Sir George Murray, to examine into the history of the epidemic, at the head of a commission appointed for the purpose. He appears to have come to the same conclusion, if we may judge from the following statement in his book respecting the vessel which was at first suspected to have brought the pestilence from Havanna;—"I think it right", says Sir W., "to state, that there was no evidence to convict her, and that I stated my opinion generally that she ought not to have been under suspicion, as she underwent the regular period of quarantine, and was released therefrom in the regular way, with the approbation of the Inspector of Health in the quarantine department, and by the authority of the Lieutenant-Governor."

We have thus seen that, during little more than the first quarter of the present century, Gibraltar was five times the scene of epidemic yellow fever, notwithstanding the utmost vigilance of the quarantine department there, and the stringency, not to say severity, of the precautions taken to exclude the disease. That the most rigid measures were enforced, will be pretty manifest from the following particulars, related by Sir James Fellowes.

In Jan. 1811, two English transports, with between four and five hundred German recruits on board from Carthage, were kept under quarantine for upwards of a month in the bay, without being allowed to communicate with the land. It does not appear that there was any actual disease on board; but they had come from a suspected port. They were then sent on to Cadiz, at that time in the possession of the English army. On their arrival there, although the men were still free from sickness, they were not allowed to be landed at once; and as, unfortunately, the weather became very tempestuous, the soldiers were obliged to keep below in the between decks, most of the time. "When the weather moderated, every assistance was afforded them; but it proved that, during the few days that the hatches were covered over in consequence of the heavy rains, a complete typhus fever\* had been formed; that the men (who appeared to be well while they had been kept on deck constantly, and the fresh air had been allowed to pass through the ship) were falling down with a malignant disorder, the germs of which, it was evident, had been brought by them from Carthage, and had exploded into fever in the vitiated air by which they were surrounded in the close and crowded between decks."

There were upwards of one hundred already attacked. Prompt steps were at once taken by Sir J. Fellowes to separate the healthy from the sick. Four hundred, after due ablutions and change of dresses, were landed and sent to a temporary hospital, a mile from the town; while one transport was entirely evacuated, and after being thoroughly cleansed, ventilated, and fumigated, all the sick were removed into it. Eventually, all the sick were brought ashore. Due precautions were taken to prevent communication between the sick of the troops in the garrison and the inhabitants of the town; and although a good many deaths had taken place in the hospital, and more than two hundred in all had been attacked with this "highly contagious disorder", it at length ceased, without any detriment to the public health, either of the other shipping in the bay, or of the population on shore.

From Gibraltar we now pass on for a few moments to the rocky island of Ascension, in the Atlantic Ocean, about

seven or eight hundred miles from the coast of Africa. Its latitude is about 8° south of the equator, and its longitude is 14° 28' west. It is resorted to by shipping for refreshment and watering; but the island itself is entirely unproductive. Our ships of war upon the African station, when they have become sickly, often visit it. In 1823, soon after the arrival from Sierra Leone of the *Bann* frigate, which had lost many of her crew during the voyage, yellow fever broke out in the small garrison, and committed considerable ravages. As no quarantine restrictions had been adopted towards the ship, it has been generally believed that the disease on shore was directly introduced by the *Bann*. Sir William Burnett, who was sent out by the Admiralty to examine into the particulars of the case, and afterwards published an exceedingly interesting narrative on the subject, leaned to this view of the question; but he did not hesitate to avow, at the same time, that the evidence was not without some defective links. The circumstances were, however, so suspicious that, in future, ships arriving at Ascension with malignant African fever on board were directed to be detained for some time in quarantine, before having free communication with the garrison. Notwithstanding this precaution, there was a partial outbreak of the disease among them in 1838, several weeks after the arrival of the *Bonetta* in a sickly state from the African coast. The surgeon of the garrison regarded the distemper as of local origin; and Dr. Bryson, (in whose valuable work the particulars will be found), while he is of opinion that it was imported, nevertheless admits the impossibility of tracing the mode of its introduction, after all the pains he had taken to discover it.

The mention of the African station in connexion with yellow fever and quarantine, naturally brings to our minds the sad case of the *Eclair* in 1845, in as far, at least, as its history bears upon our present subject. It will be remembered that, in consequence of the crew becoming very sickly at Sierra Leone, it was deemed advisable to leave the coast and go to Boa Vista, one of the Cape de Verde islands; and that, while there, her sick were landed upon a small islet in the harbour, but that the disease nevertheless continued to rage with great severity. The result was that after a short stay all were reembarked, and the *Eclair* proceeded on to England, where she arrived at the Motherbank, after a run of fifteen days from Boa Vista, on the 25th September. Already upwards of one half of the crew had perished since the commencement of the sickness in July, and every day added fresh victims to the list. It is needless to say that the utmost alarm and depression existed among all on board. The surviving medical officer urged the immediate landing of the crew, as the only means of arresting the terrible ravages of death; and Sir John Richardson, the physician of Haslar Hospital, expressed his readiness to receive them into the wards of that noble institution,—an advice that was cordially seconded by Sir William Burnett. Had this step been taken, much distress would have been spared, a heavy expense avoided, and, what is of far greater consequence, several valuable lives might have been saved. But, unhappily, the fears of our quarantine authorities prevailed over their judgment. The unfortunate remnant of the crew were doomed to rigid confinement within the walls of the pest-smitten ship; and this, too, in sight of the shores of their own country. After remaining three or four days in close quarantine at the Motherbank, the *Eclair* was ordered round to Stangate Creek, before either the sick or the unattacked were removed from her, but not till many fresh attacks and several deaths had occurred. She was not released from quarantine till the end of October, or five weeks after her arrival in England. It is altogether painful to look back upon the sad history of this vessel. The serious errors that were committed with respect to the management of the sick at Boa Vista, were only outdone by those that were perpetrated after her arrival off our own coast. The case made a deep impression on the mind of the medical public; and it was hoped that a more judicious practice would in future be adopted by our quarantine authorities, in the event of a similar occurrence.

\* From other statements in the narrative, it is obvious that the disease was genuine yellow fever.

The proceedings which have recently taken place at Southampton, in reference to the mail steamers arriving from the West Indies, seem to indicate that the system to be pursued is essentially the same, although some of the details may be modified. It is, indeed, not easy to ascertain the principles upon which the course now adopted is based. The mail bags are landed *instantly*, while the passengers and crew are detained on board. Pratique is at once given, although men may be dying of the disease on board at the time, provided only their seizure took place six days (ten were at first deemed necessary) before arrival. A health officer goes on board an infected ship, and returns on shore himself, while he leaves the ship and all on board (the mail bags always excepted) in quarantine. At one time, not only the bedding of the sick, but everything which may have come in contact with them, is recommended to be burned; and then the corpses of persons, who have died on board of casual diseases, have been ordered to be taken out several miles to sea and buried there, before the vessel is permitted to come into port. Surely, such steps as these can serve but to spread alarm and bewilder the public mind, while they can give no real protection to the public health.\* And be it remembered that, at the very moment when all this was going on towards the mail steamers at Southampton, the authorities at Port Royal, Jamaica, were receiving without delay or hesitation the sick from H.M.S. *Highflyer* into the naval hospital there;—that the wards of the public hospital at Kingston were open to the sick from the ships in the harbour;—and that, at Barbadoes, the suffering crew of H.M.S. *Dauntless* were at once landed and conveyed to the military hospital. With such facts before us, is it not high time that our quarantine system be looked into, with the view not only of bringing its regulations into harmony with the results of well attested experience, but also of establishing something like uniformity in its requirements?

It remains now to invite your attention to the relation between quarantine and the Asiatic cholera.

The whole history of this formidable pestilence is so interesting and instructive on all points of epidemiological inquiry, that it must ever occupy a very prominent place in every attempt to ascertain the laws which influence the development and diffusion of wide spreading diseases. No epidemic, moreover, has been so minutely and extensively observed, and of none have we such varied and thoroughly trustworthy records. We can trace its career almost step by step, and with something of the connected sequence of an historic narrative, from the time when it first—after having been for ages, for all that we know to the contrary, limited to one district of Asia, viz., Hindostan—began to assume the character of a great migratory pestilence, and go forth, at the bidding of Almighty Power, upon its mission of warning and judgment, to the ends of the earth. Its course and progress can be followed on the map as we follow the track of any of those hordes of the human race which, breaking loose from their place of long abode in some remote corner of the East, spread themselves of old over the face of the European continent. We can mark the advances of the invading foe from country to country; we can tell how long it was upon its successive marches; the dates of its arrival in different parts, the rapidity of its movements, the length of its stay, the places which it ravaged, and the very districts in each place upon which its chief fury fell. We know the means that were taken in every country that was invaded to avert the stroke, to keep the enemy out, or to resist its progress and mitigate its ravages; and we know, too, the amount of success or benefit which attended the efforts that were made. We know that the Russian government, in 1831, having tried quarantine, and other like mea-

asures, to protect different parts of its dominions, speedily found their utter inefficacy, and abandoned all attempts of the sort; that the Austrian Emperor formally declared that his government "had committed an error in adopting the vexatious and worse than useless quarantine and cordon regulations against cholera," frankly admitting that it did so before the nature of the disease was rightly understood; that Prussia, too, having in vain tried the same expedients, was forced to give them up; that in our own country measures of the most extraordinary stringency to prevent the introduction, and to arrest the spread of the pestilence, were at first recommended and attempted to be carried out, and that they proved so utterly valueless that they were promptly discontinued, and the government of the day intimated, in the speech delivered from the throne, more than incredulity as to their use or expediency; that the French Academy of Medicine formally declared their opinion to the same effect; and that transatlantic experience, both in the United States and in Canada in 1832, testified to a similar result. We know that, in the following year, the disease found its way into different ports of Spain, notwithstanding a rigorous quarantine; that, in 1834, it eluded the vigilance of the health officers at Gibraltar, as yellow fever had done in former years; also at Stockholm and other ports in Sweden, whose former immunity had been attributed to the stringent precautions of defence which had been taken; that, two years subsequently, Genoa, with its well appointed lazaretto and numerous quarantine staff, failed in its attempt at exclusion; and that Naples and Rome were equally forced to acknowledge the impotence of all their efforts. Nor was Malta more fortunate. Hitherto it had escaped, in consequence, many persons believed, of its insular position, and the strictness and efficiency of its quarantine establishment; and its exemption at a time when the pestilence was in Egypt on its one hand, and in Gibraltar and the south of Spain on its other, might certainly, with some show of reason, lead those, who form their opinions of epidemic diseases from the observation of what is going on in one or two limited localities, to this conclusion. But dismal experience now baffled the fond expectation, and proved the insecurity of the trusted means of defence.

Such were the lessons taught by the first world-wide migration of Asiatic cholera. After 1837, the pestilence ceased from the face of Europe for the next ten or eleven years—although scattered cases occurred every now and then in the various countries which had been affected, and a certain choleraic impress, so to speak, on the character of febrile and other diseases continued to be frequently observed.

The dark cloud once more appeared in the eastern horizon in 1845. Ere long, it became larger and more threatening, and steadily advanced in its march of destruction westward, following pretty nearly the track of its former career, and setting at defiance all mechanical attempts at exclusion where these were again attempted. Again did the quarantine authorities of this country issue some detentive regulations against vessels arriving from infected or suspected parts on the continent; but these, as you will probably all remember, were promptly abrogated, upon the recommendation of the General Board of Health, then recently instituted. The policy of this step was fully recognised by the London College of Physicians, whose well considered opinion stands in the following words:—"Cholera appears to have been very rarely communicated by personal intercourse; and all attempts to stay its progress by cordons or quarantine have failed. From these circumstances, the committee, without expressing any positive opinion with respect to its contagious or non-contagious nature, agree in drawing this practical conclusion, that in a district where cholera prevails, no appreciable increase of danger is incurred by ministering to persons affected with it, and no safety afforded to the community by the isolation of the sick." The Report of the Commissioners of Health in Ireland on the cholera epidemic of 1849-50 proclaims the same very important practical conclusions; and the medical authorities in Scotland have, I believe, emphatically recorded their opinions to a like effect.

\* Besides the pre-autionary measures alluded to above, it has been stated in the public prints that an order was issued by the Admiralty, prohibiting the reception on board of any of the West India mail steamers, on their homeward bound voyage, of yellow fever invalids, or of any distressed British subjects supposed to be labouring under, or recovering from, attacks of the disease. The cruelty of such an order is strongly commented on by Dr. Cummins, surgeon of the *Melway*, in the *Lancet* of May 28, 1853. If such an order has really been issued, it has not, I am assured by Sir William Burnett, proceeded from the Admiralty.

After such concurrence of judgment among the medical profession in this country, it is unnecessary to allude to that of our brethren abroad. It is all but unanimous; except, perhaps, in Spain and the Italian States, where other motives, besides those of truth and conviction, are well known to influence the judgment of officials upon such matters. Nor is it undeserving of notice that, although these countries profess to place the greatest reliance on quarantine measures, and certainly carry them out with the greatest rigour, the experience of the recent epidemic has again shown their inefficacy against its invasion.\* Malta, which, although a British island, may be regarded as truly Italian as regards her quarantine establishment, was again visited with cholera in 1850.

As far as I am aware, it has not been alleged by any person that it was then imported by shipping. Nor have the endeavours of the Spanish *guardas* to keep out the pestilence from Cuba, where the quarantine regulations are of the utmost stringency, been more successful. This was the only island in the West Indies that suffered during the first epidemic in 1834. In 1850, the enemy again found its way in by some channel that has never been discovered; and you will perhaps remember that, in the paper which I had the honour of reading before this society last year, I showed that the development of the pestilence in Jamaica towards the end of the same year could certainly not be traced to any neglect or violation of the quarantine, to whose agency the immunity of the island during the former epidemic had been ascribed.

Notwithstanding these facts, such is the dread of this plague in countries which have hitherto escaped its visitation, and such has hitherto, from long habit, been the vague and general belief that new diseases may be kept out by a system of rigorous medical police, just as interdicted articles of merchandise may be excluded by custom-house officers and coast guards, if these men will but do their duty, that the most extraordinary measures have been resorted to, in different places, within the last year or two for the purpose of presumed self defence. For example, two years ago, at Demarara, a quarantine of forty days was imposed upon one of our ships of war, crowded with troops too at the time, simply on the ground that she had come from Kingston in Jamaica, although no disease existed in that town at the date of her departure, nor had a single case of sickness occurred on board during the voyage. This was, certainly, a precaution with a vengeance; and might, I need not say, have led to the most disastrous consequences to the unfortunate *detenus*, had not the captain wisely determined to go to another colony, where he might communicate with the shore, until the appointed time had expired for the landing of the troops at Demarara.

Something of the same sort recently occurred also at the island of Mauritius; so that you see what views are being still entertained, and acted upon too, by some of our own countrymen abroad. Let us not, therefore, boast too much of our superior enlightenment in matters such as that now under consideration, or be so prompt, as we are apt to be, to rail at the ignorant obstinacy and blind prejudices of foreign states, in refusing to go along with us in effecting the reform of various practices, however opposed these practices may be to the conclusions of scientific research and the acknowledged results of experience. Let it be remembered that the inconsistencies of our own Government have been often so flagrant, that foreigners may well call upon us to look at home, instead of setting ourselves up as their guides and instructors. They may remind us that, after two formal declarations of the inefficacy of quarantine to avert the cholera, an order was issued, no farther back than last September, from our Council office, reimposing what was called a "Quarantine of Observation" in our own harbours on vessels, on board which was "any person or persons actually suffering from cholera, or who had been

suffering from that disease within the five days previous to the arrival of the vessel in port";—such persons to be detained on board the vessel, and the vessel to be kept in quarantine "for such period as the medical officer employed to visit the sick might judge necessary for the security or preservation of the health of the community on shore."

In drawing these remarks to a close, I cannot but again strongly commend the subject of quarantine to the searching inquiry of the medical profession. That the system hitherto pursued stands in need of a thorough revision, and of some important changes, cannot, I think, be questioned by any one. I have already occupied too much of the time of the society to dwell upon these points at present; and it is the less necessary to do so, as I have explained my views at some length in the Report on the Cholera in Jamaica and on the sanitary condition and wants of that island, addressed by me in the course of last year to the Colonial Minister.

Fitzroy Square, June 1853.

### CASE OF PULMONARY DISEASE: EXUDATION DEPOSIT BETWEEN THE LUNG AND PLEURA.

By P. MARTIN DUNCAN, M.B.Lond., Physician to the Essex and Colchester Hospital.

(Read before the Suffolk Branch of the Provincial Medical and Surgical Association, June 24, 1853.)

The following case excited much attention amongst the medical men in and about Colchester, on account of its interesting and somewhat anomalous character.

A tall and thin, red-haired labourer, aged 22, the son of unhealthy parents, and the brother of some very phthisically disposed individuals, came under my care as an inpatient at the Essex and Colchester Hospital, in March 1850. He had never had very good health, and for some weeks had suffered, from cough, a sensation of uneasiness, never amounting to actual pain, in his right side, and from gradually increasing dyspnoea. The cough was occasional, and not very severe in its duration; but, from its being induced by the slightest exertion, it was very inconvenient to him; the expectoration was small in quantity, saline to his taste, and mucoid. He had become emaciated to a considerable extent before his admission into hospital, and was troubled with a harsh, hot skin. On examination, I found that his countenance denoted a depressed state of his general powers; his eyes were sunken, and the pupils dilated; his hair was harsh and dry; and the *alæ nasi* were in constant action. He never complained of headache, or of any nervous symptoms. The general muscular development was very low, and he had large ends to his long bones, clumsy joints and clubbed ends to his fingers, and a narrow chest. Any unusual exertion fatigued him, and greatly increased the number of the respiratory efforts, and the pulsation of his heart. The thorax expanded very unequally during inspiration, and the abdominal muscles assisted in an abnormal manner. The right side of the thorax was seen to expand less than the left during inspiration; and this expansion was sudden, and not progressive: still, there was no very great difference between the two sides. The measuring tape determined that the right was half an inch larger than the left side of the thorax. Measured by Quain's stethometer, the infraclavicular region of the right expanded only five degrees less than the corresponding region of the left side. Hutchinson's spirometer proved that the patient's capacity for respiration was forty-five per cent. below the average. There was no bulging of the intercostal spaces on the right side; and the care which was taken in this physical examination was determined by the peculiarity of the results of percussion and auscultation. The whole of the right side of the thorax was dull on percussion—very dull; in fact, the upper margin of the liver could not be distinguished from the adjacent lung; the left side was resonant, and had none of the

\* Professor Sigmund informs us that, in 1849, the disease made its appearance in Naples, Brindisi, Leghorn, and Genoa, in all of which places quarantine was maintained against its introduction; while Civita Vecchia, where no quarantine existed, escaped altogether.