GENERAL BOARD OF HEALTH.

APPENDIX V.

TO THE

SECOND REPORT

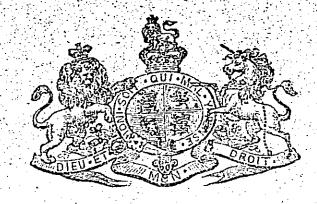
PAYS-BAS.

ON

QUARANTINE.

REPORT of Dr. W. H. BURRELL on the PLAGUE of MALTA in 1813.

Presented to both Houses of Parliament by Command of Her Majesty.



LONDON:

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOOD?
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY.

TOR HER MAJESTY'S STATIONERY OFFICE.

GENERAL BOARD OF HEALTH.

APPENDIX V.

TO THE

SECOND REPORT.

ON

QUARANTINE.

REPORT of Dr. W. H. BURRELL on the PLAGUE of MALTA in 1813.

Presented to both Houses of Parliament by Command of Her Majesty.



LONDON:

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE, PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY.

FOR HER MAJESTY'S STATIONERY OFFICE.

(39)

1854.

					ALTOGOPINE
国国	立公衆律	5 生院附	属	図書館	<u> </u>
受入先					
受入日			-		
登録番号					
所 在					
Library,	National	Institute	of	Public	Health

THE PLAGUE AT MALTA IN 1813.

CONTENTS.

				Page.
Arrival of the "St. Nichola," and alleged introduction by that ship	-		•	8
Simultaneous outbreak in various localities		-	-	16
Absurd credulity as to contagion	-		-	21
Measures of segregation at Corfu		-	-	25
Progress of the disease by months	-			30
Local causes		-	-	34
Exemption of the Monasteries and Grand Prison	-		-	44
Alleged introduction of plague at Gozo		-	-	54
Arrival of various plague ships from 1819 to 1841	_		-	61
General conclusions		-	-	76
Note A.—Extracts from Proclamations	-		-	78
B.—Returns shewing prevalence of carbuncular disease in or	di	nai	У	
years		-	-	81
C.—Extraordinary expenses entailed by the plague in 1813-14			_	89

The General Board of Health, Whitehall, 5th June 1852.

Sir,

I AM directed by the General Board of Health to convey to you their sense of the value of the report presented by you to the Lords of Her Majesty's most Honourable Privy Council, stating in detail the reasons for the opinions given by you as member of a Board of Inquiry assembled at the office of the Army Medical Department, on the subject of yellow fever, and which the General Board have inserted in the Appendix to their Second Report on Quarantine.

The Board desire me further to express their hope and belief, that those reasons will assist in diffusing juster views on the mode of propagation, not only of yellow fever in particular, but of epidemic diseases in general; and I am therefore to request that you will favour them with any assistance which your observation and experience may enable you to render, with a view to extending a knowledge of the science of prevention in reference to Plague, and leading to a practical reform in quarantine.

I have, &c.,

(signed) C. MACAULAY.

W. H. Burrell, Esq., M.D., Principal Medical Officer, Malta.

Malta, 8th July 1852.

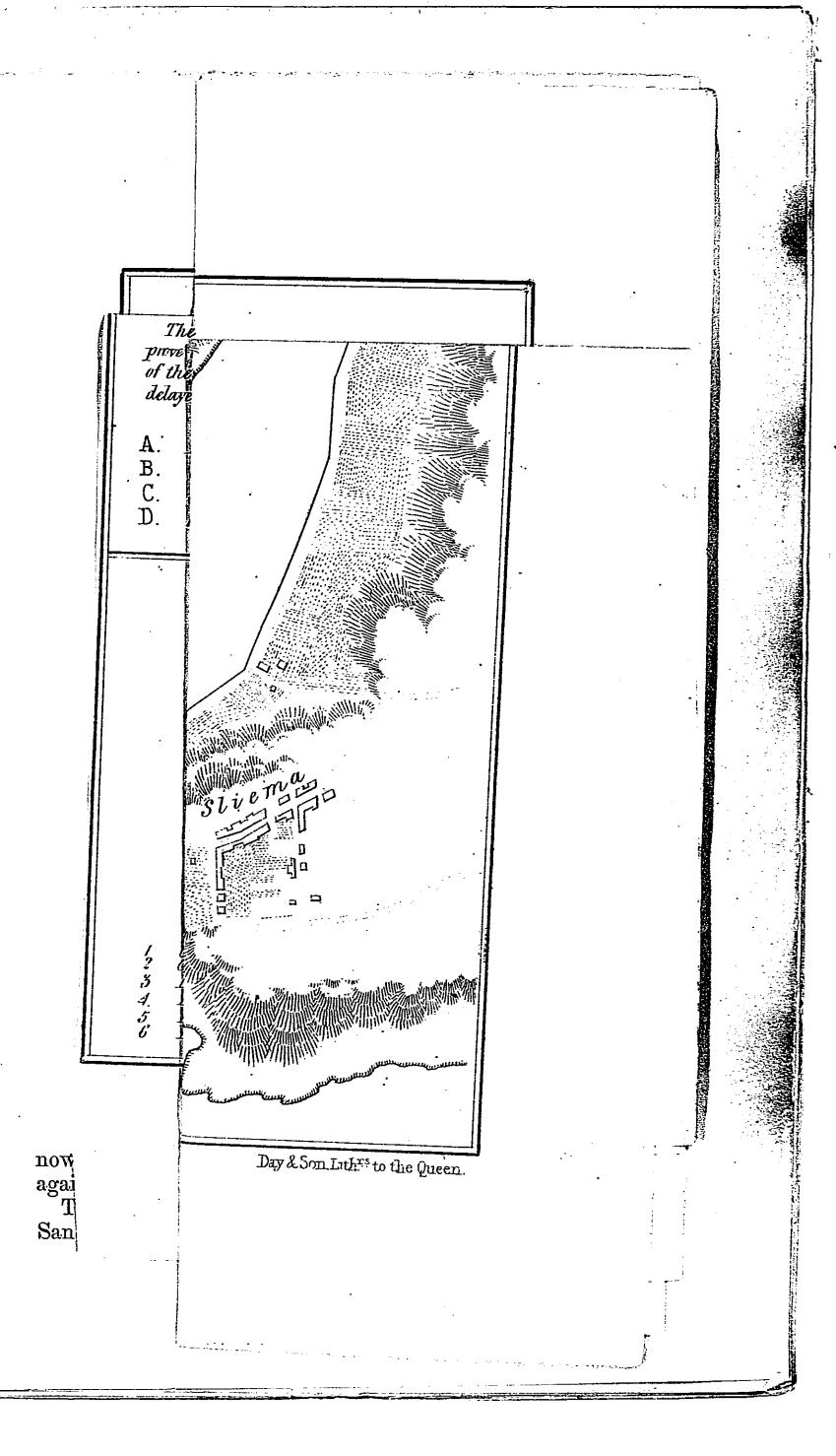
SIR,

I HAVE the honour to acknowledge the receipt of your letter of the 5th ultimo, conveying the favourable opinion of the General Board of Health on my report on yellow fever, and requesting any remarks I may be able to furnish with reference

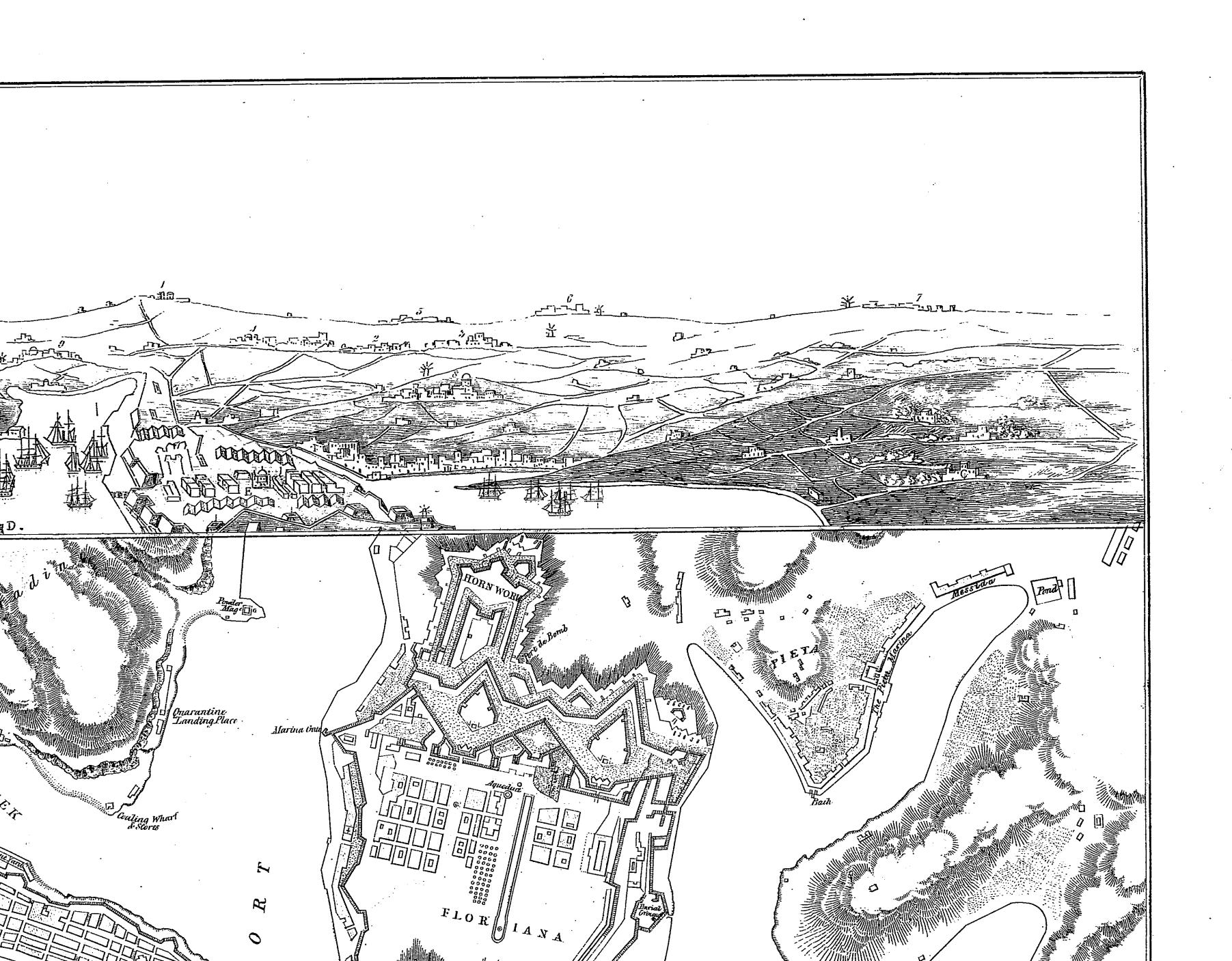
to plague; and, in reply, beg you will express to the Board the value I attach to their approval of my performance, and the pleasure I shall have in forwarding to them a paper on the plague of 1813 in this island, which is now nearly ready.

I have, &c.,
(signed) W. H. Burrell, M.D.,
Staff Surgeon, P.M.O.

C. Macaulay, Esq., General Board of Health, London.



now aga T San







Scale of Six Inches to a Mile.

to plagi value I pleasure plague c

General

REPORT

ON

THE PLAGUE AT MALTA IN 1813.

MY LORD AND GENTLEMEN,

THE island of Malta lies between Sicily and Africa, in latitude 35° 54′ north, and longitude 14° 34′ east. It is about seventeen miles in length by nine in breadth. The surface is diversified by hill and vale, the highest point rising about seven hundred and twenty feet above the level of the sea, while a part of the valley, at the head of the grand harbour, is a few feet only above the water. Limestone of various density forms its rocky base, which in many places appears almost bare, while, in others, its gentler declivities are covered by terraces, on which the scanty calcareous soil has been collected, in order to extend the area of cultivation. In some of the valleys the soil is deeper, and partakes more of an alluvial character; but in one or two spots only can it with propriety be designated as marshy. The villages, or casals, into which the great bulk of the rural population is congregated, stand, with few exceptions, upon high ground, and the habitations of the dense population in the various sections of the capital are, for the most part, favourably situated as regards elevation. The climate of this island is considered healthy. The mean temperature of the first quarter of the year is 57°; of the second, 67°; of the third, 79°; and of the fourth, 68°. The average fall of rain is about seventeen inches, and occurs chiefly in winter; the period from April to October being remarkably dry. As summer advances, the ground becomes parched, under the influence of a powerful sun. Vegetation languishes, or is checked. The winds are light, or long calms prevail, which are only interrupted by the oppressive sirocco. With the first rains, in October, the temperature speedily changes, the herbage assumes a fresh verdure; and the inhabitants, who had sought the shade as a protection from the scorching sun, now bask in the rays wherever houses or walls afford them shelter against the cooler northerly winds.

The formidable fevers, which led to the desertion of the casal San Paolo, on the border of the wet ground at the head of the 8

Appearance of First Case of Plague.

grand harbour, show that the salubrity of Malta is due rather to the general elevation and dryness of its soil than to any peculiar advantages of climate.

The island was ceded, by Charles V. to the Order of St. John, in October 1530. The incessant hostilities carried on by this martial order against the Ottoman power, then at its height, caused Malta, in turn, to experience the horrors of war; yet, during the alternate invasions, successes, and reverses of the next 145 years, the population suffered only four times from plague; namely, in 1592-3, 1623, 1655, and 1675-6. As the fanaticism and resources of the belligerents became exhausted, the Maltese turned their attention to the peaceful occupations of trade and agriculture; and when the island surrendered to the British, in September 1800, the supremacy of our flag secured full protection in these pursuits, when the coasts of Italy, France, and Spain were blockaded. Malta, in consequence, became "the emporium of "commerce in the Mediterranean;" merchants and refugees in great numbers resorted to it; and the population of its towns was augmented by many thousands, who found lucrative employment in its abundant prosperity.

"One of the most material branches of this commercial intercourse," says Dr. Tully, "was the trade carried on between Malta and the Levant; and the produce of the latter hourly appeared in her ports. In consequence of the frequency of the plague, which for centuries past had existed in almost every part of the Levant, the general quarantine precautions were invariably resorted to, and, after due expurgation, both ships and cargoes were admitted to pratique in Malta."

The consul at Alexandria had apprised the government, in January 1813, that plague prevailed in Egypt; and we may hence infer that quarantine had rather become more rigorous than undergone any relaxation in Malta at that time, for the brigantine "Nancy," which had two of her crew under plague on arrival, and the polacca, "Bella Maria," which had lost one by the same disease about the time of her departure from Alexandria, both arrived on the 28th of March, and were required by the authorities to leave the island the following day. They were both loaded with grain.

The brigantine "San Nichola," Antonio Maria Muscara, master, had also arrived on the 28th of March, 1813, with a foul bill of health from Alexandria, where the disease existed, having lost two of her crew on the voyage; "measures of "increased rigour were immediately resorted to; all arrivals from the Levant were placed in the strictest quarantine, and on "the 29th of the same month, the captain and crew were "transferred to the Lazaretto, and the ship was placed under the

"immediate charge of health guardians."* The captain was attacked on the 1st of April, his attendant, a sailor, on the 2d, and both died on the 7th of April, in the Lazaretto. The public it is said became alarmed; the Government, in consequence, determined on sending the "San Nichola" back to Alexandria; and on the 10th, she took her departure with a fresh crew.

"The public mind," says Dr. Tully, "was now somewhat "tranquilized by the sailing of the 'San Nichola;' but at the "moment they were thus indulging themselves in the fond hope "of security, this insidious disease was insinuating itself in every "angle of the city, in places remote from the scene of its first "appearance."

The "Giornale di Malta," of the 31st of March, takes no notice of these occurrences, nor can I find any allusion to the subject of plague, in the following weekly numbers, until the 12th of May.

The first case recognized by the Committee of Health as plague occurred on the 14th of April, in the daughter of a shoemaker, named Salvatore Borg, residing in Strada San Paolo (No. 227); a few hours after her death, on the 19th, the wife was attacked; and on the 30th, a son, four years of age, was taken ill. The wife, after being prematurely delivered of a seven months' child, died on the 4th of May; and Borg himself was seized with the disease on the same day. Inquiry was then made for other cases, and two suspicious ones were found. Nevertheless, in the proclamation of the 5th of May, "The Board of Health observes with pleasure, "that from the reports which, during the present meeting, have "been received from the various medical practitioners, both civil "and military, it appears that this city is at present free from "any contagious malady, excepting only the family of Salvatore "Borg (now in the Lazaretto), respecting which the board "hitherto sees no reason for diminishing the suspicions it has " entertained."

According to the "Giornale di Malta," of the 12th of May 1813, which reports these attacks in the Borg family, only three persons died under suspicious circumstances in the whole population, including the shipping, military, and prisoners of war, between the 14th of April and the 11th of May.

Dr. Tully also states, that "until the 19th (May), the advance "of the disease was slow, and many even began to doubt the "existence of plague in the island."

The "suspicions" of the board seem to have arisen during the illness, or after the death of, Borg's wife; for the daughter's disease was considered by a very able physician, Dr. Leone

^{*} Tully, p. 38.

Gravagna, who visited her on the 16th of April, as "putrid "typhus;" and, in consequence of this opinion, the body was carried to the church and buried in the usual manner. Though the mother's case seems to have been more decided, even her corpse was carried to the church; but a conference of physicians having decided that her disease was plague, the body was removed, under a military escort, and interred outside the walls. On the 5th of May plague was declared to be present, and the survivors of this family, as well as every other individual proved to have had communication with them, were forthwith removed

by order to the Lazaretto.

The only cases known as in any way connected with the disease in the family of Borg, are, 1st. Maria Agius, the midwife that attended Mrs. Borg, who was found dead in her room in Strada. San Ursula, on the 6th of May, with "some signs of plague on her body." 2d. Grazia, daughter of Giovanni Batista Pisani, sexton of the church of St. Rocco, who, with her whole family, consisting of eight persons, was sent into Fort Manoel, in consequence of having communication with, and passing the night in the house of Maria Agius. On the 15th, she is reported as being affected with glandular swellings. 3d. Signore Delicata, brother-in-law to Maria Agius, who, being suspected, had also been sent into Fort Manoel, and is reported as having been attacked with fever and carbuncle on the 17th, which proved fatal on the following day. 4th. The father of Borg, eighty years of age, who was taken ill on the 8th, and died on the 9th, without having shown any symptoms of plague. Neither Dr. Gravagna, the physician, nor the several relations and friends, who, according to the Baron de Piro, were in attendance on Mrs. Borg, are noticed as having suffered.

Grazia and Delicata had been shut up in Fort Manoel on the 8th of May, and as the disease did not appear in the former until the 15th, nor in the latter before the 17th, there is no reason to suppose that these cases had any connection with the subsequent outbreak in Valetta; for between the 8th and the 15th, when Grazia was attacked, the only declared cases of plague were in two ships; one on the 9th, at St. Paul's Bay, eight miles distant; the other on the 14th, in a vessel about to sail for Lampedosa. On the 16th were reported, the deaths of a daughter and son of a baker, 92 Strada S. Christophoro; and of a Greek; the attack of a girl eight years of age in Strada Pozzi; of a man and his wife in Strada St. Giuseppe; and a girl of fourteen in Strada St. Giovanni. On the 17th, no fresh cases. On the 18th, two new cases in Strada Pozzi: one in Strada St. Paolo, a death in Fort Manoel, another in Casal Gudia, four miles distant, and one attack

and one death in the Veterans.

The cases in the Borg family, and those which immediately followed them, can only be looked on as the more prominent and decided ones in the beginning of May; for, in addition to a boy at Sliema, whose father afterwards died of plague, there was the death of a girl on the 5th in the Maltese hospital, so suspicious that it was alleged the body was burned; the death of a boy, 150 Strada San Paolo, on the 7th, the whole of whose family was moved to Fort Manoel; a case at the village of Tarxien the next day, which proved fatal during the removal of the patient to the Lazaretto; the attack of a boy at Birchircara, who was placed in quarantine; another in the Marina, and on the 9th a young man in Strada Saluto, both of whom were sent to Fort Manoel.

All these cases were sufficiently suspicious to be placed in quarantine; but the Committee of Health conceiving (Dr. Calvert) that they had the disease in their power, remained in that belief till the 16th, when no further question could arise as to its diffusion. This unwillingness to proclaim the disease existed at a still earlier period, for the Baron de Piro (p. 13.) mentions the well-marked cases of three servants of a friend, and the death of a priest, about the 22nd of April, none of which occasioned alarm or

led to any precautions.

I can neither trace from public documents, as Dr. Tully says can be done, "the attack of many near relatives," nor can I find that "the malady displayed itself by an uniform and faithful progress," according to the same author, characteristic of contagion. The relatives of those who suffered were considered "suspected," and placed in quarantine; intercourse with the diseased being, I am informed, more frequently presumed than proved. That many of these were attacked is certain; but as they had been exposed to the same local influences, no sufficient reason can be adduced for attributing such attacks to intercourse.

The statements of Dr. Tully, that "some of the health guards" of the 'San Nichola' were among the first attacked," and that "the persons who were next and in succession attacked, were those "who made purchases of susceptible goods from the shoemaker Borg, "and who themselves traced their disease to this very source," (pp. 50, 51,) are unsupported by any official or other admissible evidence, and must be coupled with that loose hearsay testimony on which this author frequently rests important conclusions.

According to Luigi Borg, the youngest son, who is still living, neither his grandmother nor his two uncles Antonio Borg and Giovanni Bonnici were attacked, though they visited the family, and were in consequence sent to the Lazaretto. I think it not

^{*} Mr. Garcin, the very best authority, contradicts this in the most unequivocal terms. Six guardians, Mr. G. states, were employed in this duty, a number offering little security, under promise of reward, for any concealment.

improbable that the great number attacked bearing the name of Borg may have tended to strengthen the common belief that the shoemaker of that name was the cause of the introduction and spread of the disease; and it may be well to explain that this name is to be met with in nearly every part of the island, predominating much in the same way as Smith in England, or Jones in Wales. Excepting the members of the shoemaker's family, however, it does not appear in the bulletins till the 22d of May, from which date up to the end of the epidemic it is to be found more frequently than any other.

The Committee of Health having reported "the public health to be in imminent danger," efforts were made to trace the disease from the "San Nichola," or Lazaretto, to the house of Borg-a distance of fully a mile. It was said that Borg had had contraband dealings with the health guardians, who had watched in boats alongside the "San Nichola," with her ports closed. Sliema is mentioned as the place of deposit of the articles alleged to have been stolen from the San Nichola, apparently because a publichouse there is said to be the resort of persons from the quarantine ground; and an anomalous case of disease (which proved fatal on the 7th of May) in a boy there, although pronounced by the Committee of Health not to be plague, seemed to furnish a connecting link eagerly laid hold of by a population believing that, without importation, the disease could not exist. It is not alleged that Borg had been seen with the guardians after the arrival of the "San Nichola," nor is there any evidence to prove that the latter had left their very responsible duty at a ship, about which there was so much public alarm, to carry on a petty, but to them most dangerous smuggling transaction with a shoemaker.

Such was the current opinion at the time, and it prevails at the present day. Dr. Tully gives it as the only one, but the Baron de Piro, in his excellent account of the plague, published in 1833,* says, "I cannot confirm it, on account of the following circum-"stances: 1st. It appears by the deposition of the captain and crew of the 'San Nichola,' that the port-holes had been shut and secured in the course of the voyage.† 2d. The new crew, embarked to "take her back to Alexandria, arriving there, and, after having disposed of their cargo, returned to Malta, without a single indi-"vidual having been sick. 3d. The British consul in Alexandria,

* "Raggualio Storico della pestilenza che affiisse le isole di Malta e Gozo negli, anni 1813 e 1814 dal Barone G. M. De Piro—Livorno 1833.

"to whom the said ship was consigned, assured our Government by "letter that no part of the cargo was deficient."

Sir Thomas Maitland, in his despatch of the 8th of April 1819, to Lord Bathurst, says; "As far as I have been able to ascertain, "I think I am warranted in stating, that it (the plague), was "brought into Malta by a ship from Egypt, and conveyed out of "that ship by a person smuggling some leather; this person and

"his family were the first sufferers from it."

Dr. Tully seems to have given credit to this story, but the Baron de Piro (a Maltese), who would appear totally to disbelieve it, says, "I consider it proper to state that Dr. Tully, "by false accounts given to him, erred in characterizing the " shoemaker Borg as a noted smuggler; for, by common consent " of those who knew him, he was always regarded as a respect-"able artisan." Moreover, Dr. Hennen says, "in a letter now "before me, the President of the Board of Health candidly " confesses that the only clue to inquiry as to Borg's guilt was "his dying exclamation, 'Oh! the linen, the linen." "Nor "is it likely," observes the Baron de Piro, "that the guardians "having the penalty of death before them, and the knowledge " of plague on board the 'San Nichola' should have ventured " on leaving their post; it is more reasonable to imagine that "if they abandoned it at all, for the purpose of theft, either "they went on board some of the other vessels, or they had "stolen infected articles from the Lazaretto. But without "wandering into idle conjectures and suppositions, I consider "it better for us to adhere to what has been uniformly attested "by several of my fellow citizens, and published by Dr. Naudi "and Dr. John Hennen in their respective works, namely, that "the plague, although not recognised as such, had been intro-"duced amongst us previous to the arrival of the 'San Nichola,' "by means of various pieces of cloth, which had been seen in "circulation in Valetta, enveloped in their original wrapper, "the manufacture of Alexandria; thus showing that, in contra-"vention of the quarantine laws, they had been brought into "commerce, without being previously purified. Dr. Naudi, in " his learned work, relates this fact in language the most positive." (p. 22.)

But to refer to the opinions of two very competent eyewitnesses of the occurrences of 1813, Dr. Calvert states, "nothing could bring to light the way in which the infection "was brought;" and Dr. Faulkner says, "it appears to me "little less than mere waste of time to take any pains in tracing

[†] Mr. Garcin, then Captain of the Lazaretto, informs me that additional fastenings were made after arrival, and before the captain and crew left the vessel for the Lazzaretto, and that no communication could have taken place except by the guardians, and that he utterly discredits.

^{*} Linen formed no part of the cargo of the "San Nichola." (De Piro, p. 24.)

"this event to any particular instance of laxity in the depart-

"ment of public health."

The mere circumstance of the arrival of the "San Nichola," without proof that any of the first persons attacked among the population had come in contact either with those infected with the disease or infected articles, does not prove its introduction by that ship. The phrase "it must have been "introduced" is a gratuitous assumption, with which this matterof-fact age is not inclined to rest satisfied. We must have adequate proof, and not simply the arrival of a ship with plague on board; which has happened over and over again without any injury to the population of Malta.

Dr. Tully says, (p. 223) "It is well known that merchant "ships from Alexandria, Smyrna, and Constantinople, with their "crews labouring under plague, have repeatedly, within the last "three years, entered almost every port in the Mediterranean "where the British flag was flying; and many such instances "took place during my residence in the Ionian Islands without "being productive even of alarm, much less of danger; and ships "under such circumstances remained for days in strict quarantine, "closely surrounded by guard boats, until the moment of their "departure, receiving every necessary assistance during their stay; "the same repeatedly occurred at Malta, and no apprehension "whatever was entertained by the Government, which trusted "with perfect confidence to the vigilance of the public officers."

I have examined every account I could find of this alleged introduction of plague, and nothing like proof is adduced in any of them; the whole appears to be pure conjecture; the invention, in short, of a panic-struck population to verify a preconceived

opinion.

That the plague was in Malta; that the daughter of Borg was the first case recognized by the Committee of Health-that his wife, a son,* and himself were subsequently attacked by the disease; that packages of cloth from Alexandria, were previously to those occurrences circulated, are facts not to be disputed; but that Borg was a smuggler; that he had gone to Sliema or met the health guardians; that the latter had gone on board the "San Nichola," stolen goods, and sold them to Borg; that the packages of cloth from Alexandria had not been depurated, and, in consequence, plague communicated to the population, are simple matters of assertion, in support of which not a tittle of evidence exists.

The "San Nichola" arrived on the 28th of March, and disease, according to Dr. Hennen, "though not recognized as plague, "was in Borg's family on the 2d of April," and he, the supposed medium of communication, was not attacked until the 4th of May, thus showing, even had he met the guardians on the evening of the day of the arrival of the "San Nichola," a confusion or rather an inversion in the incubatory stage in the same family, which cannot be reconciled with a common sense view of contagion communicated from without, since the first and chiefly exposed was the last to suffer, though undoubtedly

susceptible of the disease.

The following facts communicated to me by Dr. Bardon, the best living authority in Malta, on the plague, prove that cases of the disease occurred in Valetta previous to those in Borg's family; if not before the arrival of the "San Nichola." Dr. Bardon states that "about a fortnight previous to the attacks " of plague in the family of the shoemaker Borg, residing in "Valetta, I was called to a Sicilian living in a small room, " No. 46, Strada San Dominico, who, in addition to symptoms " of gastric fever, presented a bubo in the right groin, which "suppurated, and was opened by me, and at the end of fifteen "days the patient was quite well: this case, in my opinion, was "one of plague. About the same period that I attended the "Sicilian, I was called to see a woman living in a small room, " at 75 Strada San Ursula, who was labouring under fever, with " severe pain of head, and vomiting. In a few days a carbuncle "appeared on the outer side of left knee; the symptoms became " aggravated, and on the 7th day the patient died of plague." .

Besides, corroborative evidence is still extant that there was no precise information, either as to the previous state of the public health, or the commencement of the epidemic in 1813, there being many graves in the vaults of the churches of Valetta, Floriana, and Burmula, secured to prevent disturbance by iron bars, which contain the bodies of persons who had died for several weeks

previous to the disease being declared.

There is then no proof that the plague of 1813 was introduced into Malta. The disease was already in the island when the "San Nichola" arrived; and that an epidemic influence was

wide spread in 1813, I shall presently show.

"Many gross errors," says Dr. Hennen, "were committed at "first (both by the public authorities, and the population) from "ignorance of the real nature of the disease, and from dread of "the quarantine police." From the date of Mrs. Borg's death (the 4th of May) all cases in the least suspicious were placed in quarantine; business of every kind was suspended; intercourse enjoined to be avoided, and all assemblages of people strictly

^{*} Another son of two years of age, was attacked on the 14th of May, or two days after the death of Borg in the Lazaretto on the 12th: he recovered. The rest of the family, and the two Greeks who nursed Borg and this child, were reported well on the 15th of May.