

place of residence of those attacked, so that I have had no difficulty in discovering the identical house, which in the vast majority of cases, remains the same as in 1813.

The alleged introduction of the plague into the island of Gozo in 1814, appears to rest on very questionable grounds. According to Sir Thomas Maitland, in his Despatch of 1819 to Lord Bathurst, "One of the persons who had been sent in to the Lazaretto for forty days, on being liberated, directly proceeded to his house which had been originally within the cordon [at Curmi,] but which was now without, in consequence of its having been straitened, as above mentioned. This person, before he went into the Lazaretto, had concealed in his garden a small box; on quitting the Lazaretto, he dug it up, carried it to town, and then immediately proceeded with it to the island of Gozo, where he had some relations in the village in which the plague afterwards appeared; he then opened it and gave, what they term a faldetta (a black silk cloak, universally worn by the women of Malta) to his relation; I have not the smallest doubt, the plague was by this means generated in Gozo."

Dr. Calvert, however, says: "A man, indeed, did go from this neighbourhood (Curmi), and was the first in that island (Gozo) who fell a sacrifice to the disorder; but as to his digging up a box, this was an idle report, and could not be substantiated, as I was confidently assured from the best authority."

Supposing Sir Thomas Maitland's statement to be correct, there is no evidence that either the man or the contents of the box had come in contact with infected persons or articles. But if they had, we can scarcely credit that the poison after a lapse of several months retained sufficient activity to communicate the disease. Captain Schembri (see p. 61) states that there is no instance on the records of the Lazaretto of Malta of any depurgator being attacked with plague, and greater doubts will arise as to the retention of the poison by clothes, when it is stated that from the 13th of November to the end of December, numbers of persons were engaged in a general purification of clothes in Valetta; and houses that had been shut and sealed, and in which whole families had perished, were then purified, without the occurrence of a case of plague.

The evidence against the communication of plague by fomites seems so conclusive, that it is not probable a silk cloak which had lain buried in the earth for some months could effect in February 1814 what cartloads of justly suspected articles failed to do in November of the preceding year, before the disease was wholly eradicated in the villages of Malta. But it is open to question whether the first recognised case was one of plague, for, according to Dr. Tully (p. 74), "he died suddenly at his own

"house," and "his body was carried to the parish church, and he was buried with the accustomed funeral ceremonies."

According to the Baron di Piro, Angelo Galea, the subject of this case, left Malta on the 19th February and died suddenly on the 22d. His daughter was attacked on the 28th, and died a few hours after her arrival at the hospital at Rabatto. Among the first cases were the priest and grave-digger (p. 77). I have ascertained that Galea was five, if not six, days in Caccia before his death on the 18th,* and that the grave-digger, "Cassimiro Rapa," died on the 2d of March; but the priest, "Vincenzo Cauchi," aged eighty-two, died on the 27th of April. The latter had no communication with Galea, who received neither religious nor medical assistance, his death having been so sudden as to call for a coroner's inquest, when buboes are said to have been discovered in the axillæ, which had been for two days dressed by his daughter Rosaria.

"Modesta Hili," a neighbour and eye-witness, questioned by Mr. Attard, states that she not only saw Rosaria preparing a poultice the day before Galea died, but a tumour in the arm-pit; and that, wishing to assist in its application, Galea "bid her stand off, as he had a fever and she might take it." This statement, if correct, would justify the suspicion that Galea had the disease on arrival. As that, however, is not alluded to by any official or trustworthy authority, it may be presumed that the fact of his recent arrival and sudden death, and that of his daughter, were the only grounds for fixing on him as the importer of the contagion; for it is pretty certain that actual disease of a suspicious nature would have supplanted indirect means in support of the allegation. This testimony is also at variance with a statement of the same witness (Modesta) that Galea had been to Rabatto (two miles distant) on the day preceding his death, proving the absence of any serious illness during nearly the whole of his sojourn, which from all accounts was not more than six days.

Mr. Attard states that twelve days elapsed after Galea's death before any restrictions were imposed on the inhabitants, during which only two deaths occurred, namely, Galea's daughter and the grave-digger. According to the witness (Modesta) considerable alarm and question as to whether the disease of which Galea died was plague, seem to have spread, but armed people were not placed on the houses till the death of Rapa, the grave-digger, on

* Die xviii Februarii 1814. "Angelus Filius Michaelis Galea, ætatis suæ quadraginta septem annorum, nullisque receptis Sacramentis animam deo reddidit; cujus Corpus Sepultum in hoc Parochiale Ecclesiæ."

Ex originale libro fidelium defunctorum hujusce Santæ Parochialis Ecclesiæ Terræ Caccia presentum extraxi copiam, et manu mea firmavi ego Parochus dictæ Ecclesiæ. Sub die xii, Octobris 1853. FRANCISCUS BUTTAGIEG.

the 2d of March. It was at this date (see Despatch of 1819) that Sir Thomas Maitland ordered the disease to be treated as plague until it should be "ascertained satisfactorily" whether it was that disease or not. It is, therefore, probable that Rapa's was the first "suspicious case" notified to the authorities of Malta. Plague was then declared; the inhabitants were strictly segregated, and on the 7th or 8th troops were sent from Malta to form a cordon. The fourth death occurred on the 6th of March, and from that to the 31st fifty-one died, several in their own houses, but the greater number in the Plague Hospital, which was opened on the 19th. On the 31st the whole of the inhabitants of four-fifths of the village were placed in tents on a neighbouring plain, and their cattle penned on the same. The remaining fifth part of the casal facing the north-west was never infected.

The removal of the inhabitants seems to have acted beneficially, for in the succeeding two months, or to the last death on the 28th of May only forty-nine died. Among these were five members of the family of Custò, brought from Rabatto along with the first attacked; a priest who died in the hospital at Caccia on the 31st of March. The others were placed as suspected in barrache near to the hospital, of whom two died on the 10th and three on the 11th of April.* Among other victims either employed or living within the village subsequent to the 31st of March were five beccamorti; a depurgator; the parish priest; Drs. McAdam and Pace, besides the members of infected families placed in barrache, and the maritime guard forming the inner cordon, of whom a considerable number died.

For the following details on the first cases I am indebted to the careful inquiries of Mr. Attard. His dates and succession of the deaths taken from the parish register, may be relied on as correct. Those of the attacks as well as the nature and amount of intercourse are more questionable. Coming, however, from two eye-witnesses, Modesta Hili and Pietro Bonello, in part confirmed by Giacomo Vella, the sexton, they are plausible if not, perhaps, as reliable an approximation to the truth as can be obtained forty years after the occurrences, among an ignorant population deeply imbued with the doctrine of contagion.

18th February.—1. "Angelo Galea brought the plague from Malta; lived in the house of Anna Bigoni Fiurina, in which also resided his daughter, Rosaria, wife of Gaetano Xerri. Gaetano only survived." (See 2 and 5.)

28th February.—2. "Rosaria, wife of Gaetano Xerri, daughter of Angelo, attacked in her house and died in the hospital of Saint Giulano, at Rabatto."

* This family were the only persons attacked in Rabatto, the Capital; they inhabited the Mandraggio, a narrow, dark, and damp locality.

2d March.—3. "Cassimiro Rapa, sexton of the church. He buried Angelo Galea, was attacked in the room called 'Bottega' in which he lived, and was found there dead on the 2d of March. This man had a house, a little distance from the room he occupied, in which his family resided, consisting of Grazia, his wife, Giuseppa, his daughter, wife of Michele Saltana, Rosaria and Maria, younger children of Michele Saltana, all of whom were in communication with Cassimiro up to the evening before his death. After his death they were transferred to the Barrache, together with Paolo Teuma (died 17th April. This man wore the cap of Angelo Galea, which had fallen from the corpse, for fifty days), and all remained unaffected except Paolo."

6th March.—4. "Michele Hili, a friend of Angelo Galea, who frequented the house as well during Angelo's illness as that of his daughter. He was attacked and died in his own house." (See case 6.)

7th March.—5. "Anna Bigone (in whose house resided Rosaria, wife of Gaetano Xerri, daughter of Angelo), attacked and died in her own house; about the same time was attacked Gaetano Xerri, her nephew, who recovered after long detention in the Plague Hospital." (The date of attack of the last must be inaccurate, as the Plague Hospital was only opened on the 19th.)

9th March.—6. "Teresa Buhagiar, sister-in-law of Michele Hili (No. 4), attacked on the same day in the house with Michele. Both died there. Giuseppe, husband of Teresa; Maria, wife of Michele, and daughter of the couple, Buhagiar; with Gabriele and Paolo, sons of the same, were transferred to the Barrache and survived. They were intimate friends of Angelo, frequented his house at his death and during the sickness of Rosaria, his daughter."

11th March.—7. "Baldassara Attard, aged 80, attacked and died in his own house; he had had no communication with the family of Galea. His daughter, transferred to the Barrache, survived; it was doubted that the former died of plague."

13th March.—8. "Giuseppe Said, lived close to the house of Galea, and went to see his corpse; attacked in his own house, and having gone out in a state of delirium was shot by the Adjutant of Police." (Another was shot on the 31st March for concealing his illness.)

18th March.—9 and 10. "Paolo Camilleri, Angela Camilleri; attacked and died in their own house. This couple had

gone to condole with Rosaria after the death of her father Angelo. Rosa, Margarata, Angela, and Maria, their children, and a daughter of Margarita were transferred to the Barrache and survived, except Maria (died 20th March.)

18th March.—11. Lorenzo Cassar; attacked and died in his own house. He was one of those who accompanied the corpse of Angelo Galea from his house to the church; without family." (Died twenty-eight days afterwards.)

18th March.—12. "Angelo Curmi; attacked and died in his own house; a friend of Galea, and visited the house at his death and during the illness of Rosaria; without family." (Died twenty-eight days afterwards.)

18th March.—13. "Andrea Cordina; attacked in his own house and died in the hospital. His brother Francesco transferred to the Barrache, was attacked there, and died in the hospital on the 20th of March."

19th March.—14. "Signore Giuseppe Formosa, deputy lieutenant of the village; attacked in his house and died on his way to the hospital. Maria, his wife, Ignazio and Saverio, younger children, Salvo Rapa, Grazia Rapa, Giovanni Rapa, Angela Rapa and her husband, Francesco Pace and Giuliano Rapa, sons-in-law, and the father-in-law were confined in the Barrache and died in hospital, except Ignazio and Saverio, the younger children, and Francesco Pace who remained unaffected. (The deaths of the others took place as follows: Maria, the mother, Salvatore, Grazia and Angela on the 20th; Giovanni on the 23d; and Guiliano on the 31st of March.)"

Mr. Attard's information regarding the subsequent cases almost exclusively relates to the place of attack and date of death. No connection with the first cases is alleged, except in three instances, one of which I have given (Teuma, No. 3). The others were two sisters, Giovanna and Olimpia Pace, who, it is said, had had ingress to the house of Signore Formosa (No. 14.) They were attacked in their own house, and died in the hospital on the 20th of March.

The above details may seem to afford as strong evidence of the importation and diffusion of plague as some could desire. It is necessary, however, to remember that all these persons were neighbours, living in the same unhealthy part of the village, as Galea; that all except Rapa (No. 3) were attacked from sixteen to twenty-seven days after Galea's death, and from six to nineteen days after the removal of his daughter, and that twenty-five members of the ten families infected, as well as the great numbers who, according to the witness Modesta,

came to welcome Galea and to see his corpse, either entirely escaped the disease or had it when communication with him could no longer be suspected as the cause. Neither do we find among those attacked at this period any of the four members of the two inquests and their subordinates, nor the persons who conveyed Rosaria to Rabatto, nor any of the attendants in the hospital where she died.*

But let us suppose that all those cases contracted the disease from the family of Galea (after the 2d of March they could not from each other) we have reason to expect, as in sporadic small pox, that after they had been isolated for sixteen days, the disease would have developed itself in those exposed at the outset, and been either arrested or on the decline. Far from it: in the next thirteen days forty-three died, of whom only six were related to or in any way connected with the preceding cases (five were of the family Formosa, No. 14). Was the disease now at an end or declining? On the contrary. From the 6th of April to the end of the epidemic, on the 28th of May, there were forty-seven more victims, and none of them had any connection with the first cases, all being strictly guarded.

From the 2d of March, then, to the 28th of May, during which time no intercourse took place, 101 died, including, probably, nearly all who remained in the infected portion of the village after the 31st of March. But the following, perhaps, will best explain the course of the disease and of the mortality:—

1. Attacked and died in houses to 19th of March	14
2. Attacked in houses subsequently, and died there or in the hospital	20
3. Attacked in Barrache from 19th of March, and died in hospital	70
4. Attacked in the tents, and died in hospital	3
5. Total died in hospital	89
6. Total deaths 104, of which 71 were males, and 33 females.	

This mortality took place in thirty-eight single persons and twenty-four families, the latter consisting of 108 individuals, of whom forty-one remained unaffected. Among the former were twenty-one officials; hence the large preponderance of males. Nearly all, therefore, who were forced to remain in the village, were swept off; while 1,200 or 1,300 persons

* Much less must we forget that all those cases occurred after from four to sixteen days of the most rigid seclusion in these filthy dwellings.

encamped at a short distance, many of whom, it is certain, had been in communication with Galea's family, lost only three individuals. I leave for future inquirers to determine whether a local cause, from which quarantine prevented all chance of escape, or contagion was here the most active agent. Similar occurrences under similar measures, in Malta and other places in the Mediterranean, between 1813 and 1816, seem to offer a ready solution of the question.

The outer cordon, consisting of 160 men of the Sicilian regiment, accommodated in seven tents and six houses, was entirely exempt, while the maritime guards (Maltese) within the village and guarding the hospital, suffered considerably. "The hospital" says Mr. Attard, "is within, and at the southern extremity of" of the village. It is large, and separated from other houses, but "badly adapted to the purpose. It contains a large ox-stable and "four rooms, two of which are dwelling-rooms, the others, a mill "and storeroom for straw, all on the ground, and deficient in light "and ventilation. I did all in my power, on account of these "objections, to prevent this building being occupied as an "hospital in the cholera of 1837." Nearly every case of plague, subsequent to the 19th March, was treated here.

In ninety-nine days, from the first to the last death, 104 died, yielding a proportion on the four-fifths of the population which suffered of 7.22 per cent., or, for the time, equal to the mortality in Zebbug. Some of the causes of this have not escaped the attention of Mr. Attard. He says, "The part that faces the north-west, which comprises about a fifth of the village, remained intact by the plague, and in fact was never in quarantine, while, in the first days of its appearance, it raged with all its force in one street which leads from Ghar Scejba to the small church of St. Antonio, and the precincts of the parish church. It was again observed, in the cholera of 1837, that in the three first days the identical houses affected in 1813 in Strada Ghar Scejba, and the localities just mentioned, yielded more cases than all the rest of the casal during the whole period of the epidemic."

"The houses at the north-west of the village are in parts more elevated than in Ghar Scejba. The houses in Caccia generally are scattered and detached, except in the quarter near the church, where they are more concentrated and closer to each other. The inhabitants of Ghar Scejba are placed in the centre of the village, at the mouth of a valley, where there is water running from several fountains and rivulets, to orchards and kitchen gardens, forming, by their refuse and sediment, pools of mud, and here and there little marshes, sufficient at times to corrupt any air. Indeed, the Government, at the beginning of summer, take means to remove the stagnant water."

On the 13th of June the remaining members of families that had been infected were removed for a time to Ramola Bay, guarded by a cordon, and made to bathe three times a day, under the superintendence of the police. The remainder of the population returned to the village, but the whole were admitted to pratique with the rest of the island on the 26th of July, and with Malta on the 8th of September. There is here, again, room to question whether the gain was equal to the sacrifice, or rather, that as in the first twelve days, this suspension of intercourse and occupation for six months might not have been with impunity altogether avoided. The arrest of the disease by removal from the locality while proving the subjection of plague to the means found beneficial in other epidemic maladies, points significantly to the propriety of of this removal, and to the cruelty of chaining a population in an unhealthy spot by quarantine.

Captain Schembri, who held the appointment of Captain of the Port of Quarantine in Malta for twenty years, and served for several years previously in the Venetian Navy, where he had frequent opportunities of meeting with plague, states, in a small pamphlet, entitled "*Ragionamento Pratico Sanatorio*," published in 1842:

"1st. That many ships loaded with, and without susceptible goods, arrived from infected places and completed their voyage and quarantine without any case of plague.

"2d. That some ships coming from the same infected places have developed the plague in a single individual, and it has not extended further.

"3d. That on some occasions the first attack was followed by others, not only during the voyage, but after arrival in port.

"4th. That in other instances the disease did not appear on the voyage, but showed itself after arrival, namely the 'Acheron' and 'Mabruca Georgiana.'

"5th. Cases of the transmission of the disease to those employed in the Lazaretto are rare, and these were attacked by having had contact (?) with the infected and *their clothes*. *There is no instance on the records of the Depurators of susceptible cargoes being attacked.*"

That the arrival of ships at Malta having cases of plague among their crews has been of frequent occurrence without any spread of the malady in consequence, is proved by the following extract from Records in the office of the Quarantine Department, showing the various Vessels with this disease on board duly depurated in the Lazaretto since the Plague of 1813.

"1819, *Maltese Bombard 'Sta. Trinita,' from Susa.*

"On the 27th of March 1819, the Maltese Bombard 'Sta. Trinita,' Francesco Azzopardi, master, arrived in Malta from