ORIGINAL COMMUNICATIONS.

YELLOW FEVER IN GIBRALTAR IN 1804.

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Among the archives of the Army Medical Services a formidable looking volume, measuring nineteen inches by twelve inches and consisting of 262 closely written manuscript pages in faded ink, has recently come to light entitled:—

Reports relative to the Diseases of Gibraltar
by
W. W. Fraser,
Deputy Inspector of Hospitals,
etc. etc. etc.

Felix qui potuit rerum cognoscere causas.

The Director-General (Sir William Leishman), one of my colleagues on the Yellow Fever Commission (West Africa), 1913, of which I was Chairman, suggested that possibly I might be able to find in it material of sufficient interest for an article in this Journal. Whether I have done so must be decided by the reader. It seemed at first sight a rather stiff job, as it opens with a quotation covering a whole page from "Observations on Epidemics by Dr. James Sims," and continues in a rather discursive style to review the medical history of the Rock, beginning as far back as the views of the Spanish authors on the epidemic histories of the time of David, king of Israel, or about 1,800 years before Christ!
Yellow Fever in Gibraltar in 1804

After eleven pages of retrospect, in which plague, pestilences, malignant tertian, scurvy, influenza, and other disorders are mentioned, the writer indulges in long extracts from the "Epidemiologica Española," and finally, p. 15, arrives at the year 1800, when, after expressing regret for the absence of more distinct and positive matter, he refers to the "official documents collected by Colonel Wright and his own [i.e., Colonel Wright's] invaluable manuscript [which] I shall largely transcribe as the only means of completing my report."

Here things seemed to take a turn for the better, and I became more hopeful; as to how much of what follows is "Fraser" and how much is "Wright" is doubtful—I incline to the "Wright" view. I agree with Colonel Harvey that the epidemic with which this Report deals was one of yellow fever, and I hope to show that a critical analysis of its features is worth the trouble and is not a mere dry-as-dust story, without value at the present time.

One of the duties of the Yellow Fever Commission was to consider the reports of cases suspected to be yellow fever which had occurred in the West African Colonies during recent years, and to classify them upon the basis of (a) yellow fever, (b) probably yellow fever, (c) possibly yellow fever, and (d) negative.

I do not suggest that we were always unanimous, but when the disease was fatal and the words "black vomit" occurred the opposition obviously weakened; their "last ditch" was the absence of a post-mortem examination. I cannot recall that Sir William Leishman and I ever differed in our view as to the category in which a case should be placed.

SYMPTOMATOLOGY.

The reading of many narratives such as this, when there is a doubt as to the nature of the disease, has impressed me with the conviction that they lose much from the absence of an attempt at the outset to put before the reader a clinical picture of the features of the epidemic, as precise as is possible. Of course in one dealing with 1804 we do not look for temperature charts, urine analysis, or "Faget's sign"; but as to the latter we may find it, in part at least, if the cases are carefully reported.

The first statement of interest is as follows (p. 41):—

"On October 18th 1804 Mr. Pym, Surgeon major who for some years had been head of the Medical Department arrived from Malta" where he had been absent on sick leave and from whence he hurried to Gibraltar on hearing of the epidemic. "Previous to giving his opinion Pym wished to receive from the Faculty a particular description of the nature and symptoms of the disease and for this purpose he drew up a number of Queries on the subject."

A very wise beginning. The replies from the town physicians appear to have fallen into the sea and "were so much destroyed by sea water as to be illegible," but that from Dr. du Cabanellos, to whom a special question-
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naire was sent, gave exactly what was wanted. Dr. du Cabanellos was "a physician of celebrity" in Spain "who had had the advantage of having seen more of the disease in Europe than perhaps any other man existing. Having been at Seville in 1800 when upwards of 70,000 were attacked with it and he also happened to be at Cartagena in charge of the Public Lazaretto on the present occasion." His answers, in which he gave the general results of his experience, but not apparently founded on observation of the epidemic then prevailing in Gibraltar, as translated by Mr. Price, the English Consul, were as follows:—

"No. 1.—The Bowels during life seldom present anything exteriorly, the Cavity of the Stomach being generally natural, flexible and soft, excepting the region of the Liver where there is often experienced a certain degree of tension painful to the touch" (p. 48) (epigastric tenderness).

"No. 2.—On dissection parts of the Stomach, Bowels and Liver have frequently been found mortally gangrened;"

"No. 3.—The Excrements are bilious and of various Colours and towards the close of the Disease are in most cases black as Pitch and Bloody" (melânea).

"No. 4.—The urine in the beginning is generally of the natural colour, afterwards it is muddy with a dark sediment" (not blackwater).

"No. 5.—The majority have their eyes yellow during the disease and in many the skin turns yellow."

"No. 6.—All the Bodies after Death have generally exhibited black spots at one or two palms distance and most commonly on the Hips."

"No. 7.—The Tongue in the beginning is moist and white, which as the Disease advances changes in many to black with longitudinal fissures in the middle."

"No. 8.—Vomiting is frequent and is one of the most fatal symptoms of the Disease, towards the end of it. In the beginning of the fever the vomiting is always bilious, but at the last part of the Disease it is always loose and blackish, like the grounds of Coffee, which is called the black vomit."

"No. 9.—There is often pain and heat without swelling at the Pit of the Stomach, which ascends up the Oesophagus and is a sure indication of the approach of the black or bloody vomiting, which generally continues to the end" (epigastric tenderness again).

"No. 10.—The sick in general complain of Thirst" (an important symptom).

"No. 11.—The Distemper began at first solely in that Quarter or District of the Town called Gamora? [Cartagena] being that of the Piscadores (or Fishermen) near the City Gate, in the Street of Conception and in the House of Juan Moncerratto. The other parts of the Town when the Disease began being most healthy, there being only a few Intermittent Fevers."

"No. 12.—Those who have returned from the Country and have been
taken ill there after quitting the Town say that they began to feel indisposed from the second to the sixth day after leaving the City.” (See Incubation period.)

“No. 13.—Where one Person of a Family is taken ill, the rest frequently fall sick one after another in 3 or 4 or 5 days.”

“No. 14.—In general the Pulse is full and strong at the beginning, which suddenly on the third or fourth Day or at the furthest on the 5th Day becomes weak and from 90 to 100 falls to 60 and sometimes 30 or 40; in this state the Patients remain—without any preternatural heat or cold on the surface of the Body and then expire commonly with black or bloody vomiting or in the act of a Diarrhoea of the same kind. Others die with convulsions and some expire quite suddenly without any of these symptoms or without any change of the natural colour.” (All most excellent: note that Faget’s sign is in part recognized.)

“No. 15.—It is exactly the same desolating Distemper as that experienced at Philadelphia (described by Isaac Catral) and is the same Disease which I witnessed at Seville in 1800, called the Malady of Sians [sic] by the French or more commonly the Yellow Fever.

“With which I reply to the Questions put by the aforesaid Physician of Gibraltar, Camp at St. José, 8th October, 1804.

(Signed) MIGUEL CABANELLOS.”

Dr. Cabanellos completely justifies in this document the highest estimation in which as a physician he was held in Spain. His replies are evidence of the possession of a remarkable clinical insight; indeed after reading them one feels that if they had been founded on observations made during the Gibraltar epidemic its nature could not have admitted of any further doubt.

YELLOW FEVER IN SPAIN.
1793—1804.

The presence of yellow fever in Spain at the period with which we are dealing is a well-known fact, mentioned in every textbook. It was first reported in Europe at Cadiz in 1700, and Cadiz was the headquarters of the West Indian trade, and it was probably by the ships engaged in that trade that the infected mosquitoes were brought to Spain. For a time it remained upon the coast, but at a later period, 1793 to 1805, and still later its area increased and its virulence became greatly intensified. Seville, Murcia; Jumila, Malaga, Cartagena, Barcelona and Palma were all the seat of severe epidemics.

INTRODUCTION OF YELLOW FEVER INTO GIBRALTAR IN 1804.

We are now in a position to endeavour to trace the introduction of the disease into Gibraltar in 1804:

1 There are no italics anywhere in the original.
The Case of the Smuggler.

"About the 10th or 12th August, 1804, a Priest named Hoyera was called by a smuggler to ‘confess’ a man lying in the Garden of the Public Library, who was believed to be dying. This man confessed that he had come from Malaga in a Felucca with two others and that his disorder was like that which prevailed at Malaga when they left it, but a few days before. *This man afterwards died and was buried there* (i.e., in the Library Garden) (p. 17).

The three men who came from Malaga, smugglers all, "lived in the Library Garden or in some sheds near it, which were in every direction about Boyd's Buildings and Santos's House."

The man who called the priest was subsequently taken ill, but recovered. The third man was not traced.

The Case of Santos.

"On 27 August 1804, Doctor Jaye was called to visit the son of one Santos, the Keeper of a wine house in Boyd's Buildings.

"This young man had just returned (August 25th) from Cadiz, where he had been exposed to infection. On first seeing young Santos Dr. Jaye did not suppose his disease was of a communicable nature, but finding that it spread thro' the whole of Santos' Family and to several in the adjoining Houses, he shortly became convinced that it was highly so. *A few days after Santos had been attacked*, his Mother, two Aunts, one Brother and two Sisters who were living in the same House with him, were taken ill of Fever."

His mother and two aunts died before September 16.

The movements and medical history of Santos were as follows, although they were not ascertained until November 21, 1804.

"He left Gibraltar about 26th July 1804 to go to Cadiz. At Cadiz he heard that Fever had broken out at Malaga, upon which he proceeded about the 23rd or 24th of August to return to Gibraltar, and to avoid the Quarantine which he expected would be put on any vessels coming from any port of Spain he got on board a Portuguese Schooner named the Conception, which arrived at Gibraltar on 25th August, 1804 after a passage of 24 hours." (This date of arrival was later confirmed from official records.)

"Two days after his arrival (i.e., on August 27) he was seized with Fever and sent for Dr. Jaye. He heard of no sickness at Cadiz when he left it, but confessed he was in one room with a man *who was lying ill as he believes of Fever*. That the house was a Tavern where he had gone accidentally to get something to drink, that he did not know who the person in Bed was."
Yellow Fever in Gibraltar in 1804

The Case of Pratt.

On March 8, 1805, it was discovered that "a Person named Pratt had arrived in the garrison who had been ill of a Fever whilst living in the same House with young Santos at Cadiz in 1804."

Pratt was a Master Cooper of the Navy Victualling Yard and was examined on oath on March 9, 1805, before the Lieutenant-Governor.

The substance of his evidence was as follows:

"He left Gibraltar about July 30, 1804 intending to go to Cadiz. He went in a Boat to Algeziras and thence by land. He arrived at Cadiz on the 3rd or 4th of August. He lodged in the Tavern Del Sol, in the street Handillo, where he remained about 15 or 16 days, when he was taken ill and having continued ill for 8 days, he had symptoms of a black or bloody vomiting: at this he was much alarmed and for fear of being sent to the Hospital he removed to another quarter of the Town and ultimately recovered. He had however a very yellow look which prevented the Master of a Vessel from taking him on board and bringing him to Gibraltar, as it might be the means of putting the Vessel into Quarantine."

It appears that a privateer captain living in the same tavern with Pratt was taken ill at the same time as himself, with the same symptoms, and was removed to hospital where he died.

Pratt also stated that "a Gibraltar man named Santos lived for many days in the same Tavern with him, whilst he was ill of a Fever, which, however he endeavoured to conceal for fear (as already stated) of being compelled to go to a Hospital; that Santos returned to Gibraltar in the Vessel in which he (Pratt) had been refused a Passage."

"He was told that the Disorder generally attacked strangers and was fatal to them. That he was attended when he removed from the Tavern by a Man to whom he gave some of his clothes and this Man shortly after receiving or wearing them was taken ill and died."

The Cases of Pratt, Santos and the Smuggler.

The point at issue is now narrowed down to the cases of (1) Pratt, (2) Santos, and (3) the Smuggler, but before stating the conclusion it may be useful to show how it has been reached, as it is the method which must be followed in every investigation of the kind. Moreover, quite recently I have had to endeavour to unravel by similar means the story of an outbreak of yellow fever in a British Colony, when both the nature of the disease and the method of its introduction were in dispute.

Constants in Yellow Fever.

In yellow fever there are certain "constants," which although not absolute are nearly so, and no conclusion can be accepted which seriously encounters any one of them.
The Mosquito.

1. From the infection of the mosquito to the possible conveyance by it of the disease to man ... ... ... 12 days.
2. Duration of life of Stegomyia calopus ... About 30 days.
3. Number of batches of eggs laid, 7.
4. Eggs laid after the 12-day period are infected and can transmit the disease to a second generation of Stegomyia.
5. After hatching as imagines these become capable of conveying infection in ... 14 days.

Man.

1. From date of infection to appearance of symptoms (incubation period) { Experiments \{ 2 days 20 hours to 6 days 2 hours.
Clinical (Carter) 3 days to 51/2 days.
Inoculation of blood serum \{ (?) 12 days.
Average ... 5 days.
2. Duration of infectivity to a mosquito, i.e., the patient must be bitten within The first three days of the illness.

ANALYSIS OF CASES AND COMMENTARIES.

CASE OF PRATT.

Analysis.

<table>
<thead>
<tr>
<th>Nature of disease</th>
<th>...</th>
<th>Yellow fever.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of infection</td>
<td>...</td>
<td>Doubtful.</td>
</tr>
<tr>
<td>Place of infection</td>
<td>...</td>
<td>Cadiz, Tavern Del Sol.</td>
</tr>
<tr>
<td>Onset of illness</td>
<td>...</td>
<td>August 18 or 19.</td>
</tr>
<tr>
<td>Incubation period</td>
<td>...</td>
<td>Doubtful.</td>
</tr>
<tr>
<td>Day of landing at Gibraltar</td>
<td>...</td>
<td>Doubtful, but later than August 25.</td>
</tr>
<tr>
<td>Result</td>
<td>...</td>
<td>Recovered.</td>
</tr>
</tbody>
</table>

Commentary.

Pratt was almost certainly the man whom Santos saw lying in bed with fever at Cadiz. Pratt and Santos were both infected in the same tavern at Cadiz. Santos came to Gibraltar in the boat which had refused to take Pratt, because he looked yellow.
Yellow Fever in Gibraltar in 1804

The Case of Santos.

**Analysis.**

<table>
<thead>
<tr>
<th>Date of infection</th>
<th>Before August 24.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Place of infection</td>
<td>Cadiz, Tavern Del Sol.</td>
</tr>
<tr>
<td>Onset of illness</td>
<td>August 27.</td>
</tr>
<tr>
<td>Incubation period</td>
<td>Probably about five days.</td>
</tr>
<tr>
<td>Day of landing at Gibraltar</td>
<td>August 25.</td>
</tr>
<tr>
<td>Interval between arrival at home and appearance of second case in father's house</td>
<td>“A few days.”</td>
</tr>
<tr>
<td>Result in second case (mother)</td>
<td>Death.</td>
</tr>
<tr>
<td>Date of death (mother)</td>
<td>“Before September 16.”</td>
</tr>
<tr>
<td>Result (Santos)</td>
<td>Recovered.</td>
</tr>
</tbody>
</table>

**Commentary.**

At first sight it appears almost certain that the disease was brought to Gibraltar by Santos, and that was the view which was adopted. But if there were no infected Stegomyia in the tavern kept by the father of Santos at the time of his son's arrival on August 25, and if he was bitten between August 27 and August 29 (the first three days of his illness) the earliest day on which the second case could appear in Santos' house, or in visitors, would be about September 7 (twelve days). We are told that “a few days after Santos had been attacked” his mother “fell ill.”

If an interval of twelve or thirteen days had elapsed between the onset of his illness and the appearance of the second and other cases it is unlikely that the words “a few days” would have been used or that it would have been stated that Dr. Jaye “shortly became convinced” that he was dealing with a highly communicable disease.

“On the 6th September Mrs. Fenton wife of a Bombardier in the Royal Artillery who was in the habit of visiting the Santos was taken ill. She died on September 8th. The Bombardier also died on the 8th Sepr. [p. 30]; on the 9th the Daughter of the keeper of the Canteen of De Rolls Regiment who inhabited the house adjoining Santos, to the northwards was infected; she died on Sepr. 15th and a soldier of De Rolls Regiment on the 11th. The Disease was thus first introduced into that Regiment and amongst such soldiers and their wives of the Royal Artillery as had communicated with Fenton and his wife whilst all the other corps continued healthy.”

Case of the Smuggler.

**Analysis.**

<table>
<thead>
<tr>
<th>Nature of disease</th>
<th>Yellow fever.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of infection</td>
<td>Doubtful.</td>
</tr>
<tr>
<td>Place of infection</td>
<td>Malaga.</td>
</tr>
</tbody>
</table>
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Onset of illness ... ... Doubtful, probably about the beginning of August.
Incubation period ... ... Doubtful.
Date of arrival at Gibraltar ... "A few days before August 10th or 12th."
Date of death ... ... Probably August 10 or 12.

Commentary.

The Priest Hoyera who "confessed" the dying smuggler informed a friend, Mr. Breciano, "some time after the event" confidentially, that the dying man "had all the symptoms upon him of the Disorder which he had seen at Lebrija, a small town in the neighbourhood of Seville in 1800 where it had been very fatal."

"Neither Breciano nor Hoyera divulged this fact at the time, for they were unwilling to alarm the garrison, and it was not until Santos's illness and when the Disease began to appear about Boyd's Buildings that they both expressed publicly their suspicions of the nature of the Fever in Gibraltar" (p. 18).

"It had been said that there were some Sick in the part of the Town (Boyd's Buildings and Santos's House) and even one or two deaths previous to the Alarm which Santos's Illness occasioned, but they were attributed to the Warmth of the Season, and even after the Disorder appeared at Santos's House no attempts were made to trace it to any other source; as the circumstances of his arrival from Cadiz, his sickness immediately afterwards, and the progress of the disease in his Family were sufficiently well ascertained to account for all the mischief which ensued" (p. 18).

"As the three smugglers from Malaga lived in the Library Garden, and as the one who died was buried there, it is reasonable to conclude that the Disorder did not spread from him which it might otherwise have done [italics not in report] had he lived in a confined or crowded house, as was the case with Santos" (p. 17).

This proviso, in the light of present-day knowledge, is of course not at all necessary.

"Again, it appears by the concurring testimony of all the Town's Practitioners that no case of Fever occurred which was remarkable until the 27th August, when there existed only 14 Febrile cases in the Military Hospitals."

Local practitioners, in my experience, are in no hurry to diagnose yellow fever.

CONCLUSION.

The following facts appear to emerge as proven from this rather minute and possibly tedious analysis:

(1) That the first case of yellow fever in Gibraltar in 1804, of which we have any certain knowledge, occurred in the smuggler, who died about August 10 or 12.
(2) That this man lived in the neighbourhood of a tavern (Santos’s house).

(3) That Santos, the son of the tavern keeper, arrived home on August 25, about fourteen days after the death of the smuggler, he being then in the incubation stage of an attack of yellow fever acquired in Cadiz.

(4) That he was taken ill two days after his arrival, and that a few days after the onset of his illness other cases appeared in that house, and that ultimately six persons were infected, and that persons visiting this tavern became infected and that one, Mrs. Fenton, was taken ill on September 6 and died on September 8.

Allowing for an incubation period of only three days, it would appear that Mrs. Fenton was infected on or about September 3.

If the Stegomyia in Santos’s house are assumed to have first acquired infection from biting Santos on August 27, the first day of his illness, they would not become capable of infecting other persons until September 7, i.e., one day after the onset of Mrs. Fenton’s illness and one day before her death.

It is obvious that if, in the case of Mrs. Fenton, a longer incubation period is assumed, say one of five days, the argument is strengthened.

The case of Mrs. Fenton is important, as it is the only one, except that of Santos, in which the precise date of the onset of the illness is stated. In other cases the words used are “a few days” and “shortly.”

It is to be remembered that Santos’s father’s house was a tavern and presumably a place of public resort.

If the Stegomyia in that house were infected before the arrival of Santos from Cadiz, the appearance of other cases “a few days” subsequently presents no difficulties.

My conclusion, therefore, is that, if we assume that the earliest cases of the epidemic of yellow fever in Gibraltar in 1804 are known to us, the disease was introduced by the smuggler.

It is, however, very rarely when the more careful investigation is made later, as it was in this case in 1805, that the earliest cases are discovered. I should attach more importance to the fact that previous deaths in the part of the town where Santos lived were recalled, after his illness declared itself, than to the statement that there were only a few febrile cases at the time in the military hospitals.

The disease in this case began amongst the civilian population and spread to the garrison.

INCIDENCE AND MORTALITY.

The Garrison.

On September 11, the day on which the first soldier died, the strength of the garrison appears to have been 4,052.

“The following Official Account was inserted in the Gibraltar Chronicle on the 23rd March (1805), this was sent to the editor from Head Quarters.
"Died of the Fever in the Garrison of Gibraltar from its first appearance in the beginning of September (1804) to the total extinction in the latter days of December.

<table>
<thead>
<tr>
<th>Category</th>
<th>Officers</th>
<th>Soldiers</th>
<th>Do. wives and children</th>
<th>Inhabitants</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>54</td>
<td>864</td>
<td>164</td>
<td>4864</td>
<td>5946</td>
</tr>
</tbody>
</table>

The report of Dr. Fraser contains the following statement:

"The Statement of the Mortality amongst the military is nearly correct of course, but amongst the Inhabitants the Deaths are probably exaggerated."

It is not possible to give with any degree of accuracy the total number of the sick amongst the garrison.

**Civilian Population.**

The incidence of the disease can only be surmised, as the total civilian population is not given, but it is stated that it was nearly the same as Algeziras, which was about 9,000.

After the epidemic ceased "only 28 adults could be discovered who had resided with in the walls who had escaped the Malady."

**CONTAGIONISTS AND ANTI-CONTAGIONISTS.**

From reading many reports, such as this, I have come to regard the occurrence of a violent and acrimonious contention amongst the medical men concerned, when the nature of the disease is in doubt, as the most certain evidence of its being yellow fever!

It hardly ever reaches such a degree of virulence in relation to any other disease.

It is recorded that at a meeting of the Medical Staff held on September 15 by order of the Governor:

"The jarring opinions of the medical conclave which occurred on this occasion might be esteemed the Exertions of intellectual Gladiators contending for Victory rather than truth."

After all it was quite natural: there was so much to be said on both sides. Take for example the case of Santos's house. Who but a person as stupid as a donkey or as obstinate as a mule could be found to deny that the disease therein was "contagious"?

But consider, on the other side, the case of a man suffering from yellow fever who was admitted into a hospital ward (where there were no Stegomyia!), and yet the disease did not spread. What a triumph for the anti-contagionists! I hope that if I had lived in those days I should have been a "contagionist," as was Surgeon Major Pym, afterwards a great authority on the subject of yellow fever.
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We should no doubt have been wrong, but the measures we should have advocated might have stopped the epidemic, and often did so, whereas the anti-contagionists, who alas! "included the Heads of the Departments (both naval and military)" "used the most convincing arguments to quiet the minds of the people and to assure them that it was not infectious—that it originated from the Easterly Winds—the heat of the weather—the Filth of the Town—and the burning of Lime Kilns and that it would certainly disappear with the change of the Wind and the setting in of the rainy Season."

Pym as already stated arrived on October 18 and immediately called for a return "of such of the troops as had been afflicted with the Disease in the West Indies and in the Queen's and 13th Regiments, he received a list of 83 men who had had it every one of whom had escaped an attack of Fever here, which was a convincing proof to him of the identity of this Disease with the Malignant Pestilential Fever, as Chisholm had remarked that no one was a second time subject to it."

Pym then "wrote to the Board of Health in London and mentioned his Plan of putting a stop to the Disease," and it was a very sound one, but it is too long to give here. In it he mentioned that "at a meeting of the medical men on the 15th September, before his arrival there was only one person, Mr. Kenning, of the Royal Artillery, who ventured to pronounce the Disease infectious, in consequence of which there was not the smallest Precaution taken to prevent its spreading."

Pym saw Sir Thos. Trigge, but "Sir Thomas' received the propositions coldly," but he allowed him to put them before the Commanding Officers "who accordingly assembled and were so fully convinced of the Truth and Justice of Mr. Pym's Statement that they resolved to carry them (except one) into effect in their own Corps."

But the last proposal of "taking the Guards by Detachments of Men who had passed the Fever and placing those who had not in Quarantine, could only be effected by Sir Thomas, and Pym could never persuade him to this step."

I take off my hat to Surgeon Major Pym!

"Immediately after the contagion ceased the Garrison became uncommonly healthy, the Disease was neither preceded nor followed by any other Disorder and those who had lived secluded enjoyed perfect health."

ALGEZIRAS.

The disease appeared at Algeziras towards the end of October and the Spanish Governor Castanas at once took the most energetic measures to arrest its progress, and with great success.

"Here we have an example of two Cities very nearly of the same extent and Population situated on opposite sides of the same Bay, only six miles asunder, where the same disease breaks out in both of them at the same season. In the one by the advice of the Faculty precautions are totally
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neglected the most horrible Scenes of Calamity follow and between 5 and 6000 persons are destroyed. In the other the Faculty are not consulted vigorous measures are adopted and very little loss ensues”!!

Colonel Wright says, “the Military are the only safe and effectual Practitioners in checking the progress of Contagion”!!

I am now more confident than ever that the Report is all “Wright.”

YELLOW FEVER IN THE MEDITERRANEAN COLONIES.

Apart from my general interest in yellow fever, I was anxious to assure myself whether or no in times past it had really been in our Mediterranean colonies, as they lie nearer to Europe than those in West Africa, with the history of which in this relation I am well acquainted. Of late in high quarters (not in this country), doubt has been thrown on the conclusions of the Yellow Fever Commission, as to the presence of that disease in the West African colonies, both in the past and at the present day. On neither of these points am I troubled with any doubt whatever, and I am rather at a loss to understand how it has arisen. In drafting the Second Report of the Commission which dealt with the history of those colonies in relation to this disease, and particularly with the effect of the slave trade on the dissemination of yellow fever (which was apparently nil) I obtained from various sources, including surgeons' logs of the ships of the British Navy engaged in the suppression of the slave trade, for which search the records in the Admiralty Library were kindly placed at my disposal, evidence which is therein set forth which proved conclusively to my mind the presence of the disease on the West African coast.

In 17781 “Yellow Fever was well established in Senegal”; it had certainly been there for many years, probably for many centuries previously, and I believe that it has been there ever since then and that it is there to-day.

“Yellow Fever” may have been brought to the Canary Islands in 1494 by the Spanish vessels” which returned to Spain after having landed Don Bartolome Colon at Ysabella San Domingo, “and it is possible that the great pestilence which visited the Island of Tenerife in 1495, which was believed to have been introduced in a similar manner, may have been Yellow Fever.” Now we are sure that it was at Gibraltar in 1804.