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# **FACTS**

AND

## OBSERVATIONS

RELATIVE TO THE

## NATURE AND ORIGIN

OF THE

# Pestilential Fever,

WHICH PREVAILED IN THIS CITY,

IN 1793, 1797, AND 1798.

BY THE COLLEGE OF PHYSICIANS OF PHILADELPHIA.

## PHILADELPHIA:

PRINTED FOR THOMAS DOBSON, AT THE STONE HOUSE, NO. 41, SOUTH SECOND STREET.

1798.

# FACTS, &c.

ROM the first appearance, in this city, of the contagious malignant, pestilential or yellow sever, in 1793, the College of Physicians, agreeably to the principles of their institution, fanctioned by a charter from the legislature in 1789, have used their best endeavours to check the progress and to guard against the future introduction of this dreadful calamity. To the repeated applications made to them, by the different departments of the state government on the subject, they have ever paid a prompt and respectful attention, and they now conceive it a duty incumbent on them to publish a concise detail of their former proceedings, and to explain more fully their sentiments on the nature, origin and prevention of this satal disease.

About the latter end of July and beginning of August 1793, a fever of a new and very alarming nature prevailed in this city. It first appeared in Water street, between Mulberry and Sassafras streets; and all the cases of this sever, were, for two or three weeks evidently traced to this particular spot. A considerable part of the city, Northern Liberties and district of Southwark became gradually infected, and it was not until the coming of the frost, that the disease subsided, after having proved fatal to nearly five thousand persons.

The peculiarity of the fymptoms, the remarkable inefficacy of remedies generally used for diseases which commonly occur in the same season of the year, with somewhat similar symptoms, its great mortality and contagious nature, sufficiently evinced, that a very unusual disease existed amongst us; which was soon discovered to be what is called the Siam, in the French, and the Yellow Fever in the British West Indies.

The College met on the 25th day of August to consider what was necessary for them to do on the occasion, and next day sent to the Mayor of the city, "Directions for preventing the further pro"gress of the malignant fever," which were published.

pamphlet entitled, "Proceedings of the College of Physicians of Philadelphia, relative to the prevention of the introduction and spreading of contations diseases," published in January 1798, containing a regular account of all that had been done by the College on the occasion. A copy of this publication was sent to every member of the federal and state legislatures, and of the select and common council of the city. These directions plainly shew that the College regarded the disease as highly contagious and malignant.

On the fifth day of November a letter was received from the Governor of the state, requesting information of the origin of the disease, the precautions best calculated to prevent its recurrence, and the proper means to be pursued to purify the city from latent infection. The College entered into a careful inquiry on this subject, and although they met with many difficulties in the investigation, difficulties which generally occur on such occasions, and the solution of which would criminate those persons who are more immediately concerned, and who are the best qualified to give the necessary accounts, yet they obtained sufficient information to offer the following answer to the Governor.

"No instance has ever occurred, of the disease " called the Yellow Fever, being generated in this "city, or in any other part of this state, as far as " we know; but there have been frequent instances " of its having been imported, not only into this, " but into other parts of North America, and pre-" vailing there for a certain period of time; and " from the rife, progress and nature of the malignant " fever, which began to prevail here about the be-" ginning of last August, and extended itself gradu-" ally over a great part of the city, we are of " opinion, that this difease was imported into Phila-" delphia by fome of the veffels which arrived in " the port after the middle of July. This opinion " we are further confirmed in by the various ac-" counts we have received from the best authorities " we could procure on the fubject."

The College also informed the Governor of the best means to purify the city from latent infection, and offered their services to co-operate with the legislature in their endeavours to prevent, avert or remove these dangerous calamities.

On the fecond day of December 1794, a committee of the College was appointed to confider the defects in the health-laws and to point out a proper

per remedy. On the report of this committee it was refolved, that a memorial on the subject should be presented to the state legislature, which was done accordingly, January 26th, 1795. The principal objects of this memorial were, a request that medical characters might be appointed to affist the consulting physician of the port to prevent the spreading of contagious diseases when introduced amongst us, and to authorize them to remove the diseased and those exposed to contagion. Also that they should be consulted respecting the quarantine and purisication of vessels, and the construction and regulation of the city hospital.

So much attention was paid to this memorial that the legislature, in the new health-law, passed this session, empowered the Governor to appoint sour persons, members of the College, to affish the consulting physician as recommended, who were accordingly appointed in August following, and were invited to hold one meeting with the Board of Health; but another law was passed the succeeding session which excluded them from any further share in the business.

About the latter end of July 1797, the malignant contagious fever again appeared in Philadelphia, phia: and on the fifteenth of August a letter was received from the Governor requesting information concerning its existence, and "an opinion on the "best mode of preventing the calamity threatened." The College immediately directed their President to inform the Governor that such a disease had lately appeared in Penn-street and its neighbourhood, and on the seventeenth of the month, in a letter to the Governor, gave their opinion of the best mode of averting the threatened calamity, by first, prescribing the methods for preventing the spreading of contagious diseases when introduced, and secondly, by preventing their introduction.

To attain the first of these purposes, they recommended strict attention to cleaning and watering the streets, habits of temperance, attention to cloathing, exercise, &c. to avoid intercourse with the sick, and to purify places suspected or occupied by the sick.

For the fecond purpose they recommended, a new law on the subject, which will be hereafter recurred to. See next page.

On the twenty-fecond day of August the Board of Health requested the College to adopt and publish such advice as would tend to check the progress of contagion.

contagion. The College, accordingly, on the twenty-fifth, furnished the board with their sentiments on the subject. Their plan consisted, generally, in separating the sick from the well, great attention to cleanliness, free admission of air, purification of bedding, cloathing, &c. by exposing them to the smoke of charcoal and sulphur in close rooms, the free use of lime and cold water, and the application of the vapor produced by mixing oil of vitriol and salt petre, in sick rooms.

October 30th, a letter was read from the Governor of the state requesting to know "what measures
"ought to be pursued to purify the city from any la"tent infection, and what precautions were best cal"culated to guard against the suture recurrence of
"a similar calamity." On the seventh day of November a sull answer to the Governor's letter was
agreed on and communicated to him. This letter
is here introduced as giving more sully the sense of
the College on this very interesting subject.

SIR,

We have duly confidered your letter of the 24th ult. and shall cheerfully comply with the requisitions contained therein.

 $\mathbf{B}$ 

The

The measures to be pursued for purifying the city from any latent infection, are such as we have hereto-fore recommended, viz.—A strict attention to clean-liness, washing, white-washing, and ventilating the infected houses, bedding and cloathing; and sumigating them with charcoal and sulphur, or a mixture of oil of vitriol and salt-petre. These, with the frost, we believe, will be found sufficient entirely to destroy any latent contagion.

But the latter part of your inquiry, viz. What precautions are best calculated to guard against the future occurrence of a similar calamity, is an object of such magnitude, as to demand a more particular reply.

We have, on former occasions, communicated our sentiments on this head; but as you now inform us, that it is intended to establish a foundation for future regulations, we willingly enter into the detail; and though this will principally consist of repetition, yet it may be useful to have our ideas presented in one view for your consideration. And as these sentiments have been more fully confirmed by recent events, we are again induced earnestly to recommend a strict adoption of the measures we advised in our communication of August 18th, 1797, as being

being the best calculated to guard against the future introduction of contagious diseases. We now recapitulate those advices with some additions.

Let an entire new health-law be made, constituting a Board of Health, to consist of five persons, two of whom to be practitioners of physic. The smallness of the number will ensure responsibility, and a constant residence in the city; and the professional knowledge of the medical characters will be necessary to assist in directing the measures of the Board. Let no person whose private interest may be affected by quarantine laws, be a member of this Board.

Let a fufficient fum of money, per annum, be subject to the draughts of the Board, who shall render to the Assembly a yearly account of their expenditures. Let this Board sit daily during the months of July, August, September, and October; and, during these months let every vessel from the Mediterranean, coast of Africa, West-Indies, and continent of America, to the southward of Florida, perform an effectual quarantine. Let the cargoes of suspicious vessels be unloaded, and, with the vessels, be purished at the Island.

Let a resident physician, or health-officer be appointed, who shall never be absent from the Island during the above mentioned months, and a consulting physician, who shall reside at Philadelphia.

Let the punishment of a master of a vessel, who evades the law, by landing cargo, crew or passengers, contrary to the intent and meaning of it, be the same as for murder of the second degree. Let no vessel of war ever be allowed to come above the fort.

Let co-operative laws be procured from the neighbouring legislatures or from congress.

Let the Board of Health have power, with the concurrence of the Governor, to cut off the intercourse with infected persons and places. Let the long projected Hospital be erected.

Let the most diligent and scrupulous attention be given to cleaning and watering the streets, gutters and wharves, throughout the city and liberties.

Such are the precautions which we believe best calculated to guard against the future occurrence of calamities similar to those we have experienced. If

further discoveries shall happily add to our knowledge on this important subject, we shall not fail to make such communications to the Governor without delay.

> By order of the College of Physicians JOHN REDMAN, President.

Attest,

THOMAS C. JAMES, Sec'y.

Philadelphia, Nov. 7, 1797.

To his Excellency, THOMAS MIFFLIN, Esq. Governor of the Commonwealth of Pennfylvania.

Although the College had now complied with every requisition that had been made to them, yet, feelingly impressed with the magnitude of the subject, they judged it proper to present to the state legislature their reasons for believing the disease to be of foreign origin, hoping that the legislature would be induced to make such a change in the health-laws as might secure us from its suture introduction. This Memorial was accompanied with a narrative of facts relative to the probable origin and progress of the malignant contagious sever, which had lately appeared amongst us.

The

The Memorial contains our most striking reasons for believing in the foreign origin of the disease, but for general information, it may be useful more fully to adduce our arguments in support of these opinions, which have been still further confirmed by the circumstances that have occurred during the last summer and Autumn; accompanied with such a statement of facts as we think cannot fail of producing conviction in every unprejudiced mind.

Our aim is the investigation and spreading of truth on this important subject. We are equally interested, with our fellow-citizens in discovering the means of averting so terrible a disease. A proper health-law for the purpose has not yet been applied, and unless something more efficient be done upon the occasion, our sea-port towns may soon become uninhabitable.

We shall give our reasons for believing that the disease in question is not of domestic origin, and we trust they will prove convincing to our legislature, and to our fellow-citizens, generally.

When the destructive pestilence raged at Marfeilles in 1720, there were found physicians of eminence, who strenuously maintained, that it was neither neither a contagious nor an imported disease.\* They derived it from the poor diet of the lower class of the inhabitants; and although they saw the vessel that brought it, and the most unequivocal and dreadful marks of contagion, yet they still persisted in their first opinions. Similar contrarieties of opinion prevailed at Messina in 1743, but efficient quarantine laws have since preserved Marseilles and Messina from this destructive visitant, although continually exposed.

In the present year the city of Baltimore has been preserved in a similar manner, and we would ask, Is the city of Boston more exposed by its situation to the generation of tropical diseases than Baltimore. Where do we see the first appearance of our pestilential sever? Is it amongst the marshes to the south west of our city, or in the neighbour
hood of the wharves? Is it in the confined alleys; or on the salubrious banks of the Delaware at Kensington? Is it not always near those places where vessels from foreign countries are found?

Look at the difease itself; does any sever of our country ever assume such forms, or produce such effects?

\* See A Treatise on the Plague, by Patrick Russell, M. D. F. R. S. and surgeon to the British factory at Aleppo. Printed, London, 1791.

Do not your yellow fevers appear in the state of the atmosphere Kat that time who Wind from SW. most prevails

effects? Do our severest bilious severs generally terminate fatally in a few days? Do they steal on infensibly, infecting one person after another in a family and in a neighbourhood? Are they ever equally severe in seasons so opposite as 1797 and 1798? Do not the rise, the symptoms, the progress and the termination of this satal disease, demonstrate that it is totally different from any thing we have been accustomed to?

But more particularly to examine the subject: our principal reasons for believing that this disease does not originate amongst us, are the following:

Firstly. It differs essentially from any other districts ease which is common to this country, and agrees with its most essential symptoms, with what is called the Yellow Fever in the West Indies.

Secondly. It has been regularly traced to the vicinity of fome vessel or vessels, from the West little Indies; or to persons or cloathing connected with them.

The principal peculiarities of this fever are, its contagious nature, the progress of the symptoms and the mortality consequent on it.

To endeavour to prove the contagious nature of this difease would, in our opinion, be equally useless as to prove the contagion of the plague. But in all our observation and practice we know of no case, where the autumnal bilious remittents of our country have proved contagious. We are aware that these are sometimes attended with violent and dangerous symptoms, but this striking characteristic of contagion being always absent, they never become an object of public dread or concern.

are yet to be prove

The characteristic symptoms of this disease are, generally, a constant fever for about three days, which, in dangerous cases, is followed by a cessation thereof. The concomitant symptoms of yellowness of the skin, and vomiting of black matter, which are so common in this fever, do sometimes, though rarely, occur in other diseases.

The mortality which enfues is fuch as is common when peftilential difeases prevail. The general confusion and desertion of the sick, naturally add to the fatal consequences of these diseases.

As to the second point, the origin of the sever, we may observe, that until the year 1793, no doubts on this subject, as far as we know, had been pro-

mulgated in America. Doctor Lining of Charlefton, South Carolina, one of the best, and the only American author who had then published on this subject, and who wrote in 1753, expressly informs us, that the yellow fever had prevailed in that city four times within twenty-five years, and that whenever it appeared there, it was easily traced to some person who was lately arrived from some of the West India Islands, where it was epidemical.

It may not be improper here to remark, that very erroneous opinions on this subject have arisen from confounding this pestilential sever with the malignant remittents of the West Indies and America. The difference still holds good, that these last are not contagious, if we may give credit to the writings and observations of Physicians who have practised in the West Indies, added to our own. But the malignant sever which prevailed in this city in 1793, 1797, and 1798, was always more or less so, according to circumstances.

A striking peculiarity, which does not occur in any other disease, attends the yellow sever in the West Indies. The natives and persons who have resided long in those islands, are very seldom seized with this sever. It was likewise remarked, and it

is a circumstance that deserves particular attention, that very few, if any, of the Creole French in this city, fuffered from the contagious malignant fever which prevailed here, in 1793, 1797, and 1798, though the disease was introduced into their families; and children born in this country, of Creole parents, died with it last autumn, while the parents and the children born in the West Indies, were entirely exempt from it. To European French, Irish, and other strangers, the disease was remarkably fatal. It is an observation, founded in long and extensive experience, and which admits not of an exception, that strangers are the greatest fufferers from the difeases of the country into which they migrate: were the yellow fever a difease of our country, the Creoles would probably have been among the first to experience its fatal effects; but as it is of West India origin, and their constitutions are assimilated to it, they escaped it here as they do in their native country. The natives of the West Indies being fo feldom affected with the yellow fever, has given rife and currency to the opinion, that it is not contagious in that country, and with respect to them the observation is well founded; but then it is as highly contagious to Europeans and Americans in the sea-ports of the West Indies, as it is in this city, when introduced here. [See Note A. in the Appendix.]

It is no new opinion that pestilential fevers are generated in ships or transported by them from one place to another; and that when they are brought to a sea-port, where the climate and season favor their spreading, they always do so in a greater or less degree.

The plague is checked by great heat and severe cold in the cities of Europe and Asia. We have full proof of the effect of cold upon the malignant contagious sever in North America.

We have equal proof that efficient quarantine laws have latterly preferved the sea-port towns of Europe from the introduction of the plague; and the example of Baltimore, [Note B.] in the present year, shews us what may be done in America in this respect. The inefficacy of our own laws and regulations in this important matter is well known, and much regretted by all who have been concerned in their execution.

Perhaps a more particular attention to the circumflances of the fever of the present year, may place this subject in a clearer point of light. In the months of June and July last, twenty-seven vessels arrived in this port from Cape Nichola Mole, Jeremie and Port-au-Prince in the Island of Hispaniola or St. Domingo, places which had long been garrisoned by the British forces, and of consequence more peculiarly adapted to the generation of pestilential diseases.

It is a well known fact, that these places were evacuated in great haste, and that a considerable number of American vessels which lay there, were employed to transport the British garrison; and if we are to give credit to the facts related by Pringle, [Note C.] Lind, [Note D.] Brocklesby, Young, Carmichael Smyth and others, contagion is not only generated in such circumstances, but for a long time retained, by cloathing, bedding, tents, and fails, even walls and timber.

We have further proof that the yellow fever prevailed in those ports while the above-mentioned vessels lay there. [Note E.]

On the fifth day of July last, six or eight of these vessels, having a large number of passengers on board, of course a quantity of cloathing, bedding, &c. brought off in the greatest haste, them-

felves

felves exposed to all those circumstances which are generally allowed to produce contagious severs: in this situation they arrived at the fort, where they were detained on board for twenty days, [Note F.] an occurrence well adapted to heighten the violence of the contagion. On their arrival at the city, after this detention, they generally lay at the wharves between Walnut and Spruce streets. [Note G.] And it is well known, that at this part of the city the fever first appeared, about the latter end of July and beginning of August, and spread from thence to almost every other quarter. These are facts too recent and too generally admitted to require further proof.

On the evening of the eighth of July, the armed thip Deborah, captain Edward Yard, arrived at the fort from Jeremie. She buried eight persons during her stay there and return, [Note H.] and sent fix sick to the Marine hospital. [Note I.] She was one of those employed to transport troops in the West Indies. [Note K.] After a detention of ten days this vessel came up to the city. We have been assured that some of her crew were brought up before her arrival. [Note L.]

On the twenty-eighth of July, the Deborah was moved to Kenfington, where she was hove down.

We can clearly trace the rife and progress of the disease at that place to this vessel; [Note M.] and also the first appearance of it in some other parts of the city to persons who had been on board her. [Note N.]

On the fixth day of August, the College recommended to the managers of the Marine and City hospitals, that all the vessels lying between Walnut and Spruce streets should be removed to a proper distance from the city; instead of which they were distributed indiscriminately to the other wharves, except in one instance, most of them being sent to the upper parts of the city.

From the many fources of contagion above enumerated, existing at the same time, and being so generally spread, it is not surprising that the disease had such an extensive operation; and it is to this extraordinary circumstance that we also ascribe the introduction and prevalence of this disease at Chester, [Note O.] Wilmington and Marcus-hook.

A difease so fatal and so destructive, has naturally directed the public attention to discover the means of preventing its suture recurrence. And as men are generally inclined to ascribe effects to surrounding circumstances; so in the present case a variety

variety of means have been fuggested to prevent any future calamity of a similar nature.

But when we reflect, that Philadelphia is one of the cleanest, best aired cities in the union; that Kenfington, Chefter and Wilmington, enjoy all the advantages of country air; that no possible improvement with respect to water or ventilation, can make our fituation more eligible than that of these places; and particularly when we confider, that the fituation of Wilmington precludes all idea of a defect of ventilation, and that New-York, being furnished with water brought from a distance, the bad quality of our water cannot be the cause. When we observe that our city has become more healthy by the falutary improvements made in it, that the number of our common native difeases, such as autumnal remittents and dysenteries, is greatly diminished. When we also observe that it is only in fea-ports that this fatal pestilential fever prevails, why should we refuse, in this particular instance, candidly to deduce effects from causes, and to admit, that although local circumstances may favour the spreading of fuch diseases, yet, as they can always be traced to the shipping or its neighbourhood, or to perfons or materials connected with

shipping, that there are the strongest reasons to conclude that they are introduced from thence?

From the preceding facts and observations we think the following conclusions may be justly drawn.

That the contagious malignant fever which appeared in this city in the years 1793, 1797, and 1798, is effentially different from the bilious remittent fever of this climate.

That the contagious malignant fever of those years is essentially the same, with the disease called the yellow fever in the British, and the maladie de Siam, in the French West India islands.

That the yellow fever or maladie de Siam prevailed in a very great degree in the different ports of Hispaniola, during the last year, and more particularly in Port-au-Prince, Jeremie and Cape Nichola Mole.

That a very great number of vessels arrived at this city from those ports, during the months of June and July 1798.

That this disease has been several times introduced into North America by contagion retained in the D wearing

wearing apparel of persons who had died in the West Indies, although no person was sick on board at the time the vessel arrived in this country; and that we have demonstrated, as fully as it is possible in a matter which is not obvious to our senses, that the contagion of the sever of 1798 was imported from Jeremie, Cape Nichola Mole or Port-au-Prince, in one or more vessels, which arrived here in June and July last.

That efficient quarantine laws, fimilar to those existing in Italy, France and other countries, to prevent the introduction of the plague into their commercial cities, are the only effectual means to guard against the future recurrence of a calamity which threatens us with total ruin.

To conclude—We have, from the first appearance of this destructive pestilence in 1793 to the prefent time, endeavoured to discharge our duty, by warning our fellow citizens of its appearance, and by pointing out the means of checking its extension when introduced; by informing the legislature of the proper methods of preventing its return, by strict quarantine laws and internal regulations; and although our recommendations have been too little attended to, yet

we conceive it to be a duty again thus to publish our opinions on the subject in a more detailed and familiar manner, as well for the information of our fellow citizens at large, as of those who are called to the very important office of legislation. In doing this we have no design of entering into or exciting contention: our sole aim is truth and the public good.

Published by order of the College,

JOHN REDMAN, President.

THOMAS C. JAMES, Sec'y.

Philadelphia December 24, 1798.

APPENDIX.

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# APPENDIX.

# PROOFS AND ILLUSTRATIONS,

## NOTE A.

Extract from Practical Observations on the treatment of acute diseases; particularly those of the West Indies. By William Wright, M. D. Fellow of the Royal College of Physicians of Edinburgh, and of the Royal Societies of London and Edinburgh; and Physician to the Forces in the West Indies. From the seventh volume of Medical Facts and Observations, published in London 1797, dated Edinburgh, December, 1794.

SOME late authors, who have written on West-India diseases, have roundly afferted, that in tropical countries fevers are not contagious; but whoever has had the care of crowded hospitals, of jails, of ships of war, or of transports full of troops, must have seen numerous and fatal instances of contagion in the West Indies; more especially where cleanliness and free ventilation have been neglected.

From causes of this fort a most fatal and destructive disorder broke out in the West Indies in 1793, and foon after in Philadelphia, viz. the yellow fever. Dr. Rush has classed this disorder with remittents; but every one who has practifed in the West Indies, knows for certain, that the remitting fevers of warm countries are not contagious. From Dr. Rush's book, and from the numerous letters of my correfpondents, there remains not a doubt, in my mind, on of a Typhus, exalted to a great degree of virulence from climate, fituation, and other adventitious circumstances.

> The yellow fever has appeared in America at different periods, as we learn from Dr. Lining's paper in the Edinburgh Effays, Physical and Literary, Vol. II.; and it was this fame diforder that committed fuch havock amongst the troops, under Admiral Vernon, in 1741.

> The commencement of this fever, in Grenada, is dated from May, 1793, foon after the arrival of a Guinea ship from Sierra Leone, the crew of which had been fo fickly, that most of the failors died of the yellow fever, either in the voyage, or foon after the arrival of the ship. It suddenly spread over the other Leeward islands, and from thence was carried to Philadelphia, Hispaniola, and Jamaica.

\* this was a Typhus X not the willow Lever of the West Indies or of america - nor do 9 believe it was carried any when elve.

ellow Fewer

The first account I received of this fever, was from Dr. James Clark, a physician of eminence in Dominica; his letter to me is dated July 23, 1793, and runs as follows: "I have been harassed night "and day, for a month past, by attendance on people ill of the yellow fever. Since its appearance in this island, it has already carried off more than a hundred sailors, new comers, and emigrants. In its progress it has been, and still is, as quick and satal as the plague; it often sinishes its course in forty-eight hours; but if the sick get past the fifth day, they generally recover."

All the letters I have had from my medical friends agree, that this fever is highly contagious, and that new comers are most subject to receive it; particularly such as are young, or are addicted to drinking spirituous liquors. Next to these are the nurses and attendants on the sick, who breathe the air in their chambers, or handle their bodies or bedclothes. But such as avoid infected houses, or keep at a distance from people convalescent, are no way subject to the yellow sever. It appears, also, that people of colour, and negroes, are in a manner totally exempted from this disease, except such as are employed as house servants, and fare the same as white people.

the restablished

The Creole white inhabitants, and others who have long refided in the islands, are, it seems, seldom attacked with this disorder, unless under the circumstances above-mentioned. But why the yellow fever should attack some, and not others, can only be accounted for in this way: that in order to receive or resist contagion, men's bodies and minds must be in a particular state; and that field negroes should not be liable to it is to me inexplicable. They, however, have their epidemics, from which white people are exempted. I have of not that white People are exempted. I have of not that white People are exempted. I have of not that white People are exempted.

Extract of a letter from Joseph Townsend to Doctor Griffitts, dated Baltimore, 12th month, (December) 6th, 1798.

"I find it will be best to forward thee, the following resolution, to the operation of which our
late enjoyment of good health is attributed."

August 10th, 1798.

Board of Health for the City of Baltimore.

Resolved,

That all veffels arriving from any of the West India islands, loaded with coffee or other produce that may be liable to damage or putrefaction, be

not permitted to come up into port, but that the cargoes thereof be discharged into other vessels while it remains in the river, and every necessary care extended to purify the same before it be admitted into the city; and that the health officer be required to pay strict attention thereto.

On behalf of the Board, JOSEPH TOWNSEND, Clk.

## NOTE C.

" Orders coming foon after, to remove all the fick from Germany to Flanders, they were embarked in bilanders, to be carried to Ghent; but where they did not arrive till the middle of December. During this voyage, the fever having acquired new force by the confinement of the air, by the mortifications and other putrid effluvia, it became fo virulent, that above half the number died in the boats; and many of the remainder foon after their arrival. Its refemblance to the plague was further evinced by this memorable incident. A parcel of old tents being fent on board the fame bilanders with the men, were used by them for bedding; these tents, in order to be refitted, were put into the hands of a tradefman at Ghent, who having employed

Typhus

Semployed twenty-three Flemish journeymen about the work, lost seventeen of them by the distemper; though they had no other communication with the infected." Pringle's Observations on the Diseases of the Army, page 26.

### NOTE D.

"The infected ships were the Princess Amelia, the Oxford, Shrewsbury, Medway, Dublin, and Neptune. The most vigorous contagion had invaded the two latter. It was faid, the Neptune had lost one hundred and fixty of her men in a few months, and her report contained one hundred and thirty-three sick. The surgeon had been seized with the yellow sever, but was recovered.

"The crew of the Cambridge, an healthy ship, enjoyed a good state of health until some of them were ordered on board the Neptune, to prepare that ship for the dock, which was then in great distress for want of hands, most of her people being then at the hospitals. Three of these men belonging to the Cambridge were brought into the hospital, one died and another narrowly escaped with life,

life, and I have reason to believe, that their other shipmates, who were employed in the Neptune, conveyed the sever to the Cambridge, as she soon after sent to the hospital several afflicted with the same sever.

"I would have it here observed, that this infection did not proceed from any sick person on board the Neptune; for during this period no sick man was kept for an hour on board any of the ships, if the weather did permit to send him on shore.

could not proceed from a foul air. They were furnished with ventilators; and I have it from good authority that the Neptune was kept uncommonly clean and neat; and being a fecond rate, a prodigious draught of air must have been admitted from her having three tier of ports; and when these ports were open, (which was all the time she lay at Spithead and in Portsmouth harbour, while the contagion was so violent) the ventilation and renewal of the air, exceeded what could be effected in most other places. The diet of the people was fresh beef and broth with greens.

"The fick apartment of the Neptune while at fea was on the lower gun-deck, spacious and neat.

Two Two scuttles were cut for the admission of fresh air; the adjoining ports were also opened, when it could be done with safety. It was washed twice a week with warm vinegar, and daily cleaned.

This practice of cleanliness and the benefit of the freshest air, did not however avail to remove this contagion; which continued till the ship was taken into dock, and properly purified by fire and smoak. After this operation, the ship and crew became perfectly bealthy. Lind, on Fevers and Infection.

## NOTE E.

Letter from Doctor Stevens to Doctor Griffitts.

SIR,

During my residence in Santo Domingo and the Cape, I received frequent information that the yellow sever prevailed in almost all the sea-port towns in the French part of Hispaniola, particularly at Cape Nichola Mole. It raged so violently at this latter place, and the mortality was so great, that it obliged the British to abandon the post sooner than they intended. About the same time this disease made its appearance in the harbour of St. Thomas, and was so destructive to foreigners that it obtained the name of the

Domingo I saw several cases of it, during the months of August and September. These were entirely confined to American seamen, while the native inhabitants of the city were altogether exempt from it. The privateers which frequented this port lost also several of their crew by this fever, while they remained at anchor.

I mentioned to you that a fimilar difease had broke out on board of the schooner Swift at Porto-Rico. The following are the facts respecting that veffel, viz. On the 11th of last March she failed from the Delaware, and, after touching at Tortola and St. Thomas, arrived at the city of Santo Domingo on the 13th of April, where she continued until the 26th of June, when, she went to the Cape, and returned again on the 1st of August, without touching at any other port. She remained at Santo Domingo until the 28th of October, and then failed for Porto-Rico, where she arrived on the 5th, of November. She anchored at the entrance of the harbour, at a confiderable distance from any other vessel. A short time before she left the city of Santo Domingo she took on board, from a French privateer that had been difmantled, a quanty of rigging, fails, guns and ammunition. From the time that

that she left Philadelphia until her arrival at Porto-Rico the crew were healthy, except two of the faillors who were affected with venereal complaints. The fecond day after she anchored at this latter port the mate and one of the failors began to complain, and the greatest part of the crew, together with the captain, were fuccessively attacked. The two first died after a short illness, and one of the others during her paffage to America. The captain escaped in consequence of being brought on shore and carefully attended, at the commencement of the diforder. When the arrived at Porto-Rico, and during her stay there, both the harbour and city were remarkably healthy, and her crew had little or no communication with either the shore or the shipping. These are all the facts which have come to my knowledge respecting the existence of this difease in the West Indies, during the last summer and fall. I remain, Sir,

With due respect,

Yours, &c. &c.

EDWARD STEVENS.

Walnut ftreet, Dec. 26, 1798.

### NOTE F.

See the daily papers at that time.

## NOTE G.

The information referred to was procured from the health office.

# NOTE H.

Deposition of the captain of the Deborah, procured from the health office.

Questions to be proposed to masters or commanders of vessels coming to at the health office on State Island.

- Q. 1. What is the name of this veffel?
- A. Ship Deborah.
- Q. 2. What is the name of the captain?
- A. Edward Yard.
- Q. 3. Where does your veffel belong to?
- A. Philadelphia.
- Q. 4. How many men belong to this vessel?
- A. 37.
- Q. 5. How many passengers have you brought with you? Are they now all on board? And if not, where were they landed?

A. 58 on board, landed none.

Q. 6. When did the veffel enter on her voyage?

A. 7 February.

Q. 7. At what port have you taken in the cargo, which you have now on board?—And when did you fail from the fame?

A. Port-au-Prince and Jeremie; left Jeremie

24 of June.

Q. 8. What does your present cargo consist of?

A. Sugar, coffee and cocoa.

Q. 9. What ports or places have you touched at fince you have taken your last cargo? And when did you leave them?

A. None.

Q. 10. Have you touched at any fickly ports, places or islands, during your voyage?

A. None.

Q. 11. How were the inhabitants and the people belonging to the shipping of the port you have left or touched at, during your voyage? Were they healthy, or not?

A. Healthy on shore but fickly in the harbour.

Q. 12. Have you brought with you all the crew, which you have taken out? if not, what has become of them?

A. Brought all the crew back but 13, eight left

\* aproof of a Ship fiver.

Q.

Q. 13. Have you lost any persons by diseases during your voyage? If so, when, in what place, and what was his or their complaint?

A. Lost 5 with the dysentery, the first at Jeremie, and the last 24th June, seamen and three passengers.

Q. 14. Have you any wearing apparel or bedding belonging to deceased persons on board?

A. Part of the wearing apparel of the abovementioned 5 persons, the rest was sunk at sea.

Q. 15. What vessels have you met at sea, during your last passage? What port were they from? Have you sent your boat on board of them, or did they send their boats on board of your vessel? Had they any sick on board?

A. Boarded the floop Friendship, all well.

Q. 16. Yourself, your people and passengers, are they all now in good health?

A. All well on board, but one negro woman, with a fever and lax.

## EDWD. YARD.

July 8, 1798, 6 o'Clock, P. M.

Sworn, JAMES HALL, Residt. Phyn. Port.

Two ventilators were used on board the ship Deborah for 8 days.

JAMES HALL.

Mr. WILLIAM ALLEN, Health Officer, No. 32, Walnut st.

## NOTE I.

Health Office, 26th, Dec. 1798.

SIR,

After you left the office I found the Steward's return of the number of fick persons landed from the ship Deborah at the marine hospital; their names and time of admission are as follow:

A French black girl admitted,	8th. July.
John Lincoln,	9th.
Robert Stone,	9th.
Wm. Wallworth,	10th.
Jonathan Farnham,	11th.
Robert Price,	11th.

The above statement may be relied on as accurate.

I am, Sir,

Your Obedient Servant, Wm. NESBITT, Clk.

DR. GRIFFITTS.

# NOTE K.

"On the 12th, August, John Lewis, mate of the Deborah, informed me that she lost seven persons with sever on board during her passage, and one by accident accident, and that she had been employed as a transport in the British service previous to her taking in her cargo at Jeremie."

Extract of a Letter from Dr. Currie to Dr. Wistar.

## NOTE L.

Mr. Thomas Town, citizen of the Northern Liberties, related to Dr. Wistar, that on the 1st of August, 1798, he saw Alexander Philips, late of & Width Water-street, taylor in Second-street, opposite the Milisis in 2 house of Messrs. Hamilton and Son, and inquired of de line at the him whether it was true (as reported) that he hadand with me brought up privately some fick men from the ship De-to Luis me to borah, foon after her arrival in the river, and had received ten dollars for fo doing; and that Philips replied, that he had brought up two or three in one or two boats. Mr. Town believes he faid that he had gone down as low as Marcus Hook. Philips faid he had taken fome of them to his own house, and that one was dead. He added that he was forry it had been done; that he was fick himfelf, but hoped his complaint would turn out a cold.

He stated that he had done it as an act of friendship, in return for favours received. On the Sunday morning following, Mr. Town was invited to Philips's funeral.

THOS. TOWN, CASPAR WISTAR, Jun.

Nov. 16th, 1798.

The following paper was given to Doctor William Currie, by Mr. John Purdon.

Mr. Purdon fays that on the afternoon of the 1st. or 2d. day of August, being at the house of Mr. Alexander Philips in Water street, he was informed in the course of conversation by Mr. Philips, that he himself had gone down to a ship at the fort, and brought from thence one of his old lodgers, then fick, to his own house in Water street. Mr. Purdon observed to him with horror and astonishment that he had acted very wrong, and immediately departed from his house. Mr. Phillips on that day was apparently in perfect health; on the Saturday night following he was a corpfe. Mr. Purdon was not informed by Mr. Philips from what ship he had conveyed the fick man, but by Mr. Isaac Milnor, a few weeks after, that it was from the ship Deborah, and on the ninth night of her quarantine.

I shall

### NOTE M.

Extract of a Letter from Doctor Daniel de Benneville to Doctor Griffitts.

I shall now proceed to mention a few of the early cases of yellow sever, that occurred in the immediate neighbourhood of the wharf where the ship Deborah lay. The ship Deborah arrived at George Eyre's wharf in Kensington on the 28th day of July, and remained there until the 8th day of August following.

Joseph Streeton, the first victim in Kensington, was on board the ship Deborah July 21st, 1798, whilst she lay in the city, was taken sick July 29th, and died August 3d.

James Porter, an apprentice boy of Joseph Grise, who lived next door to Streeton's, was taken sick August 1st, and died August 12th.

James Ashmore, an apprentice lad of Wm. Yard's, whose dwelling house is opposite the wharf where the ship lay, and who had worked on board while she lay in the city about the 18th or 20th of July, was taken sick August 2d and died August 15th.

James Kerr, George Adams, —— Simons, apprentice boys of Wm. Yard's, who worked on board the ship, were all taken sick a few days after the first appearance

appearance of indisposition in J. Ashmore, their fellow apprentice, and all recovered.

Two labouring men of the name of Sutton, who worked on board the ship, were taken sick August 3d, one of whom died; the other recovered.

Samuel Baker, whose dwelling house is directly opposite the wharf where the Deborah lay, was on the wharf July 31st, when his nostrils were assailed with a very offensive stench from the ship, out of which, the people who worked on board were heaving some lumber, and which instantly induced him to leave the wharf, was taken sick August 3d, and recovered.

Daniel de Benneville, who rode by the wharf in his chaise, daily for a week before his indisposition, and for three days previous walked twice or thrice a day on the banks, nearly opposite the wharf where the ship lay, the wind blowing directly from the ship, wasting a disagreeable stench, which he observed to Manuel Eyre, the elder, who was in company; and which produced a violent nausea, in consequence of which he left the shade on the bank, returned to his house, and took some lavender water and loaf sugar, but without any effectual relief, until he ejected

ejected the contents of his stomach, with a large proportion of bile, by vomiting; he was taken sick August 5th and recovered.

Catherine Pecky (Daniel de Benneville's housekeeper) was taken sick August 7th, 11 o'Clock A. M. and died August 19th.

Elizabeth de Benneville (wife of Daniel de Benneville) was taken fick August 7th, P. M. and recovered.

Joshua Baker (son of the aforesaid Samuel Baker) who had been on board the Deborah, was taken sick August 9th, and died August 15th.

Jacob Miller, who lived about 300 yards from the ship, and daily walked by the wharf to his work, was taken August 9th, and died August 15th.

Jane Newman, daughter of the widow Mary Newman, who lived nearly opposite the wharf where the ship lay, was taken sick August 10th, and died August 25th.

Susannah Baker (wife of the aforesaid Samuel Baker) was taken sick August 12th, and died August 22d.

Sarah

Sarah Eyre (daughter of Manuel Eyre) was taken fick August 15th, and recovered.

Charlotta Yard (wife of William Yard) was taken fick August 15th, and recovered.

Jacob Fawns, who worked on board the ship Deborah whilst she lay at Kensington, was taken sick and recovered.

Three apprentice boys belonging to George Eyre, who worked about 100 yards from the Deborah, were all taken fick, one of whom died, and the rest recovered.

Cæsar Maul, a negro lad living with Daniel de Benneville aforesaid, was taken sick August 19th, and recovered.

John M'Curdy was taken fick whilst working on board the Deborah, and recovered.

Thomas Norris, who worked on board the ship Deborah from two days after she arrived, until she sailed, was seized, whilst working on board, with a violent nausea, pain in his head, loins and extremities, was relieved by severe vomiting and sweating that

that enfued the night following, and felt no manner of indisposition thereafter.

Henry Underwick, William Moore, George Jenny, and Allen Robinett, who worked on Doughty's wharf, about 100 yards from the ship Deborah, whilst she lay at Kensington, were all taken sick about the latter end of August and the beginning of September, and died.

I have been fo repeatedly interrupted in this bufiness that necessity obliged me to do it in haste, and
with a pre-occupied mind. The people here are in
the day time employed in their several occupations, that I have been obliged to take the evening
and best part of the night to obtain correct intelligence on this subject, and that at intervals:
which of course has taken longer time to essect my
purpose; and which you will excuse.

With unfeigned Esteem,

I am, Yours,

DANIEL DE BENNEVILLE.

Kenfington, Nov. 27th, 1798.

## NOTE N.

Mr. Ralston was attacked with the sever July 25: on the 29th, I first visited him, he died on the 30th. He was at work on board the ship Deborah the three days immediately preceding the attack.

A Mr. Beaty, who affisted to nurse him, was attacked August the 1st. I attended him two days, he was then removed from near the hay-scales, North Front street, to a small alley in North Seventh street, where, I was informed by his brother, he died a few days after.

J. PROUDFIT.

DR. GRIFFITTS.

John Butcher, a seaman residing in Misslin's alley, worked nine days on board the Deborah, first at Race street wharf, then at Kensington; until he was taken sick on the 2d August last. Being opposite my laboratory, his wife requested I would call and see him. He appeared to me to have the symptoms of the yellow sever. He was immediately bled plentifully, and briskly purged; he recovered in

in 2 or 3 days. Doctor Proudfit also visited him and was of the same opinion.

This being in the evening of the 3d August and the health office shut, I requested Captain Lawler to inform the Board thereof, who next morning sent Doctor Dussield to visit him; when Butcher, by the operation of the above remedies, was so much better that Doctor Dussield doubted his having the disease. Yet the impression was so great on my mind, that I immediately sent my children to the country. I am still of the opinion, that he was the first who brought the fever into Missin's alley, where it was so fatal.

### GEORGE HUNTER.

Philadelphia, December 1st, 1798.

## NOTE O.

DEAR SIR,

I met Davis Bevan in Second street, who informed me, as a proof of the Deborah's being an unhealthy vessel, that seven boys of Chester went in a boat to see a comrade on board, staid with him an hour or two, and returned: that in two or three days, six of them were taken ill of a fever, supposed to be the yellow

yellow fever, and that five of them died in less than ten days. He said he would take his oath of this fact, if required.

I think I am accurate, for it appeared to me a strong confirmation of the Deborah's importing the yellow fever of 1798.

Yours, Respectfully,

W. SHIPPEN, junr.

DR. GRIFFITTS.

December 26, 1798.

THE END.