

**A memoir on contagion, more especially as it respects the yellow fever :
read in convention of the Medical and Chirurgical Faculty of Maryland, on
the 3d of June, 1817 / by Nathaniel Potter, M.D.**

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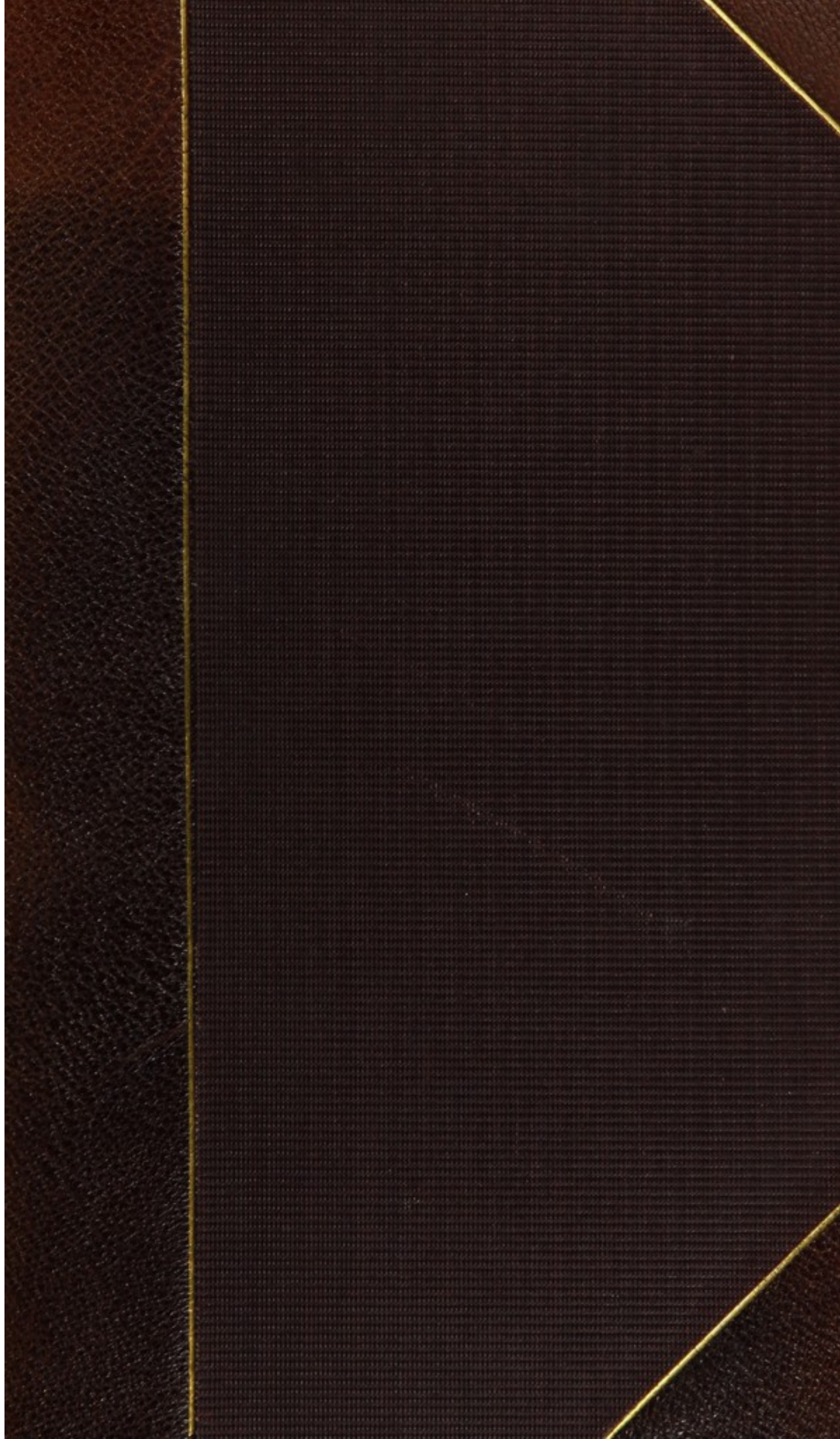
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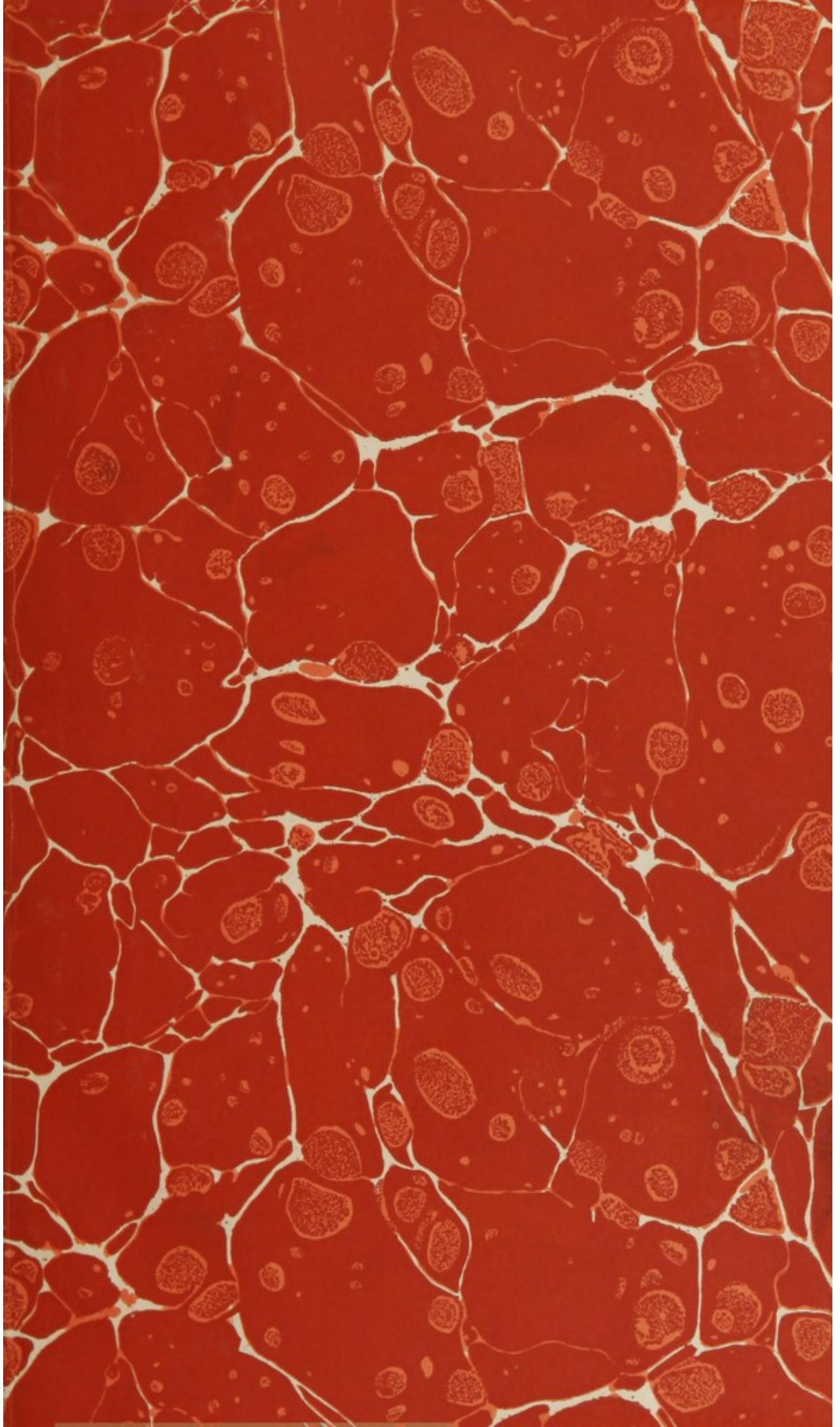
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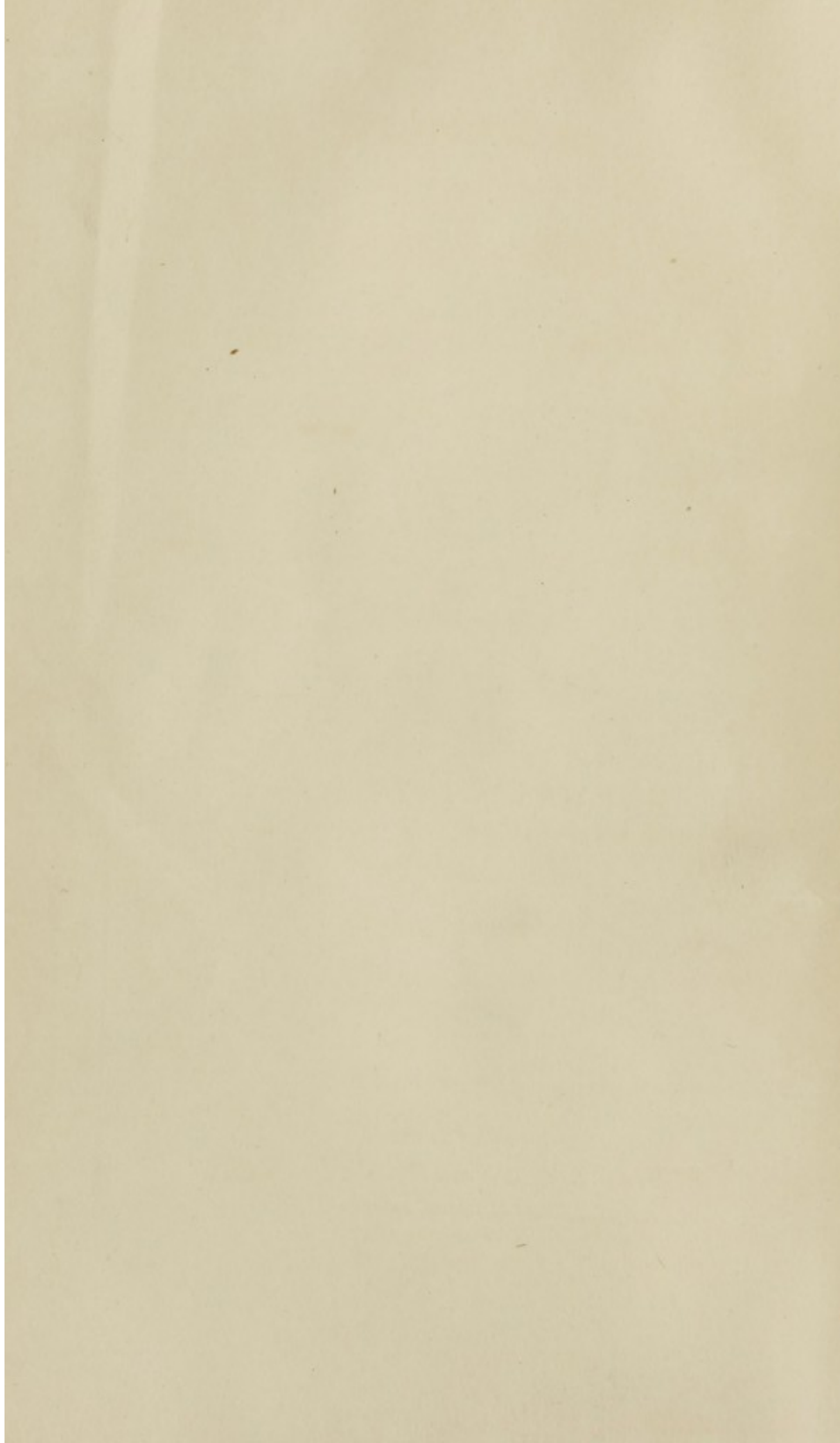
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A MEMOIR
ON
CONTAGION,
MORE ESPECIALLY AS IT RESPECTS THE
YELLOW FEVER:

READ IN CONVENTION OF THE
MEDICAL AND CHIRURGICAL FACULTY
OF MARYLAND,

On the 3d of June, 1817.

BY NATHANIEL POTTER, M. D.

MEMBER OF THE FACULTY, HONORARY MEMBER OF THE MEDICAL SOCIETY OF
MARYLAND, HONORARY MEMBER OF THE MEDICAL SOCIETY OF GEORGIA, AND
PROFESSOR OF THE THEORY AND PRACTICE OF MEDICINE IN THE UNIVER-
SITY OF MARYLAND.

*“Quo vobis mentes recte quæ stare solebant
Antehac, dementes sese flexere via?”
Ennius.*

BALTIMORE:
PUBLISHED BY EDWARD J. COALE.

BENJAMIN EDES, PRINTER.

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1818.

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PREFACE.

THE reader will easily perceive that the following Memoir is not intended as a system on the subject of contagion. The impracticability of condensing a copious mass of materials, within the limits of a single discourse, is obvious; hence the style and manner appear sententious and didactick. From the nature of the occasion that called it into existence, it is sometimes declamatory. The frequent repetitions can be excused only on the ground of attempting to place a controverted question, in all the attitudes of which it is susceptible.

However imperfect or exceptionable the opinions expressed may appear to the critick, they are the result of some reflection, and an assiduous attention to the phenomena of pestilential diseases, especially the yellow fever. All the reasoning, and many of the facts, are contained in a series of letters addressed to Dr. Rush, commencing 28th October, 1793, and the 4th of June, 1797. When the irruption of the yellow fever was experienced at Philadelphia, in 1793, I was the private pupil of Dr. Rush; and, as will be perceived in the sequel, was casually absent. On the 20th of August, I addressed a letter to my preceptor, describing an unusually malignant fever, then prevailing in Caroline. Between this date and the 28th of October, an unremitted observance of the phenomena of the disease, and the causes that manifestly occasioned it,

convinced me that it, as well as the epidemick at Philadelphia, were to be referred solely to domestick sources. On the 28th of October I addressed, to Dr. Rush, a second letter, detailing more minutely, all the circumstances connected with the epidemick on the Eastern Shore of this state. The letter concluded in the following words: "*These various forms of bilious fever, unquestionably owe their existence to the putrefaction of matters on the surface of the earth, after an uncommonly wet spring, followed by the driest and hottest summer that can be remembered by the oldest inhabitants of the country. Whatsoever may be the result of the controversy so warmly agitated in your city, respecting the contagion of the yellow fever, the epidemick here has no pretensions to that character, in any of its forms. The dysenterick form is considered contagious by popular consent, but (me judice,) is no more entitled to the epithet contagious, than the remittent or intermittent fevers. With all possible deference to your superior judgment, I cannot prevail upon myself to believe that any fever, arising from vegetable decomposition, is contagious. The origin you have assigned to the epidemick fever of your city is the only one that is physically possible, and therefore you place your adversaries on equal ground with you, by acknowledging the fever contagious. Deny the existence of contagion as unphilosophical, and you cut them off from every resource. If we admit one of the fevers from marsh effluvia to be contagious, we are bound, (a priore,) to admit them all to be so; intermittent, remittent, and dysenterick.*"

In April, 1794, while Dr. Rush was committing to paper his thoughts on the epidemick of the preceding

year, he proposed to introduce into his work that part of my letter, of the 28th of October, which described the symptoms and treatment of the epidemick in Caroline. I consented, provided he would also print the sentiments therein expressed, as far as they regarded contagion. He declined this proposal, and (as may be seen in the first edition,) mentions only the use of purgatives in my practice. That part which questioned the contagion of the fever at Philadelphia, was the only part of the letter in which I felt an interest; and after some conversation with the doctor, he assigned as a reason for excluding that part of my communication, his firm belief "*that all diseases arising from marsh miasmata were contagious in a degree proportioned to their malignity, and that the opposite doctrine was utterly untenable.*" Believing that I was, at that time, the only person in America who denied the contagion of the yellow fever, and that the opinion could be sustained by facts; in the summer of 1795, I proposed to select this question, and maintain the negative in an Inaugural Thesis, at the next commencement. I had scarcely began to arrange my notes, when I was waited on by Dr. Wistar, who entreated me to select some other subject. He assigned so many reasons, on the score of policy and expediency; his motives were so benevolent, and his views so pacifick and amiable, that I waved the subject.

In June, 1797, I addressed a last long letter to Dr. Rush on the subject of contagion. In his answer he enumerated a host of authors in support of his opinions, not one of whom employed the epithet contagious in any other sense than synonymous with atmospherical infection. From the fever of 1793, at Philadelphia, to that

of Baltimore, in 1797, the contagion of yellow fever was not called in question, till the paper written by my learned colleague, the professor of anatomy, was issued in the Federal Gazette, of this city, on the 30th of November of that year. This was the first printed enunciation in the United States in the negative, protesting against an unphilosophical opinion which Dr. Davidge never believed. This communication was afterwards enlarged and embodied in a pamphlet, and has not been answered to this day.

MEMOIR.

MR. PRESIDENT, AND GENTLEMEN,

I RISE to discharge an obligation justly due to this convention, one which I was precluded from fulfilling by corporeal indisposition on a former occasion. I am sensible, that life, strength, and glowing colours will be wanting in the execution, and that an honest zeal is my only qualification, commensurate with the importance of the appointment.

Perhaps it may be asked, why I should have selected this polemick subject, at so late a period of the long agitated controversy. To this suggestion I would answer, I had cherished a hope that the question had been consigned to rest, never to be revived. To my equal astonishment and regret, it is manifest from opinions both publick and private at home, as well as from high literary sources abroad, that there is still not only a *la Vendee* in our own country, but a host abroad, arrayed in opposition to that opinion, which alone would seem consonant to sound philosophy. *The army Medical Board* of Great Britain, professing to have bestowed on this subject the most profound consideration, has deliberately and solemnly adjudged the yellow fever a *contagious* disease, and consequently capable of being communicated by commercial intercourse. In this decision we feel a more than ordinary solicitude, because we are persuaded, that the consequences which must flow from its admission are so fraught with calamity, both publick and private, that neither the philosopher nor the philanthro-

pist can contemplate them without emotion. Indeed it becomes the more momentous from the reflection, that it emanates from an honourable and learned body, whose distinguished rank in the republick of medicine, may awe surrounding nations into admiration and submission. While we lament that the country which gave birth to a Newton, a Bacon, and a Shakspeare, that has "waked to ecstacy the living lyre" on every other theme, should have sounded a discord on this tender string, we can but view the expression of such a sentiment as one of those solecisms in science which belongs exclusively to the fatality of the subject.

At the very threshold of the investigation, we are to encounter an impediment, which although when met with energy, will be found to have nothing to boast but its antiquity, has become formidable from the tyranny of custom. That sentiment which has been imbibed as an elementary principle of our education, which has "grown with our growth, and strengthened with our strength," which has been sanctioned by legislative authority throughout the whole maritime world, would require the sagacity of a Socrates and the eloquence of a Burke to combat it with success. Independent of this despotism of education, and all the prejudice it must inspire, the pride of nations has riveted the chains it has forged. Pestilence has been viewed as an alien to all the world; it has been disdained as a national stain, and chased from every clime. When it has invaded the European or American continent, it has been imputed to the eastern or southern sections of the globe, whose indolent and benighted inhabitants, had neither the energy, nor the science to repel the illiberal charge. The first settlers of the West India islands charged the yellow fever to Siam, and as one error begets another, we have retorted the futile imputation upon them.

"No nation owns it in the first degree,
But thinks his neighbour further gone than he,

Ev'n those who dwell beneath its very zone
 Or never felt its rage or never own;
 But where the extreme of vice was ne'er agreed,
 Ask where's the North; at York, 'tis on the Tweed,
 In Scotland, at the Orcades: and there,
 At Greenland, Zembla, or the Lord knows where."

Since the doctrine of imported contagion has appeared questionable to the more scrutinizing eye of modern philosophy, although we witness many efforts to refute it, we can but lament, that writers have generally* restricted their views to a sphere too contracted, to reflect that light, of which the subject is susceptible. Instead of appealing to the history of all warm latitudes, which originate this disease necessarily, they have limited themselves to the strict letter of medicine; and few of them have ventured beyond the precincts of their own cities. It may be laid down as a general position, that all countries in tropical latitudes, and all others liable to tropical seasons, are destined to suffer that form of pestilence, now so notorious under the appellation of yellow fever. If the histories of such places had been faithfully transmitted, we should invariably find pestilence as one of their natural productions. The colonial histories of our continent, are replete with facts to prove that this disease is the offspring of putrefaction, communicable only through the medium of the atmosphere. We will avail ourselves of some of them, as auxiliaries to our medical histories; but we will first appeal to Hippocrates, the most ancient authority in medicine. On various occasions in his writings, we find depicted all the characters of that fell disease, which has since inflicted so deep a wound on our own country. This illustrious Greek viewed the disease he so well describes, in the mild climate of his native soil, almost in the parallel of latitude in which we live. He speaks a language

* The most expanded and liberal view of this important subject, has been given by a gentleman, who, although he was not educated a physician, has contributed more than his quota to the history of epidemics.

Vide Webster on Pestilence.

without disguise, susceptible of but one interpretation. The *tout ensemble* of his faithful picture, portrays the disease in colours as glowing as those of Chisholm or Rush. He enumerates the more prominent symptoms, under the following appellations: *καυσος*, the ardent fever; *τυφος*, a stupor or coma; *φρενιτις*, an inflammation of the brain or its investing membranes; *ιχτερος*, a yellowness of the skin, and caps the climax of the malignant picture by the words *μελανα εμελον*, black vomit, and *μελανων εμελον*, the vomiting of black matter. "In burning fevers," says Hippocrates, "a yellowness of the skin on the fifth day, especially accompanied by a singultus, is a sign of great malignity."* In the first section of his first book, on prognosis, he states in the most explicit terms "that the black vomit is a most dangerous symptom."† He ranks the disease to which he attaches these pathognomick signs among the endemics of Greece, and on this, as well as all other occasions, attributes its origin to the uncommon heat of the seasons. It would be superfluous to adduce other proofs, (with which his works abound,) for the most fastidious nosologist cannot improve upon his emphatical definitions. The visionary idea of an exotic origin, never entered his imagination. He does not invidiously impute the pestilential visitation to other nations; he does not stigmatize the Phœnicians with having introduced it by commercial intercourse, nor does he insinuate that it was introduced through the Bosphorus or imported from the islands of the Archipelago.

As no well marked distinction between miasmatick and other epidemics was taken till it was suggested by Lancisi, we will only recur to more ancient authorities, when we come to examine the doctrine of contagion with a view to its pathology. He bears strong witness in our favour, in his

* *Εν τοις καυσοισιν εαν επιγενηται ικτερος και λυξη πεμπταιω εοντι, θαλασσωδες υποσροφαι λαμβανονται.*

† Sect. 9th Book on Crises.

description of the bilious pestilential epidemick that ravaged Rome, in 1695. He has left on record the most explicit declaration that the fever was limited to those parts of the city that were built on factitious materials, like artificial grounds of parts of our cities at this day; and declares that the hills, only a few paces distant, were exempted from the disease; he finishes his description of this mortal fever, by expressing his astonishment, that so short a distance could have made so essential a difference in the air. He ascribes the disease solely to the effluvia extricated from the low grounds acted upon by unusual heat.*

Baglivi is equally impressive in his history of the same fever; they both describe its malignity, and equally lament its fatality. I would ask no greater favour of the abettors of the contagion of yellow fever, or those who are sceptical on this question, than a fair and candid appeal to those writers.†

Bartholine describes a malignant fever that wore the very features of the yellow fever of our country; one that, (on account of its mortality,) struck a panick through the city of Copenhagen, in 1652, and caused it to be deserted. He states that he dissected a great number of bodies, and in every case found the stomach and duodenum highly inflamed or gangrenous. He does not ascribe it to any extraneous source, but refers it to putrefaction occasioned by uncommon heat; "to something rotten in the state of Denmark." His description concludes with this emphatick expression: "Its mortality was arrested only by frost."‡

Forestus is no less explicit in his description of a malignant bilious fever which infested the city of Delft for several years in succession. This fever generally terminated in death on the fifth day. It was occasioned, says this faithful

* Lancisi de noxiis paludum.

† Baglivi Opera Omnia, page 157, et aliis locis.

‡ Thomæ Bartholini Historiarum anatomicarum rariorum.

historian, "*from the unusual heat of successive summers, and because the city was surrounded by stagnant waters.*"

Silvius De Le Boe, describes a most inveterate bilious remitting fever that raged at Leyden, in 1669. He attributes it to the uncommon heat of summer and autumn, a paucity of rain, and an almost uninterrupted calm, by which the waters in the canals were nearly evaporated, and consequently stagnated. The air was so pestilential, says De Le Boe, that two-thirds of the principal inhabitants perished.*

Claghorn, in his account of the diseases of Minorca, describes a disease similar in character; obstinate, and sometimes intractable; but views it as the endemick of the island, the offspring of marsh effluvia, in common with other bilious fevers, all of which vary in degree according to the season.

Sir John Pringle, treating of the fevers that vexed the British army in Flanders, remarks: "the remitting fever was more general and fatal after the extreme heat of the summers 1743 and 1747." The same distinguished writer, speaking of the fever that infested the troops encamped near the inundations in Dutch Brabant, in 1748, adds "*in the greatest heat of the weather, and rage of the distemper, most of the fevers answered the description of the causus of the ancients.*"

It will be almost superfluous to mention the island of Zealand, so memorable for its disastrous influence on the British army, in 1809. In Doctor Blane's letter† to the physician-general, dated Middleburgh, October 3d, of that year, and presented to parliament in February, 1810, we find the following melancholy account: "It appears from the last general weekly return, that nearly two-thirds of the whole numerical strength of the army is incapable of duty; the mortality of the last three weeks has been about a thousand." This fever never has been viewed in any other character than as the endemick of the island, affecting strangers almost exclusively. About twelve thousand of

* Silvius De Le Boe. Prax. Med. Tract. X.

† Documents presented to parliament, in February, 1810.

those troops were remanded to England from Walcheren, and the sick were deposited in the hospitals, but no disease was communicated to those with whom they held constant intercourse, either on board the transports on the passage, or on shore afterwards. The malignant character of this fever, derived solely from the iniquated atmosphere of the island, is too notorious to require a comment. It may be asked, were all these diseases genuine yellow fever? To this it may be answered, that if they were not all of equal grade, they were from the same remote cause. It is physically impossible that every one of them should have maintained the same grade. The difference in the force of the remote cause, as well as the previous condition of the subject, invariably modify the character of diseases, more especially the whole family of miasmatic fevers. It is incontestably established by each of them, that they were extraordinary in virulence, transcending, in malignity, the ordinary diseases of the same places, as far as the yellow fever of our country transcends the common remittent.

Let us now appeal to the civil history of our own country to prove the indigenous origin of bilious pestilence. We have established the fact, that it has originated even in cooler latitudes than our own, and the colonial histories of our continent abound with proofs that it is of a texture solely domestick. They claim our highest and most respectful attention, because, having no favourite hypothesis to support, and enlisted under the banners of no party, they have left the naked facts. If those who recorded the facts were influenced by any prepossession, it must have inclined to the hypothesis of contagion, for in those days it was as much a popular superstition as the belief in witchcraft or ghosts, and rests on as baseless a foundation.

It is very remarkable, that the first accounts of pestilential epidemics in our country should have been noted so specially by all the historians of the times, and that they should correspond in all essential points. It is manifest,

that the series of epidemics at that period were so pestilential, and so general, that a deep solicitude was felt by every one. So notorious were the facts, and so disastrous the consequences, that they became matters of record in every colony of which there is a history extant. Georges in his History of New-England, Hutchinson in that of Massachusetts, and Purchas in his Pilgrims, as well as Smithe, concur in recording the more prominent facts of the series of mortal epidemics that commenced about the year 1607, and continued about thirteen or fourteen years, to the great annoyance of the colonists, as well as the discouragement of those who were disposed to emigrate to the new world. In 1607 and 1608 it depopulated a company of Englishmen, who had settled in Massachusetts under letters patent from James the first. It was denominated the *calenture*, or burning fever, an ancient appellation synonymous with *causus*, and seems to have pervaded all the colonies in the most virulent degree. Purchas states, "that captain Dormer, an Englishman, who had arrived in America two years before, passed the winter 1618—19 in Minichigan, an Indian settlement on the northern coast: in the May following he sailed along the coast, bound to Virginia, and landed at several places where he had been the year before. He found many of the Indian towns depopulated; in others only a few of the natives had survived, but not one free from sickness." He adds, "the disease must have been the plague, for I perceived the sores of some who had escaped."

In Belknap's life of Fernando Georges, a fact is stated that indicates a strong feature in the character of bilious pestilence, but is hostile, in the extreme, to the doctrine of contagion, which is no respecter of person, which spares no nation, sex, or condition, unless those on whom it has previously made its impression. "Richard Vines and his associates," says the historian, "remained among the natives during the whole pestilence, but were exempted; not one of them had the disease." This assertion cannot be predica-

ted of any contagious fever, and can only be explained on the principle of habitual impression. Vines and his companions, (who seem to have been rovers by profession,) had no doubt, been accustomed to breathe a contaminated atmosphere, and to this alone they owe their immunity.

Mr. Webster, in his learned work on pestilence, quotes a passage from the Magnalia of Massachusetts, which corroborates the narrations of the cotemporary historians, but is more explicit as to the character of the epidemics of the times. Gookin, who recorded the facts, "declares that he conversed with several of the natives who escaped this mortal fever, and that they unanimously declared, *that the sick, but more especially the dead, were remarkably yellow.*" As neither of them understood the language of the other, the Indians resorted to comparison to render themselves intelligible to their visitors. They produced some articles of clothing of a *yellow colour*, and by various gestures imparted their impressions.

In Prince's chronology, another history of deserved reputation, we find a conclusive fact respecting the same fatal fever. He describes it as "*terminating in death, from hemorrhages, especially from the nose.*"

Can there be a doubt respecting the character of this pestilential disease? The most irresistible evidence arises from the repeated representations of the historians of the times. Purchas every where ascribes the difficulties and misfortunes of the first settlers, in part, to the extraordinary condition of the atmosphere which was not more congenial to animal than vegetable life. He expressly declares, "*that the foul air of Jamestown was the cause of the mortality among the colonists.*" This connexion between scarcity, sometimes famine and pestilence, at some period, marks the history of all nations.

The celebrated Smithe in his work entitled "*A General History of Virginia, New England, and the Summer Isles, by captain John Smithe, sometimes governor of these coun-*

tries, and admiral of New England, commencing 1548, and ending 1626," is as unequivocal on this subject, as any writer, not exclusively devoted to the science of medicine, could have been. In the autumn of 1622, the deplorable state of his settlement, arising from the memorable Indian massacre in March of that year, from the scarcity of provisions, and the almost depopulated state of the colony from a pestilential fever, occasioned a general despondence among the survivors. So well founded, and clamorous were their complaints, that all the energies and address of their intrepid captain, were required to reconcile them to their forlorn condition. In reply to the remonstrances of his disaffected company, after enumerating the other causes of their troubles, he finishes his pathetick appeal by imputing the pestilence that had proved so fatal, to elementary causes, neither to be foreseen nor controlled. These are his words: "*You might as well renounce the kingdom of Great Britain, because the fens and marshes are unhealthy and barren.*" The complaints of men who had abandoned their native country, and all that was dear to them, might well become grievous when it was manifest that this pestilential visitation was a national calamity, that had swept all the settlements, and had even invaded the aborigines. Hutchinson states, "that 30,000 of the Massachusetts' tribe of Indians were reduced to 300." Purchas declares that "the emigrants to Virginia, in 1619-20-21, amounted to 3570, in 42 sail of transports. There were 600 in the colony before, making 4170; of these, 349 perished in the massacre of 1622, which leaves 3821. In 1624, only 1800 were living." Among the causes already enumerated there must have been some one more prominent than the rest, to account for the unprecedented defalcation of the colonists. The pestilential state of the atmosphere, furnishes the only rational solution of this incontrovertible fact.

From these authorities, and from every other well attested fact, the inevitable conclusion must flow, that as the yellow fever did then prevail endemically, between the 41st and

44th degrees of latitude, it can again, and necessarily must originate there, or in any other place where the mercury of Fahrenheit's thermometer rises to 85°, provided moisture, and the materials of putrefaction be present. If there be any so deeply infatuated with the visions of contagion, as to dream of importation into those infant colonies, let them reflect that in 1618, and for many years subsequent to these reiterated pestilential epidemics, there was no communication between this country and the West Indies: not one of the islands was then settled, except a small part of Hispaniola, with which the colonists had no intercourse.

From the cessation of this pestilential series to the year 1741, the medical history of our country, (especially of Massachusetts, New York, Pennsylvania, Maryland, Virginia, and South Carolina,) furnish more than fifty of the most unequivocal instances of the existence of the yellow fever, not one of which has been demonstrated to have arisen from importation, or to have been propagated from a sick to a healthy body. Doctor Mitchell's description of this disease, as it appeared in Virginia, in 1741, is admitted to be one of the most accurate and complete to be found in the annals of medicine. In 1793, during the gloom that clouded the city of Philadelphia, when the mortality of the disease seemed to defy investigation, it imparted to our illustrious countryman, Dr. Rush, the first spark that lighted into existence the most luminous work that graces the medical annals of our country. Although contagion, at that day, constituted one of the cardinal points of the creed of every physician, and was one of the idolatries of the times, the disease was not imputed to other climes, but ascribed, by Doctor Mitchell, to the tropical season in which it originated.

But why should we dwell on the testimony of our predecessors? Although their works are full of instruction, the experience of our own times speaks a living language more

eloquent, and indeed, irresistible. In every state of the union has this disease occasionally originated, from local causes, either sporadick or epidemick; even among our ordinary bilious remitting fever we occasionally meet with some of the more inveterate grade.

M. Volney,* during his travels through the interior of our country, found the yellow fever in several places. Having seen it previously in our seaports, he could not have been deceived.

Mr. Ellicott, in his journal, is so explicit and intelligent on this subject, that no reasoning can shake his statement. His words are these: "I arrived at Gallipolis about eleven o'clock in the morning. This village is a few miles below the great Kanhaway, on the west side of the Ohio river,† situated on a high bank; it is inhabited by a number of miserable French families. Many of which, this season, fell victims to the yellow fever. The mortal cases were generally attended with the black vomit. This disease certainly originated in the town, and in all probability, from the filthiness of the inhabitants, added to an unusual quantity of animal and vegetable putrefaction, in a number of small ponds and marshes within the village. The fever could not have been taken from the Atlantick states, as my boat was the first that descended the river after the fall of the waters in the spring: neither could it have been carried from New Orleans, as there is no communication, at that season of the year, from the latter to the former of those places: moreover, the distance is so great, that a boat would not have time to ascend the river after the disorder appeared that year in New Orleans, before the winter would set in." A more detailed account of the fever at Gallipolis was communicated to me by major Prior, of the United States' army, who witnessed the rise and progress of

* Volney's View of the Climate and Soil of the United States.

† Journal of a Voyage down the Ohio, in November, 1796, by Andrew Ellicott.

not yellow fever says Mr Ellicott

the disease. The major visited Baltimore in September, 1797; and, at my request, committed to writing what he had seen the year before, in the following words: "As the garrison was severely afflicted by this fever, I could but take great interest in it. The fever was, I think, justly charged to a large pond near the cantonment. An attempt had been made, two or three years before, to fill it up by felling a number of large trees that grew on and near its margin, and by covering the wood thus fallen with earth. This intention had not been fulfilled. In August the weather was extremely hot, and uncommonly dry; the water had evaporated considerably, leaving a great quantity of muddy water, with a thick slimy mixture of putrefying vegetables, which emitted a stench almost intolerable. The inhabitants of the village, principally French, and very poor, as well as filthy in their mode of living, began to suffer first, and died so rapidly that a general consternation seized the whole settlement. The garrison continued healthy for some days, and we began to console ourselves with the hope that we should escape altogether: we were, however, soon undeceived, and the reason of our exemption heretofore was soon discovered. The *wind* had blown the air arising from the pond from the camp; but, as soon as it shifted to the reverse point, the soldiers began to sicken: in five days half the garrison was on the sick list, and in ten, half of them were dead. They were generally seized with a chill, followed by head-ache, pains in the back and limbs, red eyes, constant sick stomach, or vomiting; and generally, just before death, with a vomiting of matter like coffee grounds. They were often yellow before, but almost always after death. The sick died generally on the seventh, ninth, and eleventh days, though sometimes on the fifth, and on the third. As some decisive measures became necessary to save the remainder of the troops, I first thought of changing my quarters, but as the station was in every respect more eligible than any other, and had been made so by much labour and expense, I deter-

mined to try the experiment of changing the condition of the pond from which the disease was believed to have arisen. A ditch was accordingly cut; what little water remained was conveyed off, and the whole surface covered with fresh earth. The effects of this scheme were soon obvious. Not a man was seized with the worst form of the fever after the work was finished, and the sick were not a little benefited, for they generally recovered, though slowly, because the fever became a common remittent, or gradually assumed the intermitting form. A few cases of remitting and intermitting fever occurred occasionally, till frost put a period to it in every form. As soon as the contents of the pond were changed by cutting the ditch, the cause, (whatever it was,) seems to have been rendered incapable of communicating the disease in its worst form."

The following fact, published in the Medical Repository, and communicated by Doctor Watkins, is equally explicit as to the indigenous origin of yellow fever. "At a village called New Design, fifteen miles from the Mississippi, and twenty from St. Louis, containing about forty houses, and two hundred inhabitants, in the summer and autumn of 1797, the yellow fever destroyed fifty-seven of the inhabitants, or more than one-fourth. No person had arrived at this village from any part of the country, where the disease had prevailed, for more than twelve months preceding its appearance." Doctor Watkins resided in the village at the time, and having seen the disease in Philadelphia, testifies to the facts. He also mentions an Indian village that was depopulated by a similar disease, two or three years before.

"In 1799, an irruption of the yellow fever was experienced in Bald Eagle Valley, in Mifflin county, Pennsylvania, and was as mortal, in proportion to the population within the sphere of the remote cause, as it ever had been in any of the seaports of our country. This valley is situated two hundred miles north and west from Phila-

delphia; is deep, and interspersed with frequent ponds of fresh water, which, from the heat and dryness of the season, emitted a most offensive smell. Near these sources of exhalation the fever prevailed with great malignity. It made its approach with chills, pains of the back, limbs, and head, which, in forty-eight or sixty hours, terminated in death. The sick discharged great quantities of filth from the stomach, of the consistence and appearance of coffee grounds, so offensive as to occasion nausea and even vomiting in the attendants. The feces had the same appearance. In many the disease terminated [fatally] by profuse hemorrhages."

Fortified by these facts, unsophisticated by the fallacy of theoretick refinement, we appeal to the candour and magnanimity of the advocates of contagion and importation, and challenge them to torture this common sense in physicks to suit the visions of their creed. Were these people smitten from the heavens by the malign influence of the stars under which they lived, or was pestilence shaken from the Gorgon abyss of these hotbeds of intestine putrefaction, boiling under an almost vertical sun?

But we are still to enforce our plea, by evidence derived from the demonstration of our own senses, the most unerring sources of experience. In August, 1793, (having been summoned to the eastern shore of this state, in July, in consequence of the death of my lamented father,) the duty of attending the sick, in the sphere of his former practice, devolved on me. After a spring unusually wet, and during a summer as uncommonly hot, the bilious remitting fever became epidemick. On the 9th of August, I was requested to visit Mrs. Hall, consort of Levi Hall, who had been confined three days. I found her in the agonies of death. Her skin of a deep orange colour, her eyes red and prominent, pulse intermitting, and ejecting copiously from her stomach once every eight or ten minutes the secretion, now known by the name of black vomit. She expired in a convulsion while I sat at the

bedside. Petechiæ appeared immediately after death, and putrefaction succeeded so rapidly that I advised immediate interment. On the 12th, I was requested to visit William Leighton, manager on the estate of Mr. James Summers, who had been ill of a bilious remitting fever five days. I found him with an intermitting pulse, a pale yellow complexion, cold hands and feet, red eyes, an incessant hick-up, and complaining of a heat in his stomach, which he compared to "burning embers." He died about five hours after my return home, and the scene was closed with the fatal black vomit. On my arrival at twilight, the family were preparing to inter him, and with great difficulty succeeded in getting him into the coffin, as his flesh was literally dropping from his bones. Will the abettors of imported contagion attempt to derive these cases from our seaport towns, when it is notorious that the disease existed in none of the cities except Philadelphia, where it had then recently commenced. Can rational men prevail on themselves to believe that a disease thus originating in Caroline forest, could have been referred to any other source but an iniquated atmosphere? From this date, till the progress of the epidemick was arrested by frost in October, every grade and every variety of miasmatick fever was to be found, and no etio-logist, versed in the laws of epidemicks, will contend that there existed in the same place, one cause for dysentery, another for intermittents, a third for remittents, and a fourth for yellow fever. During the rainy season, in June and July, the dysenterick form of fever prevailed; but in August it was gradually converted into that of the bilious remittent. Although we might adduce thousands of cases to confirm the domestick origin, and non-contagious nature of yellow fever, we will content ourselves with one more, perhaps more remarkable than the rest. In September, 1799, I was called to visit the family of John Webster, about three miles north of Baltimore, on the old York road. His house stood on a level, apparently beyond the

reach of noxious exhalation, as there were supposed to be no stagnant waters within a mile of it. I found Mrs. Webster in bed, under a bilious remitting fever, which had continued eleven days; Webster's daughter, nearly seventeen years of age, suffering from a similar fever; two sons, the one between eight and nine, and the other six, labouring under dysentery; and Webster, on the margin of the grave, from a most malignant fever. I found him without a pulse in his right arm, and one scarcely perceptible in the left, his face and breast resembling a hide of soal leather, his eyes red, his extremities cold, a frequent hickup, attended with dejections from his stomach of a dark viscid mixture, (as it appeared to me,) of bile and blood. I prescribed for the family; and, on my return, hemorrhages from the gums and nose had begun, and about 2 o'clock in the morning he expired, on the seventh day from the attack. As I could not satisfactorily account for the condition of this unfortunate family, while the adjacent country was not unusually afflicted, I determined to investigate the matter as thoroughly as possible. Upon inquiry in the neighbourhood, I found that Webster had occupied the house only about five weeks, and that immediately preceding, a man had died suddenly in it. This led me to a minute examination of the premises. The cause was manifest. The cellar contained water about two feet deep, which had remained there from the first week in June, the country having been then inundated by torrents of rain. The cellar being useless, the door had been closed, and the only vent for the pestiferous gases was through the floor, which was open in several places.* At my solicitation the family was immediately removed, and all convalesced from the time they ceased to breathe the air of the place. But the tragedy did not end there. The owner of the house, anxious to retrieve its character, hired two men, John Wills

* On the afternoon of my first visit to Webster's family, I was seized with nausea and general lassitude. I believe a fever was arrested by a strong dose of tartarized antimony, which operated *surrum et deorrum*.

and Thomas Burke to empty the cellar. They began by ripping up the floor, and having placed a pump in the deepest part of the water, they evacuated the cellar to the dregs in one day. They executed this nauseous task on the 30th of the month, and on the 2d of October, Wills was seized with a chill, succeeded by an ardent fever, which terminated with the usual symptoms of yellow fever, such as hemorrhages, yellow skin, and petechiæ, and died on the night of the 5th. Burke was attacked the day after Wills, but lived till the 9th, and died with all the symptoms in Wills's case, with the addition of the black vomit. It will not be argued that these victims to a home manufactured poison, contracted their death sickness from a sick body, from a secreted virus in Baltimore, because it did not exist there, for the summer and autumn of that year were remarkable for their healthiness.

To every man of accurate observation, possessing the capacity of discrimination, the rise and progress of the three great epidemics of 1794, 1797, and 1800, as they appeared in Baltimore, would alone be sufficient to establish the domestic origin, and non-contagious character, of the yellow fever. The disease was exclusively confined to the low grounds covered with the materials of putrefaction, or to those parts composed of factitious materials, corruptible in their nature. In that part of the city west of Jones's falls, the line of demarcation between the pure and deleterious atmosphere, was obvious to the most superficial observer. In 1797, an occurrence demonstrated the locality of the infected atmosphere so clearly, that it wrought conviction in some of the most sceptical of our citizens. Previous to the 17th of September, the fever had been confined to the places already described, and to such as had breathed the air evolved from them: on that day a strong S. E. wind wafted the pestilential effluvia in a N. W. direction, and diffused it among the inhabitants of the upper parts of Frederick, Gay, South, and Calvert-streets, who became imme-

diately implicated in all the horrors inseparable from so malignant a fever. In 1800, several concurrent facts were noted, and the principle became so familiar, that the increment of cases was calculated with tolerable accuracy, by observing the variations of the winds. No case of the yellow fever ever did originate in west Baltimore, above Hanover-street, beyond the sphere of exhalation from the docks, wharves, or made grounds. I defy the whole population of the city to produce a solitary exception; nor can they adduce a single instance, from the hundreds and thousands of those who, after breathing the pestiferous atmosphere below, and sickening there, communicated the disease.

It will be remembered by some gentlemen, who do me the honour of listening to me to day, that immediately after the embargo was laid in 1807, I publickly invited the attention of the faculty, as well as the police officers of our commercial cities, to the question of the origin of the yellow fever. Although the non-existence of a disease, depending solely upon the casualties of the elements, could not have been considered more than negative proof of its exotick origin, its existence must be conclusive that it was not imported; the intercourse between us and all other nations being then suspended. Notwithstanding this profound calm, when no foreign sail whitened our waters, in August the yellow fever commenced its ravages at Fells' Point, in a spot, it is true, limited, if we compare it with the general population, but co-extensive with the nuisance by which it was generated; and it continued until the vicissitudes of the weather banished it. So perfectly developed were the symptoms of this fever, that they were at once recognized by all who had seen the yellow fever formerly.* Those who were seized with the disease and removed, did not propagate it;

* Doctors Allender and Clendinen, who had witnessed the former epidemick yellow fevers of the same place, testify to the character of the fever of 1808.

nor was any one infected from the atmosphere, but those who had imbibed the poison at its source.

One of the principal deceptions respecting contagion, arises from the fact of the disease having occasionally originated on ship-board. The confined state of the holds of vessels, is, unquestionably, well adapted to the generation and concentration of noxious effluvia. Several causes conspire to render such a condition the focus of pestilence. Improper ballast, perishable by putrefaction, as well as cargoes subject to chymical decomposition; and, perhaps, the accumulation of animal excretions about the bodies of the crew in warm latitudes, especially when combined with other sources of putrefaction, may operate as the remote cause of yellow fever.* The narrative of the yellow fever on board the United States' ship General Greene, by Doctor Kollock, in June, 1799, furnishes an instructive lesson on this point.† The ship was new, and sailed from Newport, Rhode Island, on her first cruise, on the 3d June. As she had been caulked in winter, she became leaky, and thus damaged, more or less, every thing liable to putrefaction on board. The ballast was composed of iron, slate, and clay, interspersed with marine vegetables. The provisions became contaminated, and the fish, which made a part of them, were thrown overboard. The air between decks became so vitiated, that it would not support combustion, a candle would scarcely burn in the cockpit. The disease commenced on the 18th of the month, and its tragick end is well known. The fever did not exist at Newport before the ship sailed, and she touched no where, neither boarded, nor had communication with any vessel till she arrived at Havanna, af-

* As we propose to prove that what is called typhus, is not communicated by a vitiated secretion, we hazard nothing in admitting that putrid animal excretions may combine to produce yellow fever. The reasons why this disease is sometimes thus originated, and under other circumstances, a different disease, will be explained hereafter.

† Vide Medical Repository, Vol. 4.

ter the irruption of the disease. It became necessary, in this disabled condition of the crew, to return to the United States; and, on the 27th July, the frigate arrived at Newport. She was subjected to an entire unloading; the sick, with all their clothes, were sent to the hospital. Mark the end of this disaster; neither the citizens, (who could not be entirely excluded from intercourse with the crew,) nor the attendants of the hospital contracted the disease. Could this have been predicated of any contagious disease?

The Busbridge Indiaman* is a no less conspicuous example, both of the manner in which the yellow fever is engendered, and its non-contagious nature afterwards.

We will demonstrate, as we proceed, that the ship Hankey, (from which Dr. Chisholm, in his own imagination, scattered contagion over the whole western continent,) originated the disease in the same way. A similar occurrence can at all times take place, on board any vessel in warm climates, if there be materials liable to putrefaction. If we were to admit that the causes of the yellow fever were introduced among us after being thus manufactured, it could avail our antagonists nothing. *This local infection of the atmosphere is not contagion.* We will admit these gases to be set at liberty on shore. What is the result of our experience, from a fact that has happened in every seaport of our country? Previous to the pantomime exhibitions under our quarantine laws, vessels in this condition were disregarded. In some cases it is certain they infected those who were concerned on board, exposed to their immediate action, but the vis nocens never multiplied, but did as it always must of necessity, diminish, being diluted by a purer atmosphere, till it became inert. Those who have put their imaginations on the rack to conjure up contagion, have in all such cases mistaken the person for the place. Although the elements of pestilence were there, concentrated in their most lethiferous de-

* To be noticed hereafter.

gree, they were no sooner unbosomed than they were dissipated into circumambient space, and thus rendered innocent. The annals of the world cannot furnish an instance of the multiplication of the yellow fever, from effluvia proceeding from a vessel. It is essentially necessary, before the disease can become epidemick, that the general atmosphere on shore shall have been changed to the same state. There is no fomes, no fermenting principle in any infected vessel, that can assimilate the atmosphere by the addition of twenty or thirty cubick feet of mephitis. This physical arithmetick by which visionary sophists double, quadruple, and quintuple contagion, exists no where but in their own imaginations. When they speak of "*inoculating the atmosphere,*" reason abhors such language, and the genius of philosophy weeps at their folly. The absurdity of this hypothesis will be demonstrated in the sequel.

The manner in which the yellow fever becomes epidemick, is one of the most vehement proofs that it is not derived from contagion. The first effects of the causes, while they are feeble, are frequently manifested only in slight pains of the head, stomach, back and extremities, and other indications of the operation of the remote cause, all of which are the unerring preludes to more inveterate grades. If the disease were derived from contagion, the more pestilent features would develop themselves at first, as certainly as at any subsequent period; for it is an immutable law of all contagions to maintain nearly an uniform tenor of action, as long as they exist.

The dispersed state of the first cases, renders it at once physically impossible, that the disease should have been propagated by contagion. The pestilent rays do not diverge from a centre to a circumference, but commence at the same time at every point among those who hold no other intercourse than the common atmosphere they breathe. In all instances of contagious diseases, the increment of cases is in the ratio of the bodies to which the contagion at-

taches, and its track is so distinctly marked, that it can be retraced to the first case. The yellow fever has no focus, and, therefore, no pestilent rays are reflected. If this disease were derived from a vitiated secretion, each succeeding case would be as capable of multiplying itself, as that from which it first originated. Contagion, in its true sense, does not lose an atom of its essence during its existence, but unceasingly generates its own similitude, as long as there are bodies to assimilate to its own nature.

The extinction of the yellow fever by frost, shows that the cause exists in the atmosphere, for all contagious fevers are more so in a low temperature. So true is this principle, that many of them cannot exist in tropical climates. On whatsoever essence they may depend, it is volatilized by heat, and thus rendered innocuous. Even the small pox is less contagious in warm weather. The yellow fever is the very antipode of this, heat is the sine qua non of its existence; in heat it originates, by heat it is supported; deprive it of heat and its remote cause is instantaneously annihilated. If a vitiated secretion propagate the disease, and is essential to its communication, it necessarily follows, that in autumn, when our houses are shut, and all matters to which contagion can adhere, or has an attraction, surround us, we are destined to disease. It would be a paradox too absurd for human credulity, to believe that a gaseous emanation from a sick body could cleave to the sails, the masts and spars of a ship, or insinuate itself into the clothes of a seaman in Africa, Asia, or even the West Indies, retain its pristine virulence, and inflict disease and death on our citizens the moment a vessel shall have anchored in our ports. How stands this chimera when opposed to the universal experience of mankind, which teaches us that it cannot be propagated at the distance of two feet in our hospitals? Surely there must be some nondescript Bahan Upas, some Tartarean quintessence, sui generis, hitherto unknown, that can thus flash perdition from the equator to the poles!

The convertibility of the yellow fever into the milder forms of miasmatick disease, argues a common origin in the cause. Almost every practitioner of experience in the malignant bilious remittent of our country, bears witness to this fact. By the proper antiphlogistick treatment, an inveterate yellow fever has been reduced to an ordinary remittent, and sometimes to an intermittent; just as a remittent, in ordinary seasons, is made to assume the form of an intermittent. In the summer of 1797, at Baltimore, the symptoms of dysentery, were gradually commuted for those of a yellow fever of the deepest dye. From the middle of June till the last of July, a time of intense heat and reiterated torrents of rain, the *dysenterick* form of fever pervaded Fells' Point. In August, the rains having ceased, and the weather continuing unusually hot, the dysenterick symptoms failed, till they were lost in the unequivocal characters of the yellow fever. At first a nausea, a red or watery eye, with pains of the back and limbs, all in an inconsiderable degree, accompanied a severe tenesmus with frequent dejections of mucus and blood, without a yellow skin; but as a less humid atmosphere succeeded, the intestinal affection declined, and gradually vanished, till it was obliterated. A fever of a more inflammatory type, with an acute headache, frequent evacuations from the stomach, a burning heat, an obstinate constipation, and a yellow skin, composed the train of succession.* This transmutation is incompatible with the laws of contagion. There cannot exist two general fevers in the same body, at the same time, and the phenomena are to be accounted for, only on the principle of a variation in the remote cause resident in the atmosphere. No adventitious cause of fever can modify the features of the case, if contagion shall have first invaded the nerves. It carries its peculiar character immutably stamped upon it, and marks its sanguinary track wherever it is to be found.

* Doctor Coulter is a living witness to testify to this fact.

The negative of the controversy may be established on another ground, which defies all the machinations, and sets at nought all the visions of theoretick intoxication. It is admitted by all, that the subjects of certain countries are unsusceptible of the yellow fever in our own. In the most malignant and protracted epidemics that have affected us, the remote cause has proved inert to them. The emigrants from the West Indies, and other warm latitudes, especially the native French, have invariably resisted the force of the cause, until a residence of some years shall have assimilated their constitution to the American habit. The immunity from the operation of the morbid cause, is explicable solely on the principle of atmospherick infection. The habitual impression of heat, the constant evolution of miasmata, in their native countries, had rendered them insensible to the exhalations in this. Having resided among us a few years, after the cold of our winters had broken the force of habit, and permitted an accumulation of their excitability, they are rendered as sensitive, and are as exquisitely impressed by the cause, as our own citizens.*

If we reverse this position, and observe the influence of an iniquated atmosphere upon those who have inhabited more northern climes, our position is still supported by general experience. Those who may have recently arrived, are susceptible of the remote cause in the exact proportion to the latitudes whence they came. Those from the north of Europe scarcely ever escape an attack. The subjects of the United Kingdoms of Great Britain are little less sensible to the deleterious cause; and even those from the more northern of the United States, are more liable to the disease than the citizens of the southern and middle states. In 1797, 1800, and 1802, the New Englandmen were always the first and severest sufferers, of our own countrymen, provided they had not spent a summer or two in our city. It follows of

* Making the proper deduction for the abstemious mode of life adopted so generally by Frenchmen.

necessity, that all such persons are doomed to suffer a more malignant and dangerous grade of fever. If the disease had been communicated by contagion, this attraction for one people, in preference to another, would be inexplicable by any known mode of reasoning. There is no contagion that was ever known to spare any race of men that came within the sphere of its action. It matters not, whether the subject be born in the east, in the west, in the north, or the south; whether he be a Christian, Jew, or Musselman, once the poison shall have smitten his nerves, his destiny is fixed.*

It has been asserted, that the yellow fever of the West Indies has prevailed only, or principally during war, which necessarily brings together a greater concourse of men; and that contagion is thus engendered from a *fomes*, a word synonymous with a vitiated secretion, if we are permitted to attach to it any signification in medical parlance. This opinion, imposing as it may appear at first view, is true only in one sense. It is true, that greater numbers have received the disease, in a given time, during war; but this fact militates against the hypothesis it was intended to support: it proves that in time of war a greater mass of men, not inured to a warm climate, were compelled to breathe an atmosphere that teemed with the remote cause of the disease. If we refer to the histories of all the wars, of which the West India islands have been the theatre, either wholly or partially, we will find that the yellow fever has not appeared as often during war, as in the times of peace. Calculate the periods of peace and war, from the first European settlements to this day, and the history of every island in the West Indies conspires to prove, that two-thirds of the epidemick yellow fevers that have infested them, have prevailed in times of profound peace.

But Doctor Chisholm has declared the yellow fever contagious, and as that of the West Indies, (which has prevail-

* I speak of a general rule, which must admit of occasional exceptions.— There is one in some thousands who will not receive the small pox.

*See Lind on Infection for 1/2
argued by the Doctor's note -*

ed time immemorial,) has been, by common consent, declared not contagious, he has manufactured a *new one at Boulam*, and we have now an African and a West India yellow fever. Many of the former advocates of contagion had abandoned the opinion as untenable, but since the epidemick at Grenada, in 1793, they have, (with a few exceptions,) rallied under the banners of Doctor Chisholm, and he is now the luminary around whom all the satellites of contagion revolve. We will test the merits of his doctrine by his own writing. Doctor Chisholm admits that the yellow fever of the West Indies is not contagious; but contends that a contagious fever was generated at Boulam, transported to Grenada by the ship Hankey, and thus propagated to the inhabitants. From the cotemporaneous existence of the yellow fever at Philadelphia, he and his adherents have deduced the conclusion, that it was conveyed from Grenada to Philadelphia. This opinion is corroborated by no facts, but rests on the baseless ground of hypothesis. The character of the fever of Grenada, drawn by Doctor Chisholm himself, corresponds, in all essential points, with that which has always prevailed in the other islands. The yellow fever of the West Indies is now as it was described by Doctor Warren and Doctor Desportes, and always has been since the settlement of the islands by Europeans. The disease has not been more severely nor generally felt, since the pretended importation from Boulam, than it was before. The concurrent testimony of the physicians residing in the islands has established this fact. How did the yellow fever that infested New York in 1791, originate?* Why was it called the dock-fever? It would be as rational for Doctor Chisholm to maintain that it was *exported* thence to Boulam. A brief review of the Doctor's account of the Hankey's voyage, will place this question in a more perspicuous light. "Boulam," says the Doctor, "being surrounded by the sea, en-

* Vide Addoms's Inaugural Dissertation on the malignant fever that prevailed in New York in 1791.

The author certainly has not seen
 in his own mind

joys all the advantages of a free ventilation; and being dry, and not incommoded by any marshy tract, is considered the healthiest spot on the windward coast. It is not inhabited, but occasionally visited by the inhabitants of the neighbouring continent." The island was not inhabited. How then did the Doctor learn that such a disease as the Boulam fever existed in a desolate island? If it were received among his crew by contagion, the vitiated offspring of secretion, it must have been derived from some human being. "This fever," adds the Doctor, "was communicated exclusively by contagion!" The Doctor proceeds to state that the negroes, on this part of the African coast, are ferocious in an extraordinary degree, and even reputed to be *cannibals!* Eaters of human flesh, prowling for man, whom they seized only to devour. It would be absurd to suppose that the crew of the Hankey cultivated an acquaintance with them. The Doctor continues the same style of complaint, and remarks, "from this circumstance, we could erect no accommodation on shore, during the nine months the Hankey laid there, and the intended settlers were obliged to live on board, while the rainy season coming on almost immediately after their arrival, the heat at the same time being excessive, they endeavoured to shelter themselves from both, by raising the sides of the ship several feet, and covering her with a wooden roof."* In the next sentence the Doctor, (unintentionally,) reveals the real source of his disaster: "The confinement of upwards of two hundred persons in the narrow limits of a single ship, in an excessively hot and wet atmosphere, the want of cleanliness, and a depressed state of mind." From this expression it cannot be doubted that the fever was engendered on board. If Doctor Chisholm had determined to denominate the disease from its place of origin, he should have called it the *Hankey fever*. Who, however, superficially acquainted with the effects of putrefaction, in warm latitudes, can doubt the cause of this disaster?

* Vide Chisholm on the fever of Grenada.

Would not an enlightened etiologist be astonished if no such consequence had followed?* The case of the Hankey is not a solitary instance. "The Busbridge Indiaman sailed from England for Madras and Bengal, on the 15th of April, 1792: on the 26th of May she crossed the equator, in 27 degrees west longitude. The mercury ranged from 80 to 86 degrees; the weather was very sultry, with frequent rains. In this state of things the yellow fever broke out," says Doctor Brice, "although we had touched at no port, nor had communication with any vessel."†

Livy‡ mentions a disease in the Roman army, which he denominates by the general term pestilence, and expressly declares that it arose "*Ex colluvie omnium generum animalium in castris.*"

As we admit that in these circumstances the product of putrefaction must have consisted in part, at least, of animal excretions, the favourers of contagion will, no doubt, eagerly embrace the fact, to form an alliance between the yellow fever and typhus; and, perhaps, attempt thence to deduce the identity of their essence. We admit also that animal excretions can act as the cause of fever by becoming putrid *after they are excreted*, in common with the result of vegetable putrefaction. But this does not prove a vitiated secretion, a morbid action of the arteries, by which only contagion can be formed. On ship-board it is always physically impossible that the materials, subject to decomposition by putrefaction, can be either wholly animal or vegetable, and hence we account for the well known fact, that in all fevers on ship-board, in camps, jails, and all other places where a crowd of men are immured in a small compass, we find the character of the disease to depend upon the proportions of

* Nor was the fever communicated from the Hankey to the inhabitants of the island of Grenada. It has been incontestably established that the disease appeared in that island before the ship arrived. [*Medical Repository, Vol. 1.*

† Brice on the Yellow Fever.

‡ Book iv.

animal and vegetable matter concerned in its production, and on the degree of heat. If the occurrence take place in winter, or in any temperature below 70 degrees of Fahrenheit, a fever of a low continued type, called a *typhus*, will be the inevitable result. If the incident happen in a higher temperature, as in the cases of the Hankey and Busbridge, a disease compounded of the symptoms of the tropical endemick and typhus will be the result. If we remove seamen from a ship, and place them on shore, in an atmosphere pregnant with the remote cause of the endemick yellow, or even the milder grades of bilious remitting fever, each succeeding case will more and more assume the aspect of the disease of the place, until the predisposition to typhus shall have been completely lost. Reverse the position, and transfer the landsman thus predisposed, to a ship in the harbour, the crew of which are infected with typhus, and he will be attacked by a disease at first complicated, and every subsequent case will wear a deeper typhus complexion. It has been laid down as an axiom by some, that the causes of these diseases bear no affinity to each other, and that nature has drawn an inviolable line between them; on this point we judge from facts alone, and from repeated observations we judge with sufficient precision. We have witnessed three examples of the mutual convertibility of these predispositions by change of place, and facts abound in medical writings which conspire to evince the same conclusion.* Although human miasmata and vegetable effluvia are equally the result of putrefaction, their action upon the living system appears to be different. Human effluvia would seem to inflict a more poisonous and stupefactive wound upon the nerves, impairing their mobility, and rendering them less capable of high re-action; while that arising from vege-

* Vide Lampriere on the Diseases of Jamaica, vol. 2, page 82; to which we may add, that marsh effluvia, under any circumstances, must of necessity partake, more or less, of an animal nature. Among vegetables there always exist myriads of insects, which undergo the putrefactive process in common.

table decomposition, would appear, not only less deadly to the organs of sense, but calculated to render them more exquisitely sensible. The operation of the former would seem to justify the conclusion that it does not alone, occasion the least disarrangement in the functions of the hepatic system, while the latter invariably molests the operations of the liver. In what this difference essentially consists, we cannot determine in the present state of chymical science. No process has yet been instituted by which we can analyze these elements so far as to mark a definite distinction in the effects of their action on living matter. It is sufficiently manifest, that heat disposes the animal cause to become less noxious, and often inert, while it imparts life and energy to the product of vegetable putrefaction.

The subject may be still contemplated in a different, and perhaps, a clearer light, by comparing the yellow fever with diseases really contagious: but before we can proceed intelligibly, it behoves us to adopt some definite sense of the word contagion. We are to inquire whether the words *contagion* and *infection* are synonymous and convertible terms, or whether they are as different in a philosophical, as they are in a phylological sense. This will be difficult, if not impracticable, unless we revert to their primitive significations. It has been insinuated by some, that contagion is a term of modern invention. This error may be easily refuted by a reference to ancient authorities. Although many late, and all ancient lexicographers use the words contagion and infection as synonymous, in a medical sense, there can be no doubt but they were originally intended, in common parlance, to convey different meanings. It would appear that even the most illiterate among the ancients spoke more correctly than the literati of the present day. The terms *lues pestis*, *contagio* or *contagium*, and *infectio*, will be considered in order.

The word *lues* is probably the most ancient generick term used to express the fact of a disease being communica-

ted from a sick to a healthy body. It was primarily confined to such diseases as were supposed to entail a penalty upon those who contracted them, or to pay a forfeit for some criminal act. Hence the term attaches, with propriety, to *lues venerea*, a disease propagated by the illicit commerce of the sexes. We will show, that although it was first intended to signify a disease communicated by *actual contact*, it was also employed in a looser sense, and at a very early period; of this there are many examples in ancient writers, and unfortunately the true sense has been departed from, and *lues* transferred to those great pestilential visitations, whose causes were even then referred to the atmosphere. Claudian says,

“Hinc hominum, pecudumque lues, hinc pestifer aer.”

Virgil uses the word *lues* to express the opinion that the cause of a deleterious influence, on vegetable life, resided in the atmosphere:

“Arboribusque satisque lues, et lethifer annus.”

The word *pestis*, although now applied in medical phraseology to a particular disease called the *plague*, appears originally to have been applied to any widely extended desolating epidemick from whatsoever cause it might have arisen. The most ancient records of the prevalence of pestilence convey the idea that they were inflicted by the hand of the Almighty, as a punishment for some signal, national iniquity. When Pharaoh refused to liberate the children of Israel, and his heart was so hardened as to hold them in bondage, pestilence constituted one of the seven plagues of Egypt.—Virgil has ascribed the origin of pestilence to the anger of the heathen gods. “*Pestis est ira Deorum Stygiis sese extulit undis.*” The *το θεϊον* of Hippocrates corresponds with the superstitious belief of the ancients, that pestilence was always inflicted by divine authority. It is evident that Virgil’s language alludes to an endemick origin; the words *stygiis undis* admit of no other interpretation. It cannot be doubted that the word *contagion* is a compound of the words *con*, and

tango, taken in the most literal sense. As Doctor Quackenboss* has justly remarked, the term applies particularly to gregarious animals, such as the human species, sheep, and cattle. The social nature, and constant intercourse of these species, is such, that the actual contact of their bodies must, necessarily, be a frequent occurrence. Martial, in one of his epigrams, speaks thus:

“Depascentur oves diri contagia morbi.”

Virgil uses the word *contagium* in a similar sense, when Mellibæus assures Tytyrus that the noxious contagion of the neighbouring flock shall not injure his:

“Nec mala vicini pecoris contagia lædent.”

If the mischief, ascertained by melancholy experience to have arisen from this intimate association, be not a secreted virus, rendered poisonous by the very act of secretion, it must have been an accumulation of matter chymically decomposed in the process of putrefaction. It is sufficient for us to prove that a disease was thus propagated. It would seem fair to conclude, that the ancients received the words *contagio*, *contagium*, and *contages*, in the first sense, before the other, more indefinite, was adopted. We define contagion, a vitiated secretion, brought into contact with the nerves by inoculation; or a morbid secretion, emanating from a sick to a healthy body, and received into the lungs, giving rise, without the agency of any other cause, to its own similitude in a body previously healthy. We propose to illustrate this definition by examples; but, we will first define infection.

The word *inficio*, compounded of *in* and *facio*, signifies, literally, to undo; but it is also used by the best writers to imbue, as with a dye, to stain, to taint, violate, corrupt, or spoil. Whatever made a material change in a substance to which a foreign matter was applied, either in colour or

* Quackenboss on Dysentery.

texture, was said to *infect* it. For these reasons, when the miasma, arising from putrefying substances was exhaled and mixed with the air, the atmosphere was said to be infected. The air we breathe having thus received a foreign mixture, is rendered unfit for healthy respiration, and is said to be infected. The atmosphere thus perverted from its healthy destination, and received into the lungs, *infects* the body before healthy. Whatsoever was infused into that which was previously salubrious, is said to *infect* it, or so to alter or change its qualities, as to unfit it for any salutary purpose. Hence the reflection cast, by the poet, on unnatural stepmothers:

“Pocula si quando sævæ inficere novercæ.”

In these senses, derived from the Latin, the word *infection* has been employed, and received, in a popular acceptance, from the invention of the English language to this day; but was not appropriated as a medical discriminative appellation till the distinction between a vitiated secretion, the result of living vascular action, and that of putrefaction in dead matter, was suggested to modern etiologists, in attempting to explain the causes of epidemics. From this obvious difference, in the sources of the two great causes, which originate the greater part, and in the opinion of some, all epidemick fevers, it becomes necessary to draw a line of demarcation between them. It would be difficult, if not impossible, to invent words that would distinctly express the necessary discriminations. Those *infecting* matters, the consequence of animal or vegetable decomposition, might be aptly called the *sarcoseptick* and *phyto-septick* products, and would correspond with our views of the origin of typhus and all the tribe of intermitting and remittent fevers, from the mildest ague to the most inveterate yellow fever. But there is still a desideratum, something to mark contagion in its true character, the change wrought by the very process of morbid arterial action. As every poison, thus assimilating to itself a part of the living matter on

which it acts, exerts a peculiar action, we call it *specifick*, because it is succeeded by a train of symptoms, *sui generis*. It follows, from this notorious fact, that a name discriminating each of them, cannot be appropriated with certainty, because we cannot, by any known mode of philosophizing, demonstrate their respective essences. If the chymick art should ever succeed in detecting their elements, and rendering them cognizable by its laws, we may then invent terms sufficiently expressive of all their qualities. Notwithstanding this deficiency of conception of the essential qualities of secreted animal poisons, we might perhaps contribute something to a clearer understanding of the *modus agendi*, of the different causes inducing contagious diseases, by designating such as are the result of morbid vascular action, by the generick term *toxicopoetick*, or poison engendering agents. As it is well ascertained, that in fevers proceeding from putrefaction, none of the secretions are capable of re-producing their own similitude, and that those fabricated by the action of diseased vessels always can, and generally do, multiply in the ratio of the number of surrounding healthy bodies; some such distinction is indispensable.

If we search the writings of the ancients we will find, that although the popular sentiment was the literal contact of parts, when they spoke of contagion, the physicians recognized no distinction between *person* and *place*, when they treated of fevers. If we except the writings of the Arabian doctors, Rhazes, Avicenna, and Avazores, who treated expressly of the small pox and measles, we find no well defined account of the character of contagious diseases. Galen is the first physician who intimated that other fevers were contagious. He speaks of ophthalmia, as a contagious disease, and acknowledges he fled from Rome, and returned to Pergamus, through fear of the contagion of the plague; but no where takes any distinction between the place in which the disease prevailed, and the bodies of those who had it.*

* Lib. 1. C. 2. De differentia februm.

Aretæus in his Therapeuticks, asserts without reserve, that the elephantiasis is as contagious as the plague.

Aristotle mentions* the plague to be contagious, but like Galen, Aretæus, and many others, does not define it better than the favourers of the opinion at this day.

Notwithstanding the epithet *contagious* had been employed time immemorial, to signify almost every fever which could be contracted by being in the place where it prevailed, it never was applied, in a personal sense, to any general disease except the plague and the eruptive fevers, till it was suggested by Hieronimus Fracastorius; and no man of a sound discriminating judgment will decide, that his opinion was conscientiously expressed. Every circumstance connected with the case evinces a dereliction of principle in the author, the consequences of which are as deplorable as its propagation has been general. This futile hypothesis was the offspring of a political incident which originated in the conflicting interests of the rival potentates, Francis I, of France, and Philip V, of Germany. During the session of the memorable council of Trent, in 1547, a spirit of dissention arose among the members of that august body. The question whether the council should continue its session at Trent, or remove to the city of Bologna was warmly agitated; and, for some time, the scale appeared to preponderate in favour of the former; but the interest of Pope Paul III. finally prevailed, and the council was accordingly translated to the latter.† While the issue of the controversy was doubtful, and the Pope considered the completion of his views as problematical, among the various other means employed to ensure success, he found, and enlisted in his service, a zealous and ingenious advocate in Hieronimus Fracastorius, a popular physician at Bo-

* Prellem. 7. Sect. 1.

† The decree for the removal of the council from Trent was passed on the 11th day of March, 1547, entitled,

“De translatione Concilii sacrosancti et Œcumenici Tridentini Decretum die XI Mensis Martii MDXLVII.” Acta Concilii, page 69.

logna. It happened that in the most critical period of the contest, a fever appeared at Trent, which although it occasioned little or no alarm in others, the occurrence was eagerly embraced, by the doctor, and wielded as a most powerful engine against his antagonists, and in favour of the Pope's interest. This disease, which would seem from his own account to have been a common *typhoid* fever, was painted in the most terrific colours his imagination could invent, and made the basis of a work which represented it, as *contagious* as the small pox, one which none could approach with impunity. He represented it as having a peculiar attraction for noble blood, and thus struck a panick through the council, overwhelmed the emperor's delegates and the Spanish bishops, and thus the Pope's party triumphantly sat in council in his own city of Bologna. This stratagem, though evidently a *russe de guerre*, is a remarkable example of the incalculable consequences that sometimes flow from the most trivial incidents. The delegates to this illustrious council were no less dignified as philosophers than distinguished as theologians; they were powerful as men, independent of that influence with which their sacred characters clothed them; but they were not *medical* philosophers. They returned home deeply infected with this *fatal* error, which has slain its thousands and tens of thousands, and thus perpetuated it throughout Europe. Previous to the dissemination of this hypothesis of febrile contagion from this prolific source, the nations of Europe knew no fears from the imaginary introduction of epidemick diseases, except the plague and the small pox, but it follows as a necessary consequence to the propagation of such a sentiment, that these commercial impositions, under the several forms of *quarantine*, *pest-houses*, *lazarettoes*, and even *bannishment*, followed in the melancholy train of accumulated aggravation, and still continue, to the disgrace of civilized man, and often to the infinite embarrassment, and sometimes the ruin of the enterprising and industrious merchant.

If we apply the doctrines we have attempted to inculcate to some other diseases, we may arrive at the same conclusions by a different mode of ratiocination. As the laws imposed on contagious, and non-contagious diseases, present phenomena at variance with each other, a comparison between them, with some experiments and just deductions from both, may present the subject in a different attitude. We will proceed by a mode, as exemplary as the nature of the subject will admit of.

The *lues venerea* and *psora*, are appropriate examples of contagion in its pristine, literal sense, because they are not communicable, unless by actual contact, and in a palpable form. No effluvium from either of these secreted poisons can re-produce them. Applied to the cuticle, they both erode it, and are thus communicated by inoculation, in the proper sense of the word. The small pox belongs to another description of contagions, and differs from the examples cited. Notwithstanding it is a general disease, excites high phlogistick diathesis, and often exerts a deleterious influence on the system, the virus secreted will not erode the cuticle,* and it becomes necessary to remove it before inoculation can be effected. It can, nevertheless, re-produce itself by an effluvium emanating from the diseased body, when received into the lungs, although it is so subtile as to evade the keenest opticks. All the local contagious diseases belong to the first, and the general to the latter class. The local are capable of being received more than once, the general contagious fevers but once. These two axioms are laws of nature, as universal, as unerring and inviolable as the laws of attraction or gravitation. There is not, never has been, nor ever will be, a general contagious fever, that can be more than once tolerated in the same human body.

* When Lady Mary W. Montague introduced inoculation into Great Britain, she thought the Turks succeeded in communicating the small pox by the simple imposition of variolous matter upon the cuticle, but this opinion is justly exploded. (*Vide Lady Montague's Letters.*)

Every contagious disease could be multiplied by inoculation, if we could devise means of concentrating its peculiar essence, and rendering it so gross as to become subject to the senses of touch and sight.

There is another variety of fevers reputed contagious that obeys laws different in some respects. The *rubeola* and *scarlatina*, seem to bear some affinity in their laws to *variola*, both from their eruptive character, and from the fact that they generally render the system unsusceptible of the impression they make forever afterwards. Both these fevers are admitted to hold their primary causes in the atmosphere, and are as generally admitted to be contagious; nevertheless there is something exceedingly equivocal in their generally reputed contagious properties. There is always much difficulty in determining absolutely whether a disease be contagious or not, when the cause of that disease is diffused through the air we breathe. That both these diseases are less contagious than small pox, is a fact well ascertained, and it is the general opinion, that scarlatina is less prone to multiply itself than measles. The peculiar fetor expired from the lungs in those diseases, although not precisely the same in each, is analogical proof that they are both imparted from that source, although it may be questioned whether the fetor, in scarlatina, proceed from the lungs or the fauces. It has been a received opinion that the measles and scarlatina can be propagated by immediate contact with the nerves, as in the small pox, though with less certainty. The opinion of Dr. Home would seem to favour this opinion, as it respects the measles, but we must deduct something from the validity of the Doctor's conclusions, when we reflect that his experiments were performed in an atmosphere infected with the cause. We also have, on two occasions, instituted a similar series of experiments, with the cuticle, tears and blood of morbillous patients, but never could propagate the disease in a given time, correspondent to that law which is imposed upon every disease

derived from inoculation, and therefore, incline to the opinion that the diseases which followed were derived from the general constitution of the air. The measles observe almost uniformly other laws, at variance with small pox, and other contagions. They appear periodically, nearly once in five years, generally early in January, in our country and in Europe, and as uniformly disappear about the beginning of summer. All contagious general diseases, (except the *cynanche parotidæa*,) are less disposed to multiply in warm weather. Solitary cases of measles have often been introduced from the contaminated atmosphere of a neighbouring state into this city, but on no such occasion have they become epidemick, nor have they been thus communicated to any individual within the sphere of my observation. It would appear from these facts, that a general diffusion of the cause through the atmosphere, is essential to their multiplication.*

X The *pertussis*, observes laws materially different from any other disease supposed to depend upon a vitiated secretion. The cause, although obviously resident in the air, is inscrutable, and we can demonstrate its existence only by its effects on the lungs. It seldom alone excites high inflammatory diathesis, but by its action on the organs of respiration, probably causes a virus to be secreted, volatile in the extreme; and, although not cognizable by any of the senses, holds a singular elective attraction for the system of vessels in which it was generated. It adheres to the seat of action longer than the vitiating principle of any other fever, but is inert as to the lungs of all who have experienced its action, forever after. It invades the system at all seasons, but does not commence its progress as an epidemick, indifferently, at all seasons, like the mumps.

The *cynanche parotidæa* is an affection of the parotid

* In September, 1814, the Pennsylvania militia introduced the measles into this city, but the disease was not propagated among the Maryland and Virginia troops.

glands arising from a peculiar vascular poison, occasioned by the morbid action of these glands, from a similar poison. This disease arises alike at all temperatures of the atmosphere, and no degree of heat, or the want of it has the least influence on its contagious character. The virus secreted and poured through the parotid duct into the mouth, (like some others) is so ethereal that it cannot propagate itself, unless during the near approach of those who never suffered its action. It is necessary that the effluvium should be received into the mouth, before it can re-produce itself, and thence the conclusion has been drawn by some, that the *mumps* are not contagious.

There are other fevers contagious, in the estimation of many eminent men, such as cynanche maligna, and ophthalmia. The former is no more entitled to the epithet contagious, than the other species of the genus cynanche. It is a typhus grade of fever, with anginose symptoms. The reflections we propose to offer on typhus, will be an ample refutation of the sophism that there is any vitiated secretion in that disease which is known by the unscientific appellation, putrid sore throat. We might, with as much propriety affirm, that the putrid alvine excretions, in a bilious fever, were capable of communicating contagion, as the serous excretions from an ulcer of the throat. We find hundreds of examples to prove, that only a solitary individual, of a numerous family, has experienced an attack of this disease. With respect to the latter, it would be superfluous to assert that we have no such disease in our country as a contagious ophthalmia. It has been declared, by high authority, that the ophthalmia of Egypt is contagious, and that it was communicated from this source to the British troops, during the expedition to that country, in the late war. It would rather appear, from the best digested tracts, that the disease was derived from the influence of a climate operating on men never before exposed to it.

The plague is the only remaining fever to be considered.

I know nothing of it except from books. Although I have no hesitation in expressing my *opinion*, that it is not contagious, I will not affirm the negative of this question. I will not imitate the Army Medical Board of Great Britain, by deciding imperatively respecting the character of a disease I never saw. Few, if any, of that learned body ever saw the *yellow fever*, and can know it but imperfectly, only by tradition. They have pre-judged the question, and stigmatized us as illiterate and inexperienced, who have served campaign after campaign in the field of observation and experience. As well might the raw recruit, who "never set a squadron in the field, or the division of a battle knew," compose memoirs on military tactics.

But our antagonists maintain the position that the yellow fever is a species of typhus. To meet them on their own ground, we will prove that typhus has no better pretensions to the character of a contagious disease than any other, the result of putrefaction.

As this disease is reputed contagious by almost every physician of Europe, as well as by a majority of the faculty in the United States, we anticipate the indulgence of those to whom the subject is familiar. The term typhus was used by Hippocrates, and probably invented by him. It is from the word $\tauύφος$, *fumus*, and this substantive is derived from the verb $\tauύφω$, *inflammo*, *fumum excito*. From these derivations it is probable that the learned father of physick did not intend to restrict the meaning of the word to diseases of feeble vascular action, and that the moderns have made an unfortunate attempt at refinement, by innovating on his meaning. He did not employ the word to designate a genus or species of fever, but used it to mark a particular condition incident to many fevers, and we find accordingly, in various parts of his writings, that in all fevers accompanied with a *stupor*, or *coma*, he introduced the substantive in a metaphorical sense, because it admits of the translation in an adjective signification, when applied to fever; *smoky*, *thick*,

cloudy or *stupid*. From this origin the term has acquired a despotick influence in our nosologies, and is now *forced* to designate a class of fevers that constitute the most formidable phalanx in the long and black catalogue of diseases. Notwithstanding the nosologists have stamped all fevers of low vascular action with the name of typhus, there are several manifestly diversified in their characters, which have received this appellation. The disease known by the name of the cold plague, in Europe, is described by authors as a typhus fever, on account of the weak vascular action that constitutes its principal feature. Of this precise character is the fever that has prevailed of late years in the eastern and middle states of our country. It is reduced almost to demonstration, that a humid atmosphere, and a deficiency of heat, constituted the remote cause of this disease. It has not pervaded the more southern section of our country, and is unknown in all warm latitudes. In jails, hospitals, camps, and on ship-board, in cold latitudes, what is called typhus, sometimes arises from the same causes, but is often modified by the accumulation of animal excretions necessarily inseparable from such places, and the place has given a name, though one not altogether characteristick of the disease. It has been described by medical writers, under the several denominations, *jail*, *hospital*, *camp*, *ship*, *putrid* and *petechial* fever, with some others, no less descriptive of the real cause. The condition of the air in such situations, and the effluvium emanating from bodies long confined in them, have often imparted the cause of fever to those unaccustomed to them, even although none of the persons confined indicated a symptom of the disease; and whether the fever existed there, or not, it has always been imputed to *contagion*, a peculiar secretion, the exclusive manufacture of febrile action.*

* Great numbers of men brought suddenly together from different quarters, especially in armies, often generate typhus, although none of them may have been previously sick. When the New England troops were first incorporated with the Virginia and Maryland new levies, at Brunswick,

This secretion, supposed to be peculiar, and imagined to be as pernicious as that of small pox, is thought to be generated in the extreme vessels, and either deposited on the surface of the body, or to arise from it, in a form so subtile as to evade the senses. The cause is not cognizable by the senses, but that it is not a secreted poison, is demonstrable by the notorious fact, that no matter on the skin will re-produce the disease in a healthy subject. We have so often performed this experiment with the secretions of the skin, under all the most aggravated states of typhus, that we defy all remonstrance against the facts. Such experiments, with similar results, cannot be predicated of any contagion. Every one, that has yet been discovered, obeys the uniform law: when introduced into a part, organized similarly to that whence it came, it never fails to generate its own similitude. The whole scale of animated nature cannot produce a single exception. We arrogate nothing to ourselves, when we assert that facts evince the impossibility of the disease being propagated by contagion, and that an abundance of them have occurred within our own observation. We can but persuade ourselves that some of them will render further theoretick reasoning a work of supererogation. In June, 1798, I was appointed, by the Secretary of War, to take charge of a corps of United States' artillerists in this city. They were quartered, during the summer and autumn, in spacious well ventilated barracks, in the western precincts; but as these quarters could be held no longer, on the 1st of November they were removed to the city. It was expected the corps would be transferred to Norfolk in a few days, and an old wooden building was rented for the temporary reception of the men, which was not large enough to accommodate half the number that were crowded into it. The commanding officer, major Bruff, was at Norfolk, lieutenant Muhlenburgh was absent, and the junior lieutenant,

New Jersey, in 1778, the camp fever arose and spread rapidly among the latter.

Heath, was sick. In this state of things, a general relaxation of discipline ensued, under the command of an orderly sergeant, whose orders were seldom obeyed. Thus crowded together, in weather unusually cold, and uncommonly wet, any amelioration of the condition of the men was impracticable. The house could not be scoured, nor could its contents be washed for want of dry weather. Thus situated, and detained much longer than had been anticipated, on the nineteenth day after their removal, three men were seized with typhus. It commenced among those who were removed from the former quarters, and it invariably happened that the newer the recruit, the greater length of time elapsed before he became infected. On the 18th of December the major arrived in Baltimore, and found 120, out of 166, on the sick list. I immediately explained my views, and a general purification was ordered and promptly executed. The floors and walls were scoured with *hot lie*, and every article of clothing, except hats and boots, was scoured with soap, and dried in the open air. The soldiers remained in the same quarters till after the beginning of the new year, and recruits were admitted almost every day, but obedience to orders was strictly enforced. The quarters were improved in no other respect, and no other change was made but the simple act of removing the matters accumulated on the bodies and clothes of the troops. This general purification was performed on the 21st and 22d of December, and not a man was attacked afterwards. The sick convalesced rapidly, although previous to the purification, no means availed in removing the disease. The deleterious influence of the atmosphere of the house, fastened upon the brain and nerves a deadly poison, that resisted the whole routine of stimuli both durable and diffusible, and evacuations were seldom admissible.*

* Two recruits were admitted in November, in the incipient state of bilious remitting fever. For several days the diseases of both maintained the remittent type, and inflammatory grade, such as marked the disease on the

We appeal to the reason and candour of the most enthu-
 siastick votary of the doctrine of contagion, and ask him
 whether it be possible, consistent with any known mode of
 reasoning, for this fever to have been thus suddenly extin-
 guished, if it owed its origin and procreation to a vitiated
 secretion? Has any alkaline salt ever been known to arrest
 the morbid action of a contagious fever, even applied di-
 rectly to the body itself? No pathologist will answer this
 question in the affirmative. In the case of the soldiers it
 was applied only to the bed clothes, and the wearing appa-
 rel of the whole corps, and to the walls of their apartments.
 If the toxicopoetick process was still going on in the vessels,
 those subsequently admitted should have received the dis-
 ease, as certainly as those who had previously contracted it
 from a similar source. The action of the extreme secretory
 arteries was not cut off, nor even suspended by the act of
 purification.

It has been intimated by some, of high repute for medical
 erudition, that perhaps the genuine typhus, such as pre-
 vails in Europe, (especially in G. Britain,) is not indige-
 nous to our country. We have yet to learn that the elements
 are not the same on either side of the Atlantick, and if we res-
 pect the opinions of those who have seen and treated the dis-
 ease in Great Britain and Ireland, as well as in these United
 States, we may safely affirm, they arise from a like cause,
 and differ in no essential point. We are not constrained to
 rely solely on the authority of others to show that the typhus
 of Europe is not contagious. In November, 1799, the brig
 Mercury arrived at this port from Cork; her crew was com-
 posed of passengers of various descriptions, amounting to
 forty-four, exclusive of the officers and ordinary seamen.
 Twenty-three of this number were confined by typhus when
 the ship arrived, some of whom were indisposed and confin-

Eastern Shore of the Chesapeake, where they had received the remote
 cause; but these characters gradually faded away, till they were lost in the
 more prominent symptoms of genuine typhus.

ed before the brig sailed from Ireland; six had died on the passage, and all who were sick were removed on shore, and were admitted either into boarding houses, or received among their friends in private families. Nine of the twenty-three died on shore, having been nearly exhausted before they arrived. Although every sick man on board was received on shore with that genuine hospitality for which the sons and daughters of Hibernia are so distinguished, not one of them had occasion to lament the consequences of their disinterested and noble philanthropy. If the disease could have been communicated, some one of the hundreds by whom the sick were visited, and more especially those in the families they lodged must have contracted it. It has been objected to this, and other corresponding facts, that the air of Baltimore was too pure to become the vehicle of contagion; or, in the language of others, to be contaminated by the *fomes* proceeding from the bodies of the sick. This word should be banished from the vocabulary of medicine; it is too indefinite to convey any distinct signification; it may be employed, with great propriety, to express the force or power of any other agent concerned, directly or indirectly, in the causation of fever. In the sense it is employed, by some of the votaries of contagion, it is intended to convey the idea that, in contagious diseases, something emanates from the body which has the capacity of assimilating the atmosphere to its own poisonous nature. This is what has been figuratively styled, by others, "*inoculating the atmosphere,*" a misplaced figure, one of the evolutions of a mind undisciplined in the common principles of chymistry. The Supreme Architect has constituted the atmosphere we breathe of different parts, but in a state of chymical combination, difficultly separated by chymical and mechanical means, and never, except in limited portions, altogether unimportant in the general economy of nature. If this *fomes* can assimilate a cubick inch of atmospherick air to its own nature, by the same law it must necessarily multiply *ad infini-*

tum. Any of the causes of fever may float in the atmosphere in a state of simple mixture with it, but analyze it and it is still the same. Will those who sport such phantoms admit that the atmosphere and contagion are the same, that an animal secretion inimitable by art, and the effluvium of foul linen, or a marsh, are homogeneous bodies? They are reduced to this dilemma, or their theory is inconsistent. Is there any connexion or similarity of nature between an animal poison and atmospherick air? Can animal matter make such a change in oxygen, azote or carbonick acid, as to assimilate them to its own nature? Atmospherick air acts upon all animal matters, but the power is in the air, not in the animal matter. The animal matter is changed by decomposition, and resolved into its original elements or dissipated. If the atmosphere could thus receive the leaven, and commence a change of its vital properties, it would become irrespirable in the ratio of its progress, till all animal nature would languish and die. The proper sphere of the operation of animal poisons is living animal matter itself; and when it has once been fabricated under the action of a morbid secretion, it reproduces its own specifick nature. If it does not effect this, it does nothing, and therefore is not contagion. We will adduce the authority of the British writers themselves, to prove that typhus has been propagated from sources where there could have been no contagion; and we will select, from a variety of cases, that which has been so frequently and so triumphantly quoted to establish the contagion of typhus. The two very memorable examples of infection at the Black Assizes, at Oxford, in 1577, and the Old Bailey, in 1750, are well adapted to our purpose. As the principle is the same in both, we will prefer the latter, because it is less remote from our own time, and because it is more impartially narrated by a man who was not a physician, and who, for that reason, was partial to no theory.* An abstract of the more promi-

* Foster's Crown Law.—Folio edition, 1762.

ment parts of the report will suffice. The prisoners, who had been confined in Newgate, were brought into court covered with rags and filth, meager and squalid in the extreme; *but not sick, for there was no disease in the prison.* During the trial, which lasted two or three days, they stood between the judges and the window, where the current of air sat directly on the bench, as well as the jury, sheriff, and a part of the spectators. The bench consisted of six persons, of whom four died in a few days; sir Samuel Pennant, the lord mayor; sir Thomas Abney and Baron Clark, judges; and sir Daniel Lambert, alderman; three of the counsel; one of the under sheriffs; several of the Middlesex jury, and many of the spectators lost their lives by the effluvium from the prisoners, while the London jury, and all those to the windward of the pestilent effluvium escaped. May we be permitted to ask in what this pestiferous emanation from bodies not diseased consisted? Not in contagion, the product of diseased vascular action, because it would have been physically impossible for this process to have been effected in animal matter, and no sign of disease to have been discerned nor felt. The very act of secretion in the extreme vessels is itself a fever, and before it can commence, much less be perfected, some of the functions must have been deeply implicated. Can it be possible that a poison so virulent as to smite the judges with death, blast the jury, and poison all those within the sphere of its action, should have been secreted in men, every function of whose bodies was unimpaired and unmolested?

If it be proved that typhus is not contagious, or even rendered questionable, it follows of consequence, that we doubt the capacity of yellow fever to propagate itself. If it is contagious, the secretion by which contagion is generated, must reside in some of the secretions. Experiments fairly instituted, and honestly conducted, have invariably eventuated in demonstrating the innocuous quality of all the secretions. The effluvia from the lungs are innocent, because the disease has never been communicated in our hospitals,

or other publick receptacles of the sick. It is almost nugatory to assert, that no poison can be received into the circulating fluids with impunity, and it only remains for us to show that it cannot be communicated by inoculation, by any of the secretions, that they are inoffensive when brought into contact with the nerves. During the prevalence of the yellow fever in this city, in the years 1797, 1800, and 1802, we proposed and executed several experiments adapted to the question of contagion. On the 20th of September, 1797, having been called upon to visit a man in the act of dying, covered with perspirable matter, I applied a piece of muslin to his body till it become saturated, and in this condition, half an hour after, bound it around my head at bed time. The fetor was nauseous in the extreme, and occasioned a transient sensation of sickness of stomach; but, being languid from excessive exercise during the day, a profound sleep succeeded, from which I did not awake till seven o'clock the next morning. I experienced no further inconvenience.* In 1798, a few sporadick cases occurred in Baltimore. I inoculated myself with the perspirable matter that adhered to the skin of a patient in the last stage of yellow fever, but experienced no other effect than that which followed the punctures made in both arms. As the few cases that occurred this year, assumed an uncommonly malignant aspect, and many of them were accompanied by inguinal buboes, I availed myself of the occasion to inoculate myself with the matter formed by suppuration. On the eleventh of October, I inserted the matter in both arms, taken from the groin of Mr. Rector Lowe. A slight circumscribed redness appeared about twenty-four hours after the operation, and continued nearly stationary for four days. As no irritation proceeded from the punctured parts, and the rubefacience evi-

* A similar experiment was made by the late philanthropick but unfortunate Doctor Valli, at the Havanna, in 1816. Although he had breathed the atmosphere of the place in which hundreds had died, his death was ascribed to contagion from the experiment.

dently declined on the fifth day, I concluded that the local appearances ought to have been ascribed to the puncture, or the acrimony of the pus.

It has been suggested, that as the stomach is one of the principal organs invaded by inflammation in this disease, and as the black vomit would appear to be a secretion from that organ, that the disease might be reproduced by receiving this secretion into a healthy stomach. The experiments of Doctor Ffirth, have decided that this hypothesis is visionary. He swallowed the black matter in the state it was ejected from the stomach, but with perfect immunity from disease. That this fluid cannot propagate the disease when brought into contact with the nerves of the skin, we have ascertained by reiterated experiments.

It has been argued by some, that inasmuch as the plague has been said to have been communicated by inoculation with the blood, the yellow fever might probably be propagated in the same way. We have no well attested facts to prove that the plague ever has been thus propagated. For reasons already assigned, the opinion is so repugnant to a general law, that we cannot regard it. If the blood in the small pox cannot communicate that disease by inoculation, no other disease is entitled to the epithet contagious through that medium. The opinion is one of the rotten excrescences of the humoral pathology. We have repeatedly attempted this mode of communication, and have never been disappointed. There is nevertheless a conclusion fairly deducible from the appearances of the blood in this disease, and of those who reside long in the atmosphere where it prevails, that imposes an insuperable objection to the doctrine of contagion. It suggests a palpable distinction between a disease from atmospherick infection, and that which is the offspring of contagion. In September, 1800, a fact was daily obtruded upon the observant practitioner, which although it had been long familiar to me, had not been duly estimated. It was remarkable, that in all cases in

This blood is communicated by the mouth of the blood

which it was deemed expedient to bleed, the blood wore the same general appearances. After a separation had taken place, the serum assumed a yellow shade, often a deep orange, and a portion of the red globules was invariably precipitated. It occurred to me, that if the remote cause resided in the common atmosphere, the blood of all who had inhaled it a certain time, would exhibit similar phenomena. It accorded with the pathology I had conceived, to conclude that all who lived in an atmosphere so inquinated, were constantly predisposed, and that an additional or exciting cause only would be required to develop the symptoms in form. To ascertain the appearances of the blood in subjects apparently in good health, I drew it from five persons who had lived, during the whole season, in the most infected parts of the city, who were to every external appearance, and inward feeling, in perfect health. The appearances of the blood could not be distinguished from that of those who laboured under the most inveterate grades of the disease. As this experiment might have been considered inconclusive, unless the blood could be compared with that of those who lived in a purer atmosphere, remote from the evolution of miasmata, I selected an equal number of persons who dwelt on the hills in Baltimore county, and drew from each of them ten ounces of blood. The contrast in the appearances was so manifest, that no cause for hesitation remained. There was neither a preternaturally yellow serum, nor a red precipitate; the appearances were such as we find in the blood of healthful subjects. A young gentleman having returned from the western part of Pennsylvania, on the 10th of September, in good health, I drew a few ounces of blood from a vein on that day; it discovered no deviation from that of other healthy persons. He remained in my family till the 26th of the month; and, on that day, I repeated the blood-letting. The serum had assumed a deep yellow hue, and a copious precipitate of red globules had fallen to the bottom of the receiving vessel. Of the six persons whose blood

assumed those indications of the remote cause, four were seized with yellow fever during the epidemick; the other two escaped any formal attack, but complained occasionally of head-ache, nausea, and other nascent indications of disease. Hundreds who were not confined, and who never took medicine, experienced the effects of the general cause, under a variety of forms, such as nausea, giddiness, head-ache, constipation, a pale or yellow face, tinnitus aurium, pains in the extremities, and some other light shades of incipient indisposition. In some these were premonitory of a formal attack, in others they vanished, leaving the subject in his usual health. Many were listless, complaining of universal languor, indisposed to muscular exertion, yet did not surrender to the disease. They were neither sufficiently indisposed to be placed on the sick list, nor well enough to pursue their ordinary occupations. May we be permitted to ask of our antagonists, a rationale of those phenomena consistent with the *modus operandi* of contagion? If the cause can pass out of the body without producing the disease, the fact at once draws a line of distinction between infection and contagion, that the unerring laws of nature will not permit to be violated. If the matter of contagion once impinges on the nerves, disease, in all its parts awaits the subject on which it acts, and his destiny is fixed. In the operation of contagions there is no medium, *semina sown in embryo multiply in incalculable progression*, till their influence is arrested by art, or death; unless in the few instances in which the energies of the system resist the morbid force, and permit the vital functions to be restored. This position is true of all contagious fevers, and will avail us in accounting for the otherwise inexplicable fact, that no contagious fever can be effectually impressed, a second time upon the same body. The first assault of every such disease, by an universal law, (through the goodness of the Almighty,) unfits the subject for a repetition of the same mode of action, and is a guarantee for life. Can this notorious fact be pre-

licated of the yellow fever? If the visionary hypothesis, that this disease could be impressed upon the same system but once, were founded in truth, I might not have been doomed to have lamented a shattered constitution before the meridian of life. In August, 1795, my own was one of the few sporadick cases that occurred in Philadelphia, and was treated by my illustrious preceptor Dr. Rush. In July, 1796, I suffered a more formidable assault, and was again restored by the same. In September, 1800, I experienced a still more inveterate grade of the disease, then epidemick in this city, and was safely conducted to health by the skill and unremitted attention of Dr. Alexander. There are even some instances of two attacks of yellow fever in the same person, during the same summer and autumn, some of which I have treated. It would be superfluous to pursue an hypothesis, long refuted by the experience of my countrymen. The best commentary, on this sophism, is written with the tears of the widow and the orphan, of every seaport in the union north of Charleston, South Carolina.

If the facts we have adduced, and the reasoning we have deduced from them be admitted, we can but lament, that a practice so repugnant to them, so hostile to the interests of humanity, should still deform the policy of our country, and stain the annals of the republick. There must be an egregious error somewhere, and it will ever be vain for the philosopher to "trim the midnight lamp," for the philanthropist to deplore, or the orator declaim against error, sophistry, and their consequent oppressions, while the remedy for all the evils is wrested from the hands of the philosopher, and committed to those who can draw their conclusions only from their prejudices, their fears, or those who find it their interest to deceive them. In every commercial city, the influence of the mercantile character imparts the tone to the legislature on the subject of pestilence. Commerce is the monarch of the nation, and has always played the perpetual dictator to a heterogeneous mass of legislative

materials, incompetent to frame or prosecute any system of their own. Such men naturally fall into the ranks of any leader, and follow suit in all his movements.

We will take a cursory view of the train of consequences that follow this fatal opinion; one that hangs like incubus on our commerce, and strangles the vitals of enterprise. In a commercial view of the question only, an exhibition of the laws of the states of New York and Pennsylvania, would be sufficient for our purpose; but we must take some notice of the private calamities that flow from the belief that every body, labouring under the yellow fever, is the focus of contagion, reflecting the rays of a deadly disease upon every surrounding living human being. Such an opinion can but repress those feelings of kindness and compassion, which are essential to the comfort and safety of the sick. It deprives the unfortunate patient of the first and most necessary offices of humanity, and bereaves him of every hope. So vehement, nay irresistible is the attachment to life, that the dread of contagion dissolves the ties of consanguinity, and leaves the wretched sufferer, a victim to the forlorn chances of attention from the venal and mercenary. When the victim to this vulgar superstition awakes from his delirium, and finds himself deserted by all who were nearest his heart, and deepest in his affections, his mental energies are depressed, his vital powers impaired, and despair succeeds. Nor is the opinion without its morbid influence on the friends, attendants, and all others who live within the sphere of action of the cause. The debilitating effects of fear, increase the predisposition under which all such persons constantly exist. Gloomy as this picture may appear, it is not highly coloured; we represent nothing we have not seen; and, although the casualties of the elements may favour us for a time, these tragick scenes will ere long be repeated, unless we can awake from the lethargy imposed by habitual superstition, and absolve ourselves from the spell of false philosophy.

If we contemplate the consequences of the doctrine of contagion in a national view, they present such a multiplicity of vexations, solitudes, embarrassments, horrors, and cruelties, that it is difficult to decide, whether compassion or indignation is to predominate in the pursuit. When we behold the train of monuments reared to ignorance, under the odious and detestable forms of *quarantine*, *pest-houses*, *lazarettoes*, *imprisonment*, *finer*, *forfeitures*, *exile*, and even *death*, the mind feels an "inward horror," and instinctively asks the question, what is the boasted reason of man? A brief review of some of the principal quarantine establishments of Europe, with those of our country, will be the best commentary on the baseless theory on which they are all erected.

The origin of quarantines, the sources of so many evils, is to be sought for in the history of the crusades. When the European shores of the Mediterranean were assailed by the barbarians, the invaders were supposed to have carried with them the *fomes* of plague. Whether it was thus introduced or not, the universal belief, that it could be propagated by contagion only, necessarily suggested some means of protection. Notwithstanding the long lapse of time since these means of self-preservation were established, it is evident, from the forms under which they still exist, that neither the progress of civilization, nor the improvements in science, have effected any amelioration in their provisions, or rendered them more salutary in their results. As it regards the nations of Europe, "the pestilence that walked in darkness," in the days of the prophets, walketh in darkness still. To this benighted system there will be no period, while men are taught to cast their eyes afar off, to distant regions, to seek for that cause which is engendered in their own bosoms, and inspired at ever breath:

Among the restrictions imposed by the quarantine regulations of Europe, those of Italy are the most comprehensive in their object, and rigorous in their application. They

may be considered as an epitome of the whole continental policy, on the subject of contagion; for, in Spain, France and Portugal, they vary only in some unimportant details. The evils emanating from the prevailing systems in Italy proper, the Austrian territory, and the dominion of the Pope, may be classed under the following heads:—the expense to the nations by which they are instituted; the embarrassments to foreign commerce, and all who visit the country for business or information.

Trieste, near the head of the Adriatick, is the most remarkable for its formidable and extensive arrangements against the introduction of contagion. There are two enormous lazarettoes, one for vessels from the Levant, the other for Europeans and Americans. The former was erected at great expense by the French, while they held the country, during the late war; it covers an area scarcely equalled by any publick building in our country, and is built with a strength and solidity that might serve for a fortification. It resembles an extensive dock-yard, crowded with the marine of different nations, and the whole surrounded with a high wall, almost impregnable. The latter, destined for European and American vessels, was erected at an expense not much inferior to the other, although not equal in magnitude. Connected with these extensive masses is the *Sanita*, where all the solemnities and necromancies of quarantine are performed, although it might, with more propriety, be called *Thanita*, as it contains a compound of almost every thing offensive, nauseous, and detestable. In this place, *bills of health* are granted, as though the keepers could lay the elements under contribution, and render them subservient to their purpose. Here vessels, clothes, and papers are fumigated over *brimstone fires*. A man who never witnessed these rites, who never beheld the incense arising from these altars reared to superstition, would be apt to consider the pageantry of this farce, as emblematical of the lighting up of the dominions of Pluto. In this place

are also adjusted all the routine of police, by which the merchant and unfortunate traveller are harassed, during the ordeal of imaginary purification. In the lazarettoes are employed a multitude of menials of various descriptions, but their principal office is to guard and watch all who are admitted. The prisoners, during their incarceration, are separated into distinct classes, according to the time they are destined to be detained, and are packed together like separate folds of sheep, and move as obediently and mechanically, as a file of soldiers at the will of their commanding officer. Each group is attended by its proper guard, who carries in his hand a long pole which is wielded with great dexterity to prevent them from intermingling or touching each other. Such an occurrence would be a serious misfortune to a man on the eve of pratique. Should the person with whom he happens to come into contact, have been recently admitted, he would be remanded to his pen to perform again the laws of quarantine to which the latter had been sentenced. Notwithstanding all these precautions, and the horror of actual contact, a person not incurring this misfortune, *in a legal way*, may smoke the pipe of his fellow prisoner, provided it be constructed with *an amber mouth-piece!!* By a mode of reasoning quite consonant to the philosophy of quarantine laws, amber is used, in this way, by all the inhabitants of the shores of the Mediterranean, from a presumption that it is a non-conductor of contagion.*—There is another train of domesticks whose business it is, from time to time, to turn and ventilate the goods deposited in the magazines, and to take care lest they sustain damage or loss from dampness, vermin, or other causes. This office is often indifferently executed; for, notwithstanding the apparent attention and industry of those appointed to perform it, the

*Lind mentions an instance of a surgeon who received an electrick shock by feeling the pulse of a patient in the yellow fever. He must have mistaken a *Gymnotus Electricus* for the radius. To such sensitive pulse feelers, we would recommend an *amber glove*.

most costly merchandise is sometimes destroyed by the putrefactive process; and, instead of averting pestilence, its remote cause is engendered by the means devised to prevent it. These institutions, independent of the capital expended in erecting them, are a never failing source of expense. The numerous guards, and other domesticks, the repairs of the buildings, and the maintenance of the general system, annually require a sum that would defray the civil list of the state of Delaware or Rhode Island; and what are the results! Embarrassment to the merchant, detention to the traveller, impediments to the progress of science, as well as the increase of national wealth. The inconveniences and actual losses of merchants connected with such nations, and even those sailing from the ports of the same nation, are no less vexatious, and sometimes ruinous. Vessels arriving from Smyrna, Greece, and Constantino-ple, are generally doomed to a quarantine of forty days. Although a voyage may be made to Trieste from any of these ports in ten or fifteen days, the impediments occasioned by quarantine laws render it as long as a passage from the United States to Europe. The common practice, it is true, in some measure mitigates the rigours of this system, by permitting ships to enter, deposit their cargoes in the lazaretto, and return for another freight. In the meantime the cargo is sold by the consignee, while it is deposited in the magazines of the lazaretto. The inconveniences of this practice are obvious. The difficulties in effecting sales, and the detention of the goods for a given time, necessarily fetter a lucrative branch of commerce, cherish an habitual indolence, and obscure the lights of a better philosophy. The constituted authorities of those countries, adhere to the system they have adopted with an obstinacy almost inexorable; a system which, although one of the relicks of barbarism, has incorporated itself with, and become a constituent part of their civil policy.

European and American vessels, are treated with a rigour

almost as oppressive as those from the Levant. When we consider the length of a voyage from the United States, and the time required to perform it, the hardships of our merchants are aggravated, and the absurdity of the restrictions are more palpable. It is true that such vessels as have not touched at any intermediate port, are received more favourably; but if they shall have touched at Gibraltar, or any other intervening port, to obtain water, or other articles of subsistence, they are destined to a quarantine of from seven to fourteen days, according to the prevalence of any rumour, however vague, respecting the places at which they may have touched. The *yellow fever*, and all such as may have received the denomination of *typhus*, excite the same apprehensions, and entail the same penalties that are enacted against the plague. The other parts of Italy are governed by laws similar in principle, though variously modified in form. Fiume, Venice, Leghorn, Ancona, Otranto, Brundisii, and Baii, execute their systems agreeably to their spirit.

The Austrian government, more than any other, has manifested a disposition to adopt a liberal policy towards the United States. In consequence of a representation, explaining the character of the diseases of our country reputed contagious, expressing the opinion, that the causes operate promptly, or not at all, that their force must be expended during a voyage of two months, and that the yellow fever does not prevail in winter, in the United States, the pressure of quarantine laws has been, in some degree, relaxed. This condescension would seem to inspire a hope, that if a more rational theory could be inculcated, the other powers, bordering on the Mediterranean, might be prevailed on to mitigate the severities of their laws, and perhaps abolish them.

It is the terror of quarantines that deters men of taste and erudition from visiting this delightful country, once the seat of science, which imparted a classick tone to the civilized

world, and which still presents innumerable attractions, if they could be viewed unfettered by the Gothick usages of quarantine laws. An imprisonment, of thirty or forty days, in a gloomy lazaretto, infected with vermin, crowded with a heterogeneous mixture of half civilized Greeks, Turks, and Armenian merchants, generally the refuse of their nations, the abode of wretchedness in all its deformity, exhibits a picture that can but repress the ardour of the most enthusiastick admirer of classick remains.

But these grivances are mercies compared with the fate of those who violate the conditions of the law in other respects. If a man escape from his prison bounds, during the period for which he is committed, he forfeits the protection of all other laws, and is declared an outlaw. Every one regards him as a common enemy; every man is permitted to kill him; but killing is no murder, for the assassin is amenable to no earthly tribunal.

The horrors of such scenes were felt in their full force by lord Byron, on leaving Malta, who thus caps the climax of his adieus, by an imprecation to their memory:—

“Adieu the d——n—d *quarantine*,
That gave me fever and the spleen!!”

If we examine the quarantine provisions of Great Britain, whence we might have expected a more rational policy, we will find the laws almost as rigorous, and that they are executed with all the severity of which they are susceptible. The *wisdom of the British statutes* shall speak for itself, and will establish the melancholy truth, that, instead of introducing any improvements, since the reign of James I., the state in which they now exist is a deterioration of the original law. All the English laws, on this subject, were merely municipal, till 26 Geo. II., and all predicated on the contagious character of the plague, till the reign of the present king, when the statute was extended to *all other infectious diseases*, and these oppressive acts

were suggested as a protection against the yellow fever principally. The law was enacted in 1805, and the supplement in 1806, 55, 56, Geo. III.

By first James I. the mayor, bailiffs, and justices of peace, of every city, borough, town corporate, and places privileged, or any two of them, shall have power *to tax every inhabitant*, and houses and hereditaments within the city, &c. for the relief of *persons infected, or inhabiting houses and places infected* in the same city, &c. and to levy the same by warrant of the mayor, &c.

If the party to whom such warrant is directed shall not find goods, the mayor, &c. shall, by like warrant, *cause the person to be committed to the gaol* till he satisfy the taxation.

If the inhabitants of any city, &c. find themselves unable to relieve their poor infected persons, &c. upon certificate thereof by the mayor, &c. the justices of peace of the county of, or near the said city, &c. or two of them, *may tax* the inhabitants of the county within five miles of *the place infected*, at weekly rates, to be levied by warrant from such two justices.

If any such infection shall be in any borough, town corporate, or privileged place, where there are no justices of peace, or in any village or hamlet, it shall be lawful for any two justices of the county, *to tax* the inhabitants of the county within five miles of *the place infected*, at weekly rates, for the relief of places infected, to be levied by warrant from the justices, by *sale of goods*, and in default thereof by imprisonment, the same taxes to be disposed as they shall think fit.

All which rates shall be certified at the next quarter sessions; and, if the justices of the peace, at such quarter sessions, shall think fit the said rate should continue, or be enlarged, or extended to any other parts of the county, the same shall be so enlarged, &c. and every constable, and other officer, that shall wilfully make default in levying such money, shall forfeit *ten shillings*, to be employed in the charitable uses aforesaid.

If any person infected, or dwelling in any house infected, shall be by the mayor, bailiff, constable, or other head officer of any city, borough, town corporate, privileged place, or market town, or by any justice of peace, constable, headborough, or other officer of the county, commanded to *keep his house*, and shall wilfully and contemptuously disobey such appointment, attempting to go abroad, or going abroad, and resisting such keepers or watchmen as shall be appointed to see them kept in, it shall be lawful for such watchmen, with violence, to enforce them to keep their houses; and if any hurt come by such enforcement to such disobedient persons, the watchmen and their assistants shall not be impeached therefor. And if any infected person, so commanded to keep the house, shall wilfully, and contemptuously go abroad, and *converse in company, having any infectious sore upon him uncured*, such person shall be *adjudged a felon*; but, if such person shall not have any such sore found about him, he shall be punished as a *vagabond ought to be* by 39 Eliz. (viz. be whipped,) *but that statute is repealed*; and be bound to his good behaviour for one year.

No attainder of felony, by this act, shall extend to any corruption of blood, or forfeiture of goods or lands.

It shall be lawful for justices of peace, mayors, bailiffs, and other head officers, to appoint *searchers, watchmen, examiners, keepers, and buryers*, for the persons and places infected, and to minister unto them oaths for the performance of their offices, and give them other directions, as for the present necessity shall seem good. This act was continued indefinitely by 3 and 16 Charles I., but provides that, No mayor, &c. by force of this act, shall do any thing within either of the universities, or within any cathedral church, or the precincts thereof, or within the colleges of Eaton or Winchester; but the vice chancellor of either of the universities, and the bishop, or dean of every cathedral church, and the provost or warden of either of the

said colleges, shall have all such power, within their precincts, as any mayor, &c.

By 26 George II. All ships, persons, and merchandise, coming into any place within Great Britain or Ireland, or the isles of Guernsey, Jersey, Alderney, Sark, or Man, from any place from whence his majesty, with the advice of his privy council, shall judge it probable that the infection may be brought, shall be obliged to make their quarantine in such place, for such time, and in such manner, as shall be directed by his majesty, by his order in council, notified by proclamation, or published in the London Gazette; and until such ships, persons, and merchandise shall be discharged from quarantine, no such person, or merchandise shall come, or be brought on shore, or go, or be put on board any other ship, in any place within his majesty's dominions, unless in such manner, and in such case, and by such licence, as shall be permitted by such order; and all such ships, and the persons, or goods on board, and all vessels and persons receiving any goods or persons out of the same, shall be subject to such orders concerning quarantine, and the prevention of infection, as have been, or shall be made by his majesty in council, and ratified or published as aforesaid.

If the plague appear on board any ship, lying to the northward of *Cape Finisterre*, the master or person having charge thereof, shall immediately proceed to the harbour of *New Grimsby*, in the island of *Scilly*, (changed by 29 Geo. II. for *St. Helen's Pool*;) and make known his case to the officer of the customs there, who shall immediately acquaint some custom-house officer of some near port of England, and the said custom-house officer shall, with all speed, send intelligence to one of the principal secretaries of state, that measures may be taken for the support of the crew of such ship and precautions used for the prevention of the infection, and the ship shall remain at the island of *Scilly* till his majesty's pleasure be known; nor shall any of her

crew go on shore; but, in case the master be not able to make the island of Scilly, or be forced by stress of weather, or otherwise, to go up either of the channels, he shall not presume to enter any port, but shall remain in some open road till he receives orders from his majesty, or his privy council, and shall take care to prevent any of his ship's company from going out of his ship, and to avoid all intercourse with other ships or persons; and the master, or any other person on board, who shall be disobedient herein, shall be adjudged *guilty of felony, and shall suffer death* as in cases of felony, *without benefit of clergy*; and every such offence, so made felony, may be inquired of, and determined in the county where the offence shall be committed, or where he shall be apprehended.

When any place is infected with the plague, or any order is made by his majesty concerning quarantine, as often as any ship shall attempt to enter into any place in Great Britain, or Ireland, or the isles of Guernsey, Jersey, Alderney, Sark, or Man, the principal officer of the customs in such place, or such person as shall be authorized to see quarantine performed, shall go off, or cause some other person to go off to the ship, and at a convenient distance, demand of the commander an account of the following particulars, viz. the name of the commander, at what places the cargo was taken on board, what places the ship touched at in her voyage, whether such places were infected with the plague, how long such ship had been in her passage, how many persons were on board when the ship set sail, whether any, and what persons, during that voyage, on board had been infected with the plague, how many died in the voyage, and of what distemper, what ships he, or any of his company with his privy, went on board, or had any of their company come on board his ship in the voyage, and to what places such ships belonged, and the contents of his lading. And if it appear that any person then on board, at the time of such examination, be infected with the plague, or that such ship

is obliged to perform quarantine, the officers of any ships of war, or any forts or garrisons, and others of his majesty's officers whom it may concern, upon notice, and any other person whom they may call to their assistance, shall oblige such ships to go to the place appointed for quarantine, and use all necessary means for that purpose, be it by *firing guns at such ship, or any other force or violence*. And in case any ship shall come from any place visited with the plague, or have any person on board infected, and the commander shall conceal the same, he shall be *judged guilty of felony, and shall suffer death*; and in case such commander shall, upon such demand as aforesaid, not make a true discovery in any other of the particulars aforesaid, for every such offence he shall forfeit 200*l.*; one moiety to the king, and the other moiety to him who shall sue by action of debt, &c. in any court of record, at *Westminster*, Edinburgh, Dublin, or in the proper courts of the isles of Guernsey, Jersey, Alderney, Sark, or Man.

Every master or person, having charge of a vessel required to perform quarantine, shall, after his arrival at the place appointed to perform quarantine, deliver, on demand, to the chief officer appointed to see quarantine performed there, such bill of health and manifest as he shall have received from any *British* consul during his voyage, together with his log-book and journal, under penalty of forfeiting 500*l.*; one moiety to the king, the other moiety to him who shall sue by action of debt, &c. in any of the courts aforesaid.

If any commander, liable to perform quarantine, having notice, shall himself quit, or knowingly permit any seaman, or passenger, to quit such ship, before such quarantine shall be fully performed, unless in such cases, and by such licence, as shall be directed by such order concerning quarantine, or in case any commander shall not, within convenient time after notice, cause such ship and the lading to be convey'd into the place appointed, for every such offence

he shall forfeit 500*l.*; one half to the king, and the other to him who shall sue for the same; and, if any person so quit such ship contrary to this act, it shall be lawful for all persons, by *any kind of force*, to compel such persons to return on board; and every person so quitting such ship, shall, for every such offence, suffer imprisonment for six months, and forfeit 200*l.*, to be recovered as aforesaid.

If any person, obliged to perform quarantine, shall wilfully refuse or neglect to repair, within convenient time, after notice by the proper officer, to the place appointed, or having been placed, shall escape, or attempt to escape out of the same, before quarantine performed, it shall be lawful for the watchmen, and other persons appointed to see quarantine performed, by force to compel such persons to repair or return into such place; and every person so refusing or neglecting to repair to such place appointed, and every person escaping, shall be *judged guilty of felony*, and shall suffer death.

If any person, *not infected, nor liable to perform quarantine*, enter any lazaretto or place appointed as aforesaid, whilst any person infected, or under quarantine, shall be therein, and shall return, or attempt to return from thence, unless in such cases, and by such licence as shall be directed by such order as aforesaid, it shall be lawful for the watchmen to compel such person to repair into such lazaretto, there to continue and perform quarantine; and in case such person escape out of such lazaretto, before he shall have performed the same, he shall be *adjudged guilty of felony, and shall suffer death*.

The officers appointed to superintend lazarettoes, and such other places as may be appointed for the performance of quarantine, upon neglect of duty, forfeit their office, are rendered afterwards ineligible to the same offices, or any other in the customs, and forfeit moreover 100*l.* For embezzlement of goods, or wilfully damaging thereof by such officer, he becomes liable to treble damages and costs of suit.

Whereas goods liable to retain infection, may be brought from places infected into other countries, and from hence imported in ships not obliged to perform quarantine, all such goods as shall be particularly specified in any order concerning quarantine, which shall be imported into his majesty's dominions from any foreign country, in any ship, shall be subject to such order.

If any person shall knowingly or wilfully conceal from the officers of quarantine, or shall clandestinely convey any letters or goods from any ship, under quarantine, or liable to perform quarantine, or from any place where goods shall be performing quarantine, *every person so offending shall suffer death.*

By 28 Geo. III. In addition to the particulars which the principal officer of the customs, or such person as shall be authorized to see quarantine performed, as required by 26 Geo. II. is required to demand an account from the commander of any vessel, which shall attempt to enter into any port in Great Britain or Ireland, or Guernsey, Jersey, Alderney, Sark, or Man, and of which particulars so demanded, the said commander is, by the said act, to give account, under the penalties by the act inflicted. The said principal officer, or person, authorized to see quarantine performed, shall demand of the said commander, and the said commander shall give a true account of the following particulars, viz. whether his vessel touched at the isle of *Rhodes*, the *Morea*, or any part of *Africa within the Mediterranean or Levant seas*, or the port of *Magadore*; or whether any of the ship's company, or other person on board, had, during the voyage homewards, in any manner whatever, any communication with any vessel coming from those places; what pilots, or persons, from the shores of Great Britain, the islands of Scilly, Guernsey, Jersey, Alderney, Sark, or Man, have been on board, or had any communication with the ship's company, in any manner whatsoever, during the voyage homeward. And whether any of the ship's com-

pany had been sick, and of what disorder, in the course of the voyage, or were so at the time the particulars were demanded. In case such commander shall give an untrue answer, he shall forfeit 200*l.*, to be recovered and applied as aforesaid.

Every commander liable to performance of quarantine, shall, in case of falling in with any vessel at sea, or within four leagues of Great Britain or Ireland, or the isles of Guernsey, Jersey, Alderney, Sark, or Man, hoist a particular signal, to denote that his vessel is liable to quarantine; such signal, for the day, to be a *large yellow flag*, at the main-topmast-head; and, for the night, to be a light at the same mast head. On failure whereof, such commander shall forfeit 500*l.*

By acts 45 and 46 Geo. III., (repealing all former acts relating to quarantine,) a system is introduced and enforced, which comprehends other diseases beside the plague, and imposes the same sanguinary punishments, the same pecuniary penalties, and the same restrictions. The substance of this act is as follows:—

All ships, as well ships of war as others, coming from, or having touched at any place from whence the king, with the advice of the privy council, shall have adjudged, and declared it probable, that the plague, or *any other infectious disease* may be brought, are made subject to quarantine. The privy council may, from time to time, specify what ships or goods shall be subject to quarantine, and make orders in case of any infectious disease appearing in Great Britain, as also for mitigating quarantine in certain cases. Masters of ships, liable to quarantine, are to make signals on meeting other ships at sea, or within four leagues of the coast; penalty 200*l.*; and on the like penalty, all masters of ships are to inform pilots of all the places at which they have touched or laden. Masters omitting to disclose their having touched at infected places, or to hoist the proper signals, are *guilty of felony, without clergy*. A penalty of

500*l.* is imposed on masters, &c. quitting vessels, or permitting persons to quit them, or not going to places appointed for quarantine; and 200*l.*, and six months' imprisonment on persons coming in such vessels, or going on board them, who quit them till regularly discharged; the penalty of felony, without clergy, is imposed on disobedience of persons under quarantine, and on persons who, though not infected, shall, after entering the place of quarantine, escape therefrom. Goods, liable to quarantine, shall be opened and aired, according to order in council, of which a certificate shall be given, *the forging of which, is declared felony, without clergy; and the like penalty is imposed on lading or receiving goods improperly from vessels under quarantine.*

If a pilot quit the ship, contrary to an order of the king in council, he may be indicted for a misdemeanor, and punished at the discretion of the court, on the ground of his violating the directions of a positive prohibitory statute.

If we examine the quarantine systems of our own country, it will be manifest, that the legislatures of some of the most commercial of the United States, have not been actuated by a more enlightened policy. Instead of appealing to, and relying on the improved philosophy of their own countrymen, they have received the law from the old world, adopted their opinions, without reflection, much less analysis, and have servilely imitated those who might have been their disciples. The substance of the quarantine laws of New York and Pennsylvania, will place this subject in a more perspicuous light. By an analysis of their provisions, we may discover that proneness to imitation, which has its foundation in indolence, one of the most prominent features in the character of man. Accustomed, by education and habit, to receive as orthodox the laws and customs of Europe, we have copied them, and with their excellences, have adopted their defects, errors and absurdities.

The following summary of the laws of the state of New York, intended to protect the city against foreign pesti-

lence, truly demonstrate that we have made little improvement upon the quarantine systems of Europe.

All vessels arriving from any part of the world, except the ports of the United States, being to the N. E. of Sandy Hook, between the first of June and the first of October, are strictly examined at the quarantine ground, and made subject to the directions of the health officers, under a penalty not exceeding two thousand dollars, or twelve months' imprisonment.

All vessels arriving from any place in the West Indies, or the river Mississippi, between the first day of June and the first day of October, shall remain at the quarantine ground not less than *four days* after their arrival, and no intercourse shall be permitted, during that period, between the crews and the city, unless subject to such restrictions as shall be prescribed by the health officer, and such vessel shall remain *longer* at the quarantine than the aforesaid four days, if, in the opinion of the health officer, it shall be proper, under the penalty of *two thousand dollars, or twelve months' imprisonment*.

All vessels arriving from a place where a malignant or pestilential fever was prevailing at the time of departure, or if, during the voyage, any person has died, or been sick on board, with such fever, are absolutely prohibited from approaching the city, nearer than the quarantine ground, until the first day of October, under a penalty *not exceeding two thousand dollars, or imprisonment for a time not exceeding three years*. No person arriving in such, or any other vessel, at the quarantine ground, is allowed to proceed to the city; nor is any part of the cargoes of such vessels allowed to be conveyed to the city without a permit in writing from the health officer, under the same penalty. The governor, or, in his absence, the mayor, or in the absence of both, the recorder, may designate other descriptions of vessels that may become liable to quarantine, and may prohibit or regulate the intercourse by land, or ferries, with all sickly or

suspected places. For the sake of additional security, all vessels arriving from any port in the West Indies; in South America; in the United States, southward of Savannah in Georgia; in the Mississippi; in the Mediterranean; in Africa, or in Asia, (except Canton and Calcutta,) although no malignant or pestilential fever was prevailing at such places at the time of departure, although no person had died, or been sick on board with such fever, and although the health officer, after examination, had given his permit to proceed, are prohibited from approaching within three hundred yards of that part of the island of New York, which lies southward of a line drawn from the house of William Bayard, on the North River, to Stugvesant's dock upon the East River, under a penalty *not exceeding two thousand dollars, or imprisonment for a time not exceeding three years.* The mayor, or board of health, may order to the quarantine ground, or other place of safety, any vessel at the wharves, or in the vicinity of the city, which they may deem prejudicial to the publick health, under the penalty of *one thousand dollars;* and, when the owner, consignee, or commander of such vessel cannot be found, they may remove them at the expense of such owner, &c. The board of health may likewise order the removal of persons or things infected by, or tainted with pestilential matter, to such place as they may think proper, and any one who resists, in this respect, forfeits *one hundred dollars.*

AN ACT

For establishing an Health Office, and to secure the city and port of Philadelphia from the introduction of pestilential and contagious fevers.

Sect. I. *Be it enacted by the senate and house of representatives of the commonwealth of Pennsylvania, in general assembly met, and it is hereby enacted by the authority of the same,* That a board of health shall be established in

the manner herein after directed, which shall be, and hereby is, erected into a body corporate, in deed and in law, by the name, style and title of "*The Board of Health*," who shall have perpetual succession, and enjoy all and every the rights, liberties and privileges, powers, authorities and immunities incident or belonging to a corporation, or body politic; and, by that name, may take and hold all the estate, real and personal, now vested in the present board of health; and shall, moreover, have and exercise the powers and authorities herein after mentioned, that is to say: The governor of this commonwealth shall, on or before the first day of May, in each and every year, commission and appoint five persons, three of whom shall be resident in the city of Philadelphia, one in the Northern Liberties, and one in the district of Southwark and township of Moyamensing, who shall compose the said board of health, and shall continue in office one year, next ensuing the date of their appointment, but not more than two of the said board shall be physicians; they shall receive five hundred dollars each per annum, as a compensation for their services; and, in case of the death, sickness, resignation, and refusal to serve, or removal from office of all, or any of them, their places shall be supplied by other appointments; out of their own body the board shall choose a president, who shall preside at the meetings of the board, and whose place shall be supplied, in his absence, by the appointment of a chairman for the time; a secretary, whose duty it shall be to keep fair minutes of all the proceedings, rules and regulations of the board; and a treasurer, who shall give bond, with sureties, as is required of the county treasurer, who shall receive all monies belonging to the corporation, and pay and disburse the same upon the order of the board, signed by the president and attested by the secretary, who shall keep fair and just accounts of his receipts and expenditures, and make extracts thereof whenever the board shall require the same, and shall, once in every year, his accounts having been allowed by the board,

publish the same, in one or more newspapers of the city of Philadelphia; and the said board shall sit upon their own adjournment as they shall find necessary, but shall meet at least once in every day, between the first day of June and the first day of October in every year; and, also when the board shall be specially convened by order of the president, or any two of the members; and at all meetings three members shall form a board to transact business, but a less number may adjourn; and the said board shall have, and hereby is vested with full power and authority to make general rules, orders and regulations for the government and management of the lazaretto, and the vessels, cargoes and persons there detained, or under quarantine, and of the health-office, and public hospitals, and for the mode of visiting and examining vessels, persons, goods and houses, and shall also have power to appoint such other officers and servants as, from time to time, shall be found necessary to perform the several duties required by this act, and their future regulations. *Provided*, That such officer shall not hold any office of profit or trust under the United States; and to remove any of the officers or servants by them appointed, and to appoint others in their places, and to allow and pay the said officers and servants so appointed, such compensation for their respective services, as the said board shall deem just and proper; and the governor is hereby authorized and required to appoint one physician, who shall reside at the lazaretto, and be denominated the lazaretto physician, and one physician who shall reside in the city of Philadelphia, and shall be denominated the port physician; one health officer, and one quarantine master, all of whom shall be under the direction and control of the board of health, and may be removed from office by the governor, at the request of the majority of the members of the board of health; and the said lazaretto physician shall be entitled to occupy the house hitherto occupied by the resident physician, and to have furnished him pasturage, provender, and stabling for one

horse and one cow, and shall also be provided, by the board of health, with ground for a garden, within the bounds of the lazaretto, of such extent as the board shall think proper; and the quarantine master shall be entitled to occupy the house hitherto occupied by the quarantine master, and to have furnished him pasturage, provender, and stabling for one horse and one cow, and shall also be provided, by the board of health, with ground for a garden, within the bounds of the lazaretto, of such extent as the board shall think proper.

Sect. II. *And be it further enacted by the authority aforesaid,* That the health officer, on receiving from the captain or master of any ship or vessel, arriving from a foreign port or place, the certificate as herein after directed to be furnished by the lazaretto physician and quarantine master, or port physician, shall be entitled to receive from such captain or master, the sum of six dollars, and no more, of which the lazaretto physician shall have three dollars, and the port physician, the quarantine master, and health officer, one dollar each, in full compensation for all services enjoined on them by this act.

Sect. III. *And be it further enacted by the authority aforesaid,* That the building now called the lazaretto, and the ground therewith reserved and occupied, and all the property and estate of every kind whatsoever, now vested in the present board of health, shall become and be fully vested in the board of health constituted by this act, immediately and as soon as the same shall be organized, for the uses and purposes for which the said board is instituted and established, and the same shall be fully and entirely under the direction and management of the said board; and the said board shall have power to erect such buildings, and to make such enclosures on the lot, or tract, adjoining the lazaretto, as to them may seem proper and necessary. *Provided,* That the whole cost of such buildings and enclosures shall not exceed, in the whole, the unexpended balance of the ten thousand

dollars appropriated by the act entitled "An act for establishing an health-office, and to secure the city and port of Philadelphia from the introduction of pestilential and contagious diseases."

Sect. IV. *And be it further enacted by the authority aforesaid,* That, from and after the passing of this act, every ship or vessel, coming from any foreign port or place, bound to the port of Philadelphia, between the first day of June and the first day of October in every year, shall come to anchor in the river Delaware, as near the lazaretto as the draught of water and the weather will allow, before any part of the cargo or baggage be landed, or any person who came in such ship or vessel shall leave her, or any person be permitted to go on board, and shall submit to the examination herein after directed; and if any master, commander, or pilot, shall leave his station before the said lazaretto, or if any master or commander shall permit or suffer any part of the cargo or baggage, or any person or persons arriving in such ship or vessel, from any port beyond the limits of the United States, to be landed on either shore of the Delaware bay, or river, or suffer any person, except the pilot, to come on board before examination be duly had, and a certificate obtained, as is herein after specified, the person or persons so permitting, and the person or persons so landing, or going on board, unless imminent danger of the loss of the vessel, or lives of the crew, shall render assistance necessary, being thereof convicted upon indictment or prosecution under this act, by verdict, confession, or standing mute in any court having jurisdiction of the offence, shall pay a fine not exceeding five hundred dollars, to be recovered and appropriated as is herein after directed; and it shall be the duty of the lazaretto physician and quarantine master, so soon as any ship or vessel shall be anchored near the lazaretto, between sun rise and sun set, immediately, wind and weather permitting, to go on board the same, and there thoroughly examine, in such form and manner as shall be prescribed by

the board of health, the said ship or vessel, the crew, passengers, cargo, and baggage on board the same, and to demand answers, under oath or affirmation, to be administered by either the said physician or quarantine master, who are hereby severally empowered to administer the same, to all such questions as shall be put to any person on board such ship or vessel, touching the health of the crew and passengers, during the voyage, and the nature and state of the cargo, as the board of health, by their rules, shall, from time to time, direct to be asked; but it shall be the duty of the person so examining upon oath or affirmation, before he shall proceed therein, to make known to the person interrogated, the penalty imposed by this act upon the person who shall give false answers, under oath or affirmation, to the questions proposed in such examination; and if, upon such examination, it shall appear to the said physician and quarantine master, that the said ship or vessel came from a port or place at which no malignant or contagious disease prevailed at the time of her departure, that the persons on board such ship or vessel are free from every pestilential or contagious disease, the small pox and measles excepted, and that the said vessel has had no malignant disease on board, either during the homeward bound voyage, or during her continuance in a foreign port, and they shall see no cause to suspect that the cargo, or any part thereof, is infected, they shall forthwith deliver to the master or captain of such ship or vessel, a certificate of the facts, in such form as shall be directed by the board of health, and the said captain or master may thereupon proceed according to his destination, and shall present such certificate at the health-office in Philadelphia within twenty-four hours after his arrival, and safely mooring there; but, if it shall appear upon such examination, that the ship or vessel came from a port or place at which a malignant or contagious disease prevailed, such vessel shall be detained at the lazaretto for such time as the board of health shall deem necessary, not exceeding

twenty days, and the letter-bag of the vessel, when purified, and such letters as the master, commander, or passengers shall think proper to write to their owners, consignees, or friends, shall be transmitted to the health-office in Philadelphia, who shall safely deposit the same in the post-office. And the vessel and cargo shall be thoroughly cleansed, and all clothing and baggage shall be aired and purified at the expense of the master, owners, or consignees of the vessel and the goods respectively. *Provided always,* That wine, rum, salt, sugar, spirits, molasses, mahogany, manufactured tobacco, dye-woods, preserved fruits, and such other articles as the board of health shall, by their general regulations, specify and permit, may be conveyed immediately to the city in lighters; and, at the expiration of the said time, if it shall appear to the said physician and quarantine master that no person has been sick with a malignant or contagious disease, the small-pox and measles excepted, on board said ship or vessel, either during the voyage homeward, or during her continuance in a foreign port, nor any of the crew, or passengers, or other person from on board such vessel during the performance of quarantine, and the said physician and quarantine master shall certify the said facts to the board of health; and that, in their opinion, the vessel, crew, cargo, and passengers may be safely suffered to proceed to the city, the said captain or master may proceed with the same according to his destination, unless the board of health shall deem it necessary to cause a further detention of the said vessel or cargo, or of the crew, or passengers, or of any baggage on board said vessel, in which case the same shall be detained until the board of health shall authorize the same to proceed and enter the city; and, upon the arrival of the said captain or master at Philadelphia, he shall present the said certificate of the physician and quarantine master, at the health-office, within twenty-four hours after his arrival; but if, upon examination of any vessel by the said physician and quaran-

tine master, as aforesaid, or during the performance of quarantine by any vessel, it shall appear to the said physician and quarantine master, that there has been any person sick on board said vessel, with any malignant or contagious disease, either during the voyage homeward, or during the continuance of the vessel in a foreign port, or during the performance of quarantine at the lazaretto, (or that any person on board such vessel has been affected with such disease,) then, in such case, the vessel shall be detained such further time as the board of health may deem necessary; and the cargo and baggage, (except such part thereof, as, in the opinion of the board of health, may be supposed incapable of retaining infection, which said part may be transported to the city in lighters,) shall, unless otherwise ordered and directed by the board of health, be unladen and thoroughly cleansed and purified, and the crew and passengers, which were on board said vessel, and the cargo and baggage on board the same, or any part thereof, except as before excepted, shall not be suffered to enter the city before the first day of October then next ensuing, without the license and permission of the board of health, to that effect first had and obtained. *Provided nevertheless*, that such ship or vessel, after she shall have been thoroughly cleansed and purified, if no malignant disease appear on board, may be allowed to take in freight at the lazaretto, by means of lighters, and proceed to sea; and if any master or captain, or other person on board of any vessel which shall be examined agreeably to this law, shall not true answers make to all such questions as the lazaretto physician and quarantine master, or the said health officer, or port physician, shall ask agreeably to this act, or the rules heretofore established, or which shall, from time to time, be established by the board of health, or shall knowingly deceive, or attempt to deceive the proper officers as aforesaid, in his answers to their official inquiries, he having been duly informed and apprized of the penalties imposed by this act, upon the per-

son so offending, previous to his said examination by the person making such examination, such person, for each and every offence, on being thereof legally convicted, shall forfeit and pay a sum not exceeding five hundred dollars, to be recovered and appropriated as is herein after provided and directed; and moreover, shall be sentenced to imprisonment at hard labour for any term not less than one year and not exceeding five years; and if any captain or master of any ship or vessel shall neglect to present his certificate at the health-office, in any case in which he is herein before directed so to do, within the time directed by this act, he shall forfeit and pay the sum of three hundred dollars, to be recovered and appropriated as is herein after directed; and if any captain or master of any ship or vessel, or any other person on board the same, shall refuse or neglect to comply with the directions of the lazaretto physician and quarantine master, which shall be made agreeably to this act, or the regulations of the board of health, with respect to the detention of any ship or vessel, or the landing from on board the same of any person or persons, or of any goods, merchandise, bedding, baggage, or clothing, or shall refuse to carry the same into effect, such person, for each and every such offence, shall forfeit and pay a sum not exceeding five hundred dollars, nor less than two hundred dollars, to be recovered and appropriated as is herein after provided and directed.

Sect. V. *And be it further enacted by the authority aforesaid,* That any ship or vessel coming from any port or place within the United States, at which port or place the said ship or vessel had only called in or touched, upon her arrival from a foreign port or place, shall be liable and subject to all the rules, regulations and restrictions of the preceding sections of this act, and shall be examined and treated, as well the vessel itself as the cargo, crew, passengers, and baggage on board, in the same manner as if such ship or vessel had directly arrived at the lazaretto from a

foreign port or place, without having first touched at a port or place within the United States; and all ships or vessels, as well vessels of war as merchant vessels, coming from any port or place within the United States, and bound to the port of Philadelphia, between the first day of June and the first day of October in every year, and having on board any goods or merchandise, the growth or produce of any foreign place or country, or any person or persons, bedding or clothing, from any foreign port or place, shall come to anchor opposite the said lazaretto, and shall be examined by the said lazaretto physician and quarantine master; and if the captain or master of any such ship or vessel shall produce such satisfactory proof, as the board of health shall, in that case direct to be required, that the said goods or merchandise shall have been landed in the United States more than thirty days, and are free from damage, and that the said vessel, bedding, clothing and persons are free from the infection of any dangerous contagious disease, (the small pox and measles excepted,) then, and in that case the said physician and quarantine master shall give to the captain or master of such ship or vessel a certificate of the facts, permitting such ship or vessel to proceed to the city, which certificate the said captain or master shall present at the health-office in Philadelphia within twenty-four hours after his arrival and safely mooring there; and if he should neglect so to do, being thereof legally convicted under this act, he shall be sentenced to pay a fine of two hundred dollars, to be recovered and appropriated as is herein after directed and provided; and if the said captain or master shall fail to produce such satisfactory proof as aforesaid, of the wholesome state of the said vessel, goods, merchandise, bedding, clothing, and persons, the said vessel, goods, merchandise, bedding, clothing, and persons, shall be detained at the lazaretto, and shall be proceeded with in the same manner, and subject to the same orders and regulations, as are herein before provided and directed in the case of vessels com-

ing directly from a foreign port or place; and if the captain or master of any ship or vessel, coming from any port or place within the United States, and bound to the port of Philadelphia, having on board any goods or merchandise, bedding, clothing, or persons as aforesaid, shall refuse or neglect to come to anchor opposite the lazaretto, and shall pass the same with intent to proceed to the city, without examination by, and certificate obtained from, the said physician and quarantine master as aforesaid, he shall, on conviction, forfeit and pay the sum of five hundred dollars, to be recovered and appropriated as is herein after provided and directed; and the said vessel, goods, merchandise, bedding, clothing, and persons, shall be sent back to the lazaretto, there to be proceeded with in such manner as the board of health, agreeably to this act, shall in that case devise and direct.

Sect. VI. *And be it further enacted by the authority aforesaid,* That every ship or vessel coming from the Mediterranean, shall be subject to a strict examination, under similar regulations and penalties as are provided in the fourth section of this act, and if it appears that the said ship or vessel came from any place where the plague existed at the time of her departure, or has spoken with any vessel on board of which any person was affected with the plague, or if any person is affected with said disease on his arrival at the lazaretto, or has been affected during the voyage, the said vessel shall not be suffered to proceed to the city; the cargo and baggage shall be unloaded and thoroughly cleansed and purified, and no part shall be suffered to enter the city without the permission of the board of health first obtained, and the crew and passengers shall perform quarantine of twenty days. *Provided nevertheless,* That such ship or vessel, after she shall have been thoroughly cleansed and purified, may be allowed to take in freight at the lazaretto, by means of lighters, and proceed to sea.

Sect. VII. *And be it further enacted by the authority*

aforsaid, That any person or persons, and all goods, merchandise, bedding, and clothing, arriving at any port or place within the United States, from any foreign port or place at which any malignant or contagious disease, (the small pox and measles excepted,) prevailed at the time of their departure, or in any vessel in which any such disease existed while they were on board the same, are hereby prohibited from entering the city or county of Philadelphia, or the county of Delaware, except the township of Tinicum, at any time between the first day of June and the first day of October in any year, either by land or water, without permission of the board of health first had and obtained, under the penalty of five hundred dollars for each and every offence, and the forfeiture of all such goods, merchandise, bedding, or clothing, to be recovered and appropriated as is herein after directed; and that all goods, wares, bedding, clothing, and merchandise, seamen, or passengers, landed from on board any ship or vessel belonging to the port of Philadelphia at any other port of the United States, shall be subject to perform thirty days quarantine previously to entering the city or county of Philadelphia, under the same penalty as in the fifth section, without permission first obtained from the board of health.

Sect. VIII. *And be it further enacted by the authority aforsaid*, That no person or persons, goods, wares, merchandise, bedding, or clothing, from any port or place, at which any malignant or contagious disease, (the small pox or measles excepted,) prevailed at the time of their departure, or from on board any vessel in which any such disease existed while they were on board, shall enter or be brought into the city or county of Philadelphia, at any time between the first day of June and the first day of October in any year, by land or water, without the permission of the board of health first had and obtained, under the penalty of any sum not exceeding five hundred dollars for each and every such offence, and the forfeiture of all such goods,

wares, merchandise, bedding, and clothing, to be recovered and appropriated as directed by the twenty-first section of this act.

Sect. IX. *And be it further enacted by the authority aforesaid,* That whenever the board of health shall receive information that any malignant or contagious disease, (the small pox and the measles excepted,) prevails in any port or place within the United States, or on the continent of America, they shall make diligent inquiry concerning the same; and, if it shall appear that the disease prevails as aforesaid, all communication with such infected port or place shall be subject to such control and regulations as the board of health may, from time to time, think proper to direct and publish in one or more newspapers, published in the city of Philadelphia, and thereupon every person or persons, and all goods, wares, merchandise, bedding and clothing, from such infected port or place, and having entered and been brought into the city or county of Philadelphia, contrary to such regulations, shall be subject to the penalties and forfeitures provided by the next preceding section of this act; and all vessels from such port or place, and bound to the port of Philadelphia, shall stop at the lazaretto and be proceeded with in the same manner, and under the same penalties and forfeitures as are provided in cases of vessels coming from foreign ports; and every person or persons having entered or been brought into the city or county of Philadelphia from such infected port or place aforesaid, shall also be conveyed, by any person authorized by the board, to such place for purification as the said board may appoint or direct for that purpose, and be there detained at the pleasure of the board any time not exceeding twenty days, and at the expense of such person or persons; and if the said board shall have cause to suspect that any person or persons at the time within the city and county of Philadelphia, have been at such infected port or place, within fifteen days, since such disease prevailed at such port or place, next preceding, the

said board may lawfully require such person or persons to render satisfactory proof of their place, or places of abode, during the said period, and if such person or persons neglect, or refuse, to render such proof, or fail in proving their residence, other than at such infected port or place, every such person shall be dealt with, by purification and detention, as persons coming from such infected port or place.

Sect. X. *And be it further enacted by the authority aforesaid,* That no lazaretto physician, quarantine master, or other officer, or servant, of the said lazaretto, shall absent himself from the place of his duty, between the first day of June and the first day of October, on any pretence whatsoever, for any time, without leave first obtained in writing from the board of health, under the hand of the president or chairman, for the time, attested by the secretary, and entered on the minutes, under the penalty of forfeiting his office, and a fine of any sum not exceeding five hundred dollars.

Sect. XI. *And be it further enacted by the authority aforesaid,* That it shall be the duty of the lazaretto physician, immediately on the arrival of any ship or vessel, liable to be detained at the lazaretto, in order to be cleansed and purified as aforesaid, to cause the sick, if any on board, to be removed to the building which shall be appointed, by the board of health, for their reception, and diligently and impartially, with his best skill, to attend upon and administer medical assistance to each and every sick person that shall be therein lodged, and generally to superintend, and cause to be executed, such orders and regulations as the said board shall, from time to time, ordain for the government and management of the lazaretto, and of the vessels, cargoes and persons, under quarantine.

Sect. XII. *And be it further enacted by the authority aforesaid,* That it shall be the duty of the quarantine master, immediately after the arrival and examination as aforesaid,

of any ship or vessel liable to be detained at the lazaretto for purification aforesaid, to direct and cause such ship or vessel to be properly moored near the lazaretto, at such distance from any other vessel or vessels under quarantine, as may prevent the communication of any infectious disease to or from the same; and the cargo, bedding and clothing, or any part thereof, contained in such ship or vessel, to be landed, cleansed and purified, under the direction of the lazaretto physician; and it shall be the particular duty of the said quarantine master, to prevent any personal intercourse between the persons on board different vessels under quarantine; and, for that purpose, to take possession of and secure the boats of such vessels, until their respective terms of quarantine shall be completed; to preserve and enforce order and obedience to this act, and all such orders and regulations as the board of health shall, from time to time, ordain for the government and management of the lazaretto, and the persons, vessels and cargoes under quarantine.

Sect. XIII. *And be it further enacted by the authority aforesaid,* That it shall be the duty of the port physician, upon receiving information from the health officer, or other person whomsoever, that any person or persons on board of any ship or vessel, in the port of Philadelphia, is, or are afflicted, or suspected to be afflicted with any pestilential or contagious disease, or that there is just cause to suspect the cargo, or any part thereof, contained in any such ship or vessel, is infected with any such disease, the said physician, in either of the foregoing cases, shall visit and carefully examine such ship or vessel; and, if he shall discover any sick person or persons on board any such ship or vessel, he shall thereupon have, and exercise the authority to direct such sick person or persons to be removed to the said lazaretto, or to some other safe place, which may be specified by the board of health; and said physician shall, without delay, report the state of said vessel, cargo and crew, to the board of health, who shall direct

and determine how the crew, passengers, vessel and cargo, shall be disposed of and managed, for the restoration of their health and purification. And on the arrival of any ship or vessel in the port of Philadelphia, from any foreign port or place, from the first day of October in any year, to the first day of June, in the next succeeding year, it shall be the duty of the said physician, provided such ship or vessel shall not have been previously visited and examined by the physician resident at the lazaretto and quarantine master, and before any of the passengers, crew, cargo or baggage are landed, to visit and carefully examine such ship or vessel, in manner and form as the said lazaretto physician and quarantine master are bound to do, and to demand answers unto oath or affirmation, to be administered by the said port physician, who is hereby empowered to administer the same; and if the crew, passengers, vessel and cargo be in a healthy state, and if there shall be no ground to suspect that any of the crew, or passengers, have died in the voyage of any dangerous contagious disease, (the small pox and measles excepted,) or that the cargo, bedding, or clothing is infected, then, and in such case, the said physician shall give to the master or commander a certificate of the facts, which the said master or commander shall present at the health-office within twenty-four hours after such examination; and if he shall neglect so to do, being thereof legally convicted under this act, he shall be sentenced to pay a fine of two hundred dollars, to be recovered and appropriated as is herein after provided and directed; and if, on examination, any suspicion shall arise in the mind of the said physician, touching the health of the crew, or passengers, or the infectious state of the vessel, cargo, bedding or clothing on board, no part thereof shall be landed, but the said physician shall immediately report the same to the board of health, who shall direct and determine what measures shall be pursued relative thereto. And the said physician, upon request of the health officer, or the board of health,

shall, from time to time, visit and examine such houses and persons as the said board, or the health officer, shall have reason to suspect are infected with any dangerous contagious disease, and make report thereof to the said health officer.

Sect. XIV. *And be it further enacted by the authority aforesaid,* That it shall be the duty of the health officer, at seasonable and proper hours on each day, (Sundays excepted,) to open and keep a publick office at such convenient place in the city of Philadelphia, as shall be directed by the board of health, whereat all masters or captains of ships or vessels shall deliver the certificates or bills of health, to them granted by the lazaretto physician and quarantine master, or port physician as aforesaid; and the board of health shall there assemble and meet, as often as they deem needful, for the purpose of executing the duties and trust of their appointment. And the said health officer shall file and preserve in good order, all the certificates or bills of health so delivered; and shall keep a register of the ships or vessels, and the names of the captains or masters, owners or consignees, for which the same were respectively granted; the port or ports from which the ship or vessel respectively sailed, or at which they touched, during their respective voyages, and the number of persons on board thereof, respectively, at the time of their leaving their respective ports of departure, and also at the time of their arrival, respectively, at the port of Philadelphia. And the said health officer shall attend the health-office at the meetings of the board of health, and at such other times as shall be required for discharging the duties of his appointment, and generally enforce and execute the regulations and instructions of the board of health; and it shall be the duty of the said health officer to collect, recover, and receive all forfeitures and penalties imposed, and sums of money directed to be paid by this act.

Sect. XV. *And be it further enacted by the authority afore-*

said, That every diseased person duly landed, or sent to the lazaretto by either of the aforesaid physicians, quarantine master, or health officer, shall be there kept and maintained until the lazaretto physician shall grant him or her a discharge in writing; and if, before obtaining a discharge as aforesaid, any such person shall elope, or otherwise absent himself, or herself, from the lazaretto, it shall be lawful for the health officer, or any constable, or other person whom he shall call to his assistance, and they are hereby enjoined and required to lend such assistance, to pursue and apprehend the person so escaping or absenting himself, or herself, from the lazaretto, and there again deliver him or her to be detained until he or she be duly discharged as aforesaid; and, moreover, the person so eloping or absenting himself, or herself, shall, for each and every offence, forfeit and pay the sum of one hundred dollars, or suffer such other punishment, by confinement, not exceeding three months, as the board of health shall ordain and award. And if any master or captain shall, knowingly, receive or employ on board of his ship or vessel, or if any house-keeper, or other inhabitant of this commonwealth shall, knowingly, receive, harbour, or in any way entertain any person so eloping or absenting from the lazaretto, each and every master and captain, and each and every house-keeper, or inhabitant, so respectively offending, shall, on being thereof legally convicted, forfeit and pay a sum of two hundred dollars; and, if any person arriving in, or belonging to, any ship or vessel detained at the lazaretto as aforesaid, shall elope or absent himself without having first obtained a discharge, signed by the lazaretto physician and quarantine master; or if any person, other than those detained at the lazaretto as aforesaid, shall go on board, or along side of any ship or vessel whilst under quarantine as aforesaid, or if any person not authorized by the proper officer, shall go within the limits of the lazaretto, such person or persons shall perform such quarantine as the board of

health may direct; the person so offending, upon legal conviction of such offence, shall forfeit and pay the sum of two hundred dollars, to be recovered and appropriated as herein after directed; and if any diseased, or other person, landed and sent to the lazaretto by any officer having authority to do the same, or any person arriving in or belonging to any ship or vessel detained at the lazaretto as aforesaid, shall refuse or neglect to obey the directions of the lazaretto physician or quarantine master, respectively, agreeably to this act, and the order and regulations by the board of health, which shall, from time to time, be ordained and established for the government and management of the lazaretto, and the persons, vessels, and cargoes under quarantine, the persons so refusing or neglecting, shall, for each and every offence, on being thereof legally convicted, forfeit and pay the sum of two hundred dollars, to be recovered and appropriated as herein after directed.

Sect. XVI. *And be it further enacted by the authority aforesaid,* That when any vessel shall come up to the city of Philadelphia, or the shore of Southwark, or the Northern Liberties, although the said vessel may have obtained a certificate of health from the lazaretto physician and quarantine master, or the port physician, if the said vessel shall appear to the board of health to be infected with any contagious disorder, dangerous to the community, the said board are hereby authorized to order the said vessel to the lazaretto, there to undergo the necessary purification, before she will be permitted to return to the city or shores aforesaid; and the said board are hereby authorized and empowered to remove any vessel or vessels from any part of the city or shores aforesaid, as shall be infected with such disorders as aforesaid, to such convenient distance as they may deem proper, although such vessel may not be infected.

Sect. XVII. *And be it further enacted by the authority aforesaid,* That whenever by means aforesaid, or by the report of the port physician, or any other physician ap-

pointed by the board of health, (whom the said board are hereby authorized to send to places or houses suspected to be infected,) it shall come to the knowledge of the said board, that any person within the city of Philadelphia, the district of Southwark, the townships of the Northern Liberties, or Moyamensing, is afflicted with any contagious disease, dangerous to the community, it shall and may be lawful for the said board to take orders for preventing the spreading of the contagion, by forbidding and preventing all communications with the infected house, or family, except by means of physicians, nurses or messengers to convey the necessary advice, medicines and provisions to the afflicted; and shall exercise all such other powers as the circumstances of the case shall require, and as shall, in their judgment, be most conducive to the publick good, with the least private injury.

Sect. XVIII. *And be it further enacted by the authority aforesaid,* That no pilot bringing a ship or vessel to the lazaretto, in an apparent state of good health, shall be obliged to perform quarantine, but the lazaretto physician shall grant such pilot a certificate, permitting him to proceed to the cape of Delaware, in order that he may prosecute his profession; but such pilot shall not, on any pretence, come into the city of Philadelphia, the Northern Liberties, the district of Southwark, or township of Moyamensing, for twenty days from the date of such certificate, under the penalty of one hundred dollars, and also of one year imprisonment, which penalty shall be recovered and applied in the manner herein after directed. And any pilot bringing to the said lazaretto a ship or vessel infected, or supposed to be infected, with any pestilential or contagious disease, may be permitted to go and remain on shore, within the bounds of the lazaretto, during the time the ship or vessel, brought thither, shall be detained under quarantine. *Provided always,* That if the said vessel shall be infected with any such disease as aforesaid, he shall be detained and

treated in the like manner as seamen or passengers, so infected, are herein directed to be detained and treated. *And provided further,* That if he shall go without the bounds of the lazaretto, he shall be liable to the same penalties as are, by this act, imposed on seamen or passengers escaping therefrom.

Sect. XIX. *And be it further enacted by the authority aforesaid,* That the messuages and lots, commonly called the city hospital, situate on the north side of Sassafras-street, and east side of the river Schuylkill, shall continue to be held as a publick hospital for the Northern Liberties and Moyamensing, as well as for the city, and district of Southwark, until the board of health shall procure and provide a more convenient hospital for the purpose aforesaid; and all persons, other than persons on board of any ship or vessel, and liable to be sent as aforesaid to the lazaretto, residing within the city of Philadelphia, the district of Southwark, the townships of the Northern Liberties and Moyamensing, who shall be afflicted with any pestilential or contagious disease, (the small pox and measles excepted,) may, upon the advice and order of the port physician, or any other physician or person, authorized by the board of health to grant such order, be removed by the health officer, and such assistance as he shall for that purpose employ, to the said publick hospital, or to such other place as the physician or board of health shall approve, if the person, afflicted with any contagious or pestilential disease, cannot be properly and sufficiently attended at home, there to be lodged, nursed, and maintained, and kept until duly discharged by a permit in writing, signed by a physician of the said publick hospital. *Provided always nevertheless,* That each and every patient, and his and her estate, real and personal, shall be liable to pay, satisfy, and reimburse, all the charges and expenses, on his or her account incurred in the said hospital, unless the board of health award that he or she shall be exonerated or exempted therefrom.

Sect. XX. *And be it further enacted by the authority aforesaid,* That whenever the said board of health shall receive information, that any contagious disease rages in any port or place within the United States, or on the continent of America, they shall make diligent inquiry concerning the same; and it shall and may be lawful for the said board, to prohibit and to prevent all communication, by land and water, with such infected ports or places, by stopping all vessels coming into the port of Philadelphia, and at and before the lazaretto, in the same manner, and under the same penalties and forfeitures, as are hereby provided in case of vessels coming from foreign ports, and by stopping all persons coming from said infected places, in such manner as the circumstances and exigences of the case shall require; and the said board of health are hereby authorized and required, whenever a fever of a contagious nature shall appear in any part of the city of Philadelphia, the district of Southwark, or the township of the Northern Liberties, or Moyamensing, to adopt, without delay, such prompt measures as will effectually prevent all communication between the part or parts so infected and any other part of the city, district, or townships; and all judges, justices, sheriffs, constables, and other civil officers, and citizens of this state, are hereby authorized and empowered, enjoined and required, to aid and assist the said board and their officers, to the utmost of their power, in carrying into effect such rules, orders, and regulations, touching the stoppage of such intercourse, or the removal of the infected, when they cannot properly be attended to at home, as the board shall order and publish.

Sect. XXI. *And be it further enacted by the authority aforesaid,* That every person keeping a boarding or lodging house in the city of Philadelphia, the district of Southwark, or the township of Moyamensing, or the Northern Liberties, between the first day of June and the first day of November, in any year, shall, within twelve hours after

any seafaring man, or sojourner, shall become sick in such boarding or lodging house, report, in writing, the name of such diseased person to the health officer; and that no master of a vessel, or other person whatever, shall remove any sick person, from any vessel lying in the river Delaware, before the city of Philadelphia, the district of Southwark, or the township of the Northern Liberties, before the name of such sick person has been reported to the health-office, and a written permit granted for the purpose of such removal; and any person neglecting or refusing to comply with either of these directions, shall be subject, on conviction thereof, to a fine of one hundred dollars, and shall also be sentenced to imprisonment at hard labour, for a term not exceeding six months.

Sect. XXII. *And be it further enacted by the authority aforesaid,* That every person practising physick in the city, district and townships aforesaid, who shall have a patient labouring under a pestilential or contagious disease, (small pox and measles excepted,) shall forthwith make a report, in writing, to the health officer; and for neglecting so to do he shall be considered guilty of misdemeanor, and subject to a fine not exceeding fifty dollars.

Sect. XXIII. *And be it further enacted by the authority aforesaid,* That whenever any person shall die in the city, district or townships aforesaid, the physician or surgeon who shall have attended such person as a physician or surgeon, during his or her last sickness, shall leave a note in writing, signed with his name, with some of the family in the house where such person shall have died, specifying the name and apparent age of the deceased, and the disease of which he or she shall have died; and every physician or surgeon, refusing or neglecting to make and deliver such note, shall forfeit the sum of five dollars; and that no sexton of any church, or other person, having charge of any cemetery, vault, or burying ground, in the city, district or townships aforesaid, shall permit any dead body to be interred

therein, until he has received such note in writing, so signed as aforesaid; or in case no physician or surgeon shall have attended such deceased person, or the physician or surgeon who did attend, shall have neglected or refused to leave such note, then a like note, signed by some of the family in which such person shall have died, the contents of which note, in writing, shall be entered by such sexton on a blank schedule, to be furnished by the clerk of the health-office, or such other person as the board of health direct, and delivered, together with the said schedule, on the Saturday of every week, to the health officer for publication, in such form as may be designated by the board of health; and that every sexton, or other person, having charge of any place of interment, neglecting or refusing to perform any of the duties required by this act, shall forfeit the sum of twenty-five dollars.

Sect. XXIV. *And be it further enacted by the authority aforesaid,* That it shall be the duty of the said board of health, to cause all offensive or putrid substances, and all nuisances, which may have a tendency, in their opinion, to endanger the health of the citizens, to be removed from the streets, lanes, alleys, highways, wharves, docks, or any other part or parts of the city of Philadelphia, the district of Southwark, and the townships of the Northern Liberties and Moyamensing, and to cause such of the privies, within the limits aforesaid, to be emptied, or corrected with lime, or otherwise, at the expense of individuals who are owners of the houses to which the said privies are appurtenant, as the said board shall, from time to time, deem necessary for the health of the inhabitants thereof; and if the owners or occupiers of the premises on which any nuisance may be found, shall, on due notice thereof, refuse or neglect to have the same immediately removed as aforesaid, he, she, or they, so refusing or neglecting, shall forfeit and pay, for every such offence, any sum not less than twenty, nor more

than two hundred dollars, to be recovered and appropriated as by this act directed.

Sect. XXV. *And be it further enacted by the authority aforesaid,* That if any person shall obstruct or resist the board of health, or any of the members thereof, or any person by them appointed, in the execution of the powers to them given, or in performance of duties enjoined on them by this act, and the rules and regulations of the said board, such person shall, on being thereof legally convicted, forfeit and pay a sum not exceeding five hundred dollars, to be recovered and appropriated as is herein after directed; and if, after the expiration of the quarantine, any mariner, or other person, who shall have complied with the regulations hereby established, shall commit any violence on the person of a member of the board of health, or any of the officers attached to the same, for any thing done in the execution of his duty, such person shall be subject, on conviction thereof, to a fine of two hundred dollars, and shall also be sentenced to imprisonment, at hard labour, for any term not exceeding three years.

Sect. XXVI. *And be it further enacted by the authority aforesaid,* That for payment and satisfaction of all forfeitures and penalties, which are imposed by this act, and all sums of money directed by this act to be paid, it shall be the duty of the health officer to sue and prosecute, and the same to collect, recover, and receive, and the same shall be recoverable before any alderman, justice of the peace, or court of justice, having lawful jurisdiction, to the amount of such forfeitures, penalties, and sums of money respectively, or in the case, or upon the offence, upon which the proceeding shall be had, and the same, when recovered and received, shall be appropriated, and shall insure to the use of the institution, under the management and direction of the board of health. And no citizen, or inhabitant of the city of Philadelphia, the district of Southwark, or the township of the Northern Liberties, or Moyamensing, shall be dis-

qualified from sitting as judges or jurors, or from giving testimony respecting any of the offences mentioned in this act, by reason of his, her, or their common interest, in the appropriation of the sum or penalties imposed for such offence; nor shall any member of the board of health, or any officer entrusted with the execution of this act, or any part thereof, be disqualified from giving testimony respecting any of the said offences.

Sect. XXVII. *And be it further enacted by the authority aforesaid,* That all actions or prosecutions to be commenced against any master, captain, owner, or consignee of any ship or vessel, or other person, by virtue of this act, shall be brought within twelve months next after the commission of the offence wherewith he is charged; and if any action or suit shall be commenced against any person or persons, for any matter or thing committed in violation of this act, the defendant or defendants may plead the general issue, and give this act, and the special matters in evidence, at any trial to be had thereupon.

Sect. XXVIII. *And be it further enacted by the authority aforesaid,* That for defraying the expenses to be incurred in erecting and supporting the said lazaretto, and for carrying into complete effect the other provisions contained in this act, the said board of health are hereby authorized and empowered, by and with the consent of the mayor, or recorder, two aldermen, and two justices as aforesaid, to levy and collect tax on the estates and inhabitants of the city of Philadelphia, the district of Southwark, and townships of the Northern Liberties and Moyamensing, in the same manner, at the same rates, and under the same regulations, as the county rates and levies are, or may be, by law, levied and collected, such sums annually as the said board, by and with the consent of the mayor, or recorder, two aldermen, and two justices as aforesaid, shall deem necessary for the use of the said institution. *Provided,* The same does not exceed the sum of forty thousand dollars.

And the said board of health are hereby authorized and empowered to borrow, upon the credit of taxes aforesaid, such sum or sums of money, as may be thought necessary for the benefit of the said institution.

Sect. XXIX. *And be it further enacted by the authority aforesaid,* That any time between the fifteenth and twenty-fifth days of December, yearly, and every year hereafter, the board of health shall report to the governor the amount of taxes which may be levied, the monies received, and the monies expended, in pursuance of this act, and generally, an exact and circumstantial account of the institution; and shall publish the same in one or more newspapers printed in the city of Philadelphia.

Sect. XXX. *And be it further enacted by the authority aforesaid,* That the present board of health, hospital physician, lazaretto physician, and quarantine master, shall continue until the first day of May next, to possess and enjoy all the powers, privileges and immunities, to perform the same duties, and to receive the compensation, and to be subject to the like rules as if this act had not been passed, and the acts which are hereby repealed continue in force until that time.

Sect. XXXI. *And be it further enacted by the authority aforesaid,* That the act entitled "An act for establishing an health-office, and to secure the city and port of Philadelphia from the introduction of pestilential and contagious diseases," be, and the same is hereby repealed. *Provided nevertheless,* That all actions, prosecutions, or other proceedings begun, all rights accruing, and all penalties incurred under the said acts, shall be carried on, prosecuted, vested in, and sued for, and recovered by the board of health established by this act, in all respects as if the said acts had not been repealed, and appropriated as is directed by this act.

Sect. XXXII. *And be it further enacted by the authority aforesaid,* That this act shall continue in force for five

years, and from thence to the end of the next session of the general assembly, and no longer.

CHARLES PORTER,

Speaker of the House of Representatives.

JAMES BRADY,

Speaker of the Senate.

APPROVED—March the seventeenth, one thousand eight hundred and six.

THOMAS M·KEAN.

SUPPLEMENT TO THE HEALTH LAW.

An Act to continue in force an act entitled, “An Act for establishing an health-office, and to secure the city, and port of Philadelphia, from the introduction of pestilential and contagious diseases,” and supplementary thereto.—

Sect. I. *Be it enacted by the Senate and House of Representatives of the commonwealth of Pennsylvania, in general assembly met, and it is hereby enacted by the authority of the same,* That the board of health mentioned in the act to which this is a supplement, shall have power to appoint such officers and servants, as may be necessary to attend the health-office, the lazaretto, and the city hospital, and convey communications and supplies to the said lazaretto and hospital, and such other temporary officers and servants as may be rendered necessary, by the existence of any dangerous contagious disease in the city of Philadelphia, or in any other place within the United States.

Sect. II. *And be it further enacted by the authority aforesaid,* That the health officer on receiving from the captain or master of any ship or vessel, arriving from a foreign port or place, as is required by the second section of the act to which this is a supplement, shall pay the lazaretto physician two dollars and fifty cents, to the quarantine master one dollar and fifty cents, and to the port physician

and health officer, one dollar each, in full compensation for all services enjoined on them.—*And provided*, That so much of the first section of the act to which this is a supplement, as declares the furnishing the lazaretto physician and quarantine master, with provender for one horse and one cow, be, and the same is hereby repealed.

Sect. III. *And be it further enacted by the authority aforesaid*, That no member of the said board of health shall be permitted to go within the limits of the lazaretto, during the continuance of the quarantine, and any one of them offending against this provision, shall pay a fine of one hundred dollars, to be recovered by action, in any court having competent jurisdiction, by the guardians of the poor, for the city of Philadelphia, the district of Southwark, and the township of the Northern Liberties.

Sect. IV. *And be it further enacted by the authority aforesaid*, That the amount of taxes to be levied and collected by the said board, by virtue of the twenty-eighth section of the act to which this is a supplement, shall, in no one year, exceed fifteen thousand dollars. *Provided always*, That to defray the expenses necessarily incurred during a season when malignant fever shall become general, or be the cause of extraordinary expense, it shall and may be lawful for the said board of health, by, and with the consent of the commissioners of the county of Philadelphia, to borrow such sum or sums of money, as may be deemed necessary; and for discharging the debt so incurred, the said board shall be, and hereby are authorized and empowered to increase the amount of taxes, in the manner aforesaid, to such sum as may be requisite for the purpose.

Sect. V. *And be it further enacted by the authority aforesaid*, That the said board of health shall also, on the first Monday of January, in every year, exhibit their accounts to the auditors of the county of Philadelphia; and it shall be the duty of the said auditors, to settle and adjust the account of all monies received and expended by the said

board of health; and the said auditors shall have like power and authority in settling such accounts, as they have in other cases; and, on filing a copy of such settlement in the prothonotary's office, it shall be under the same laws, rules and regulations, and shall have the same operation and effect, upon every of the members of the said board of health, and in all other respects, as the report of auditors against county treasurers.

Sect. VI. *And be it further enacted by the authority aforesaid,* That from and after the passing of this act, any vessel, of more than two hundred tons burthen, arriving from Europe, Africa, or any place beyond the Cape of Good Hope, at the port of Philadelphia, may come too in the outer channel, as near the west end of the island of Little Tinicum, opposite the lazaretto, as her draught of water, wind, and weather will permit, for the purpose of receiving the visit of the lazaretto physician; and if the said vessel does not come into the inner channel, a fee of twelve dollars shall be paid for the visit of the lazaretto physician by every such vessel; of which sum, the several officers named in the second section of this act, shall be entitled to the several sums therein mentioned, and the residue thereof shall be paid into the treasury of the board of health.

Sect. VII. *And be it further enacted by the authority aforesaid,* That every person keeping a boarding or lodging house, in the city of Philadelphia, the district of Southwark, or the townships of Moyamensing, or the Northern Liberties, between the first day of June and the fifteenth day of October, in any year, shall, within twelve hours after any seafaring man, or sojourner, shall become sick in such house, report in writing, such diseased person, to the health officer; and any person neglecting or refusing to comply with the provisions of this section, shall, on legal conviction thereof, be subject to a fine not exceeding fifty dollars, and to imprisonment for any term not exceeding three months; and no person shall, hereafter, be subject to be punished by

imprisonment, by virtue of the act to which this is a supplement, without a previous conviction in due course of law. *Provided*, That nothing herein contained shall be construed to prevent the board of health from temporarily confining any person, within the lazaretto bounds, for such time as the said board may deem necessary for the safety of the publick.

Sect. VIII. *And be it further enacted by the authority aforesaid*, That the said board of health, or a committee of them, shall have power, having first obtained a warrant from a justice of the peace, in due form of law, founded on a complaint of two freeholders, under oath or affirmation, directed to the sheriff of the county of Philadelphia, or his deputy, to enter and search all houses, stores, cellars, and other enclosures, between sun rise and sun set, where they may have just cause to suspect any nuisance to exist. *Provided however*, That no sheriff, or deputy sheriff, shall execute any civil process, either by arresting the body, or attaching the goods and chattels, of any person or persons, under colour of any entry made for the purposes aforesaid, unless such service could by law have been made, without such entry, and all services so made under colour of such entry, shall be utterly void, and the officer making such service shall be considered a trespasser; and said board shall remove, or cause to be removed, all offensive or putrid substances, and all nuisances, which may have a tendency, in their opinion, to endanger the health of the citizens, from the streets, lanes, alleys, highways, wharves, docks, or any other part or parts of the city of Philadelphia, the district of Southwark, and the townships of the Northern Liberties and Moyamensing; and the said board shall recover in any court, having lawful jurisdiction, from all corporate bodies, and private individuals, the expense attending such removal, if the owners, occupiers, or agents of the premises, on which any such nuisance may be found, shall have been duly notified to remove the same, and shall refuse or neglect so to do, within the time prescribed by the board.

Sect. IX. *And be it further enacted by the authority aforesaid,* That so much of the act entitled, "An Act for establishing an health-office, and to secure the city and port of Philadelphia from the introduction of pestilential and contagious diseases," as is not inconsistent herewith, or supplied hereby, shall, together with this act, be continued in force for one year.

JOHN TOD,

Speaker of the House of Representatives.

P. C. LANE,

Speaker of the Senate.

APPROVED—the thirty-first day of March, one thousand eight hundred and twelve.

SIMON SNYDER.

An Act to amend and continue "An Act for establishing an health-office, and to secure the city and port of Philadelphia from the introduction of pestilential and contagious diseases," and the supplement thereto.

Sect. I. *Be it enacted by the Senate and House of Representatives of the commonwealth of Pennsylvania, in general assembly met, and it is hereby enacted by the authority of the same,* That the act entitled "An Act for establishing an health-office, and to secure the city and port of Philadelphia from the introduction of pestilential and contagious diseases," passed the seventeenth day of March, one thousand eight hundred and six, together with the supplement thereto, passed on the thirty-first day of March, one thousand eight hundred and twelve, (except so much of the said act and its supplement as is herein after altered and supplied,) be, and the same are hereby continued in force for four years.

Sect. II. *And be it further enacted by the authority aforesaid,* That from and after the passing of this act, no person shall be capable of serving as a member of the board of

health for more than three years successively; and the members of the said board shall receive four hundred dollars each, per annum, as a compensation for their services.

Sect. III. *And be it further enacted by the authority aforesaid,* That the health officer on receiving from the captain or master of any ship or vessel, the certificate, as directed by the act to which this is a supplement, or where no certificate is to be given on the arrival of the vessel, shall be entitled to receive, from the captain or master, the following sums, and no more, and to pay the same over, from time to time, to the treasurer of the board of health, *to wit:* All American vessels sailing under coasting documents, arriving at the port of Philadelphia from any port or place in the United States, between the river St. Croix and the river St. Mary, (except ports or places between Sandy Hook and Cape Charles,) shall pay two dollars and fifty cents each; and the said vessels, during quarantine months, shall, (if having goods capable of containing contagion, persons, baggage, or clothing from any foreign port or place, or any diseased person,) stop at the lazaretto, and there be examined by the lazaretto physician and quarantine master, under the rules, regulations, and penalties in the act hereby continued; and all American vessels from any port in the United States, where they may have touched or traded from a foreign port or place, shall pay the same sum as if they had arrived direct from such port or place; and all American vessels, with coasting documents, arriving from any port or place between Sandy Hook and Cape Charles, including the bay and river Delaware, during quarantine months, having on board merchandise of foreign growth, or manufacture, or persons, baggage or clothing from any foreign port or place, or from any place to the northward or eastward of Sandy Hook, or westward of Cape Charles, shall stop at the lazaretto for examination, under the rules, regulations, and penalties in the act hereby continued, and shall pay for each arrival, during quaran-

tine months, two dollars and fifty cents; all American vessels arriving from any port or place in New Brunswick, Nova Scotia, Canada, or the islands or parts adjacent, the river St. Mary, the coast of Florida, bay of Mexico, including New Orleans, and parts adjacent, and from thence along the bay of Honduras, and coast of Terra Firma, as far as the river Amazon, and including all the islands generally denominated West India Bahamas, or Bermudas, shall pay on arrival, five dollars; all American vessels arriving from any place in Europe, in the Western, Madeira, Canary, or Cape Verd Islands, the west coast of Africa as far as latitude thirty-four degrees south, and from any place in the Mediterranean, or straits thereof, or from any place from the river Amazon inclusive, and round the coast of Brazil as far as latitude thirty-four degrees south, shall pay ten dollars each; and all American vessels arriving from any place beyond latitude thirty-four degrees south, or round Cape Horn, or the Cape of Good Hope, shall pay twenty dollars each; and all foreign vessels arriving as aforesaid, (except prizes to American vessels,) shall pay twenty-five per cent. each, additional; and prize vessels, taken by foreign armed vessels, shall pay twenty-five per cent. each, more than is paid by American vessels; and prize vessels taken by American vessels, shall pay, on arrival, ten dollars each; and all publick armed vessels, and privateers, shall pay six dollars each; and all vessels that shall be entitled to receive a visit in the outer channel, if visited there, shall pay five dollars additional; and all vessels by this act entitled to a visit in the outer channel, shall hoist a signal for that purpose, to wit, a wiff at the main-top-gallant-mast head.

Sect. IV. *And be it further enacted by the authority aforesaid,* That the lazaretto physician, quarantine master, port physician, and health officer shall, from and after the passing of this act, receive annually the following salaries, as a compensation for their services, in lieu of their present fees:

That is to say, The lazaretto physician, the sum of twelve hundred dollars; the quarantine master, the sum of seven hundred dollars; the port physician and health officer, the sum of five hundred dollars each; to be paid quarterly, by an order drawn by the board of health on their treasurer; and the quarantine master shall accompany the lazaretto physician on the arrival of vessels at the lazaretto, and shall have them moored, and when necessary, well cleansed and white-washed, for which he shall be paid, in addition to his salary, by the master, owner or consignee, and shall be allowed to charge for lime and brushes the usual prices at which such articles are retailed in the city of Philadelphia; (he shall also be authorized to receive all letters and papers to be forwarded to Philadelphia by the lazaretto mail, and by any other conveyance he may think proper;) and no person shall be permitted to go on board any vessel, under quarantine, except the lazaretto physician and quarantine master, unless at the request of either of them, to perform some necessary service; and the quarantine master shall be furnished with such boats and crews as he, in conjunction with the board of health, may judge necessary for having the duties of the lazaretto physician and quarantine master carried into complete effect, and shall also be furnished with a good spy-glass.

Sect. V. *And be it further enacted by the authority aforesaid,* That the board of health is hereby directed to lease out the city hospital, and lot of ground belonging to it, except when wanted for the sick, on the best terms that can be obtained,

JOHN TOD,

Speaker of the House of Representatives.

P. C. LANE,

Speaker of the Senate.

APPROVED—the twenty-fifth day of March, one thousand eight hundred and thirteen.

SIMON SNYDER.

An Act to amend and continue "An Act for establishing an health-office, and to secure the city and port of Philadelphia from the introduction of pestilential and contagious diseases," and the supplements thereto.

Sect. I. *Be it enacted by the Senate and House of Representatives of the commonwealth of Pennsylvania, in general assembly met, and it is hereby enacted by the authority of the same,* That the act entitled "An Act for establishing an health-office, and to secure the city and port of Philadelphia from the introduction of pestilential and contagious diseases," passed on the seventeenth day of March, eighteen hundred and six, together with the supplements thereto, passed on the thirty-first day of March, eighteen hundred and twelve, and the twenty-fifth day of March, eighteen hundred and thirteen, (except so much of the said act and its supplements as is herein after altered and supplied,) be, and the same are hereby continued in force for three years, from and after the twenty-fifth day of March next.

Sect. II. *And be it further enacted by the authority aforesaid,* That any vessel, of the burthen of one hundred and fifty tons, and upwards, arriving at the lazaretto from any foreign port, or coastwise, may come too in the outer channel, as near to the west end of the island of Little Tinicum, opposite the lazaretto, as her draft of water, wind and weather will permit, for the purpose of receiving the visit from the lazaretto physician and quarantine master; and if the said vessel does not receive her visit in the inner channel, she shall pay an additional sum of five dollars, of which two dollars shall be paid to the lazaretto physician, and one dollar to the quarantine master, as a compensation for their extraordinary services, and two dollars shall be paid into the treasury of the board.

Sect. III. *And be it further enacted by the authority aforesaid,* That a letter mail shall, during the quarantine season, leave the lazaretto for the health-office, in the city of Philadelphia, and return twice in each juridical day, at such

hours as the board of health shall determine, and shall be free for the transmission of letters to and from persons who may be within the bounds of the lazaretto, or on board of vessels which may be detained there; and it shall be the duty of the health officer, immediately after the arrival of the lazaretto mail, to deposit in the post-office the letters received thereby, excepting those which shall be addressed to the board of health, and the officers connected therewith.

Sect. IV. *And be it further enacted by the authority aforesaid,* That the fifth section of the act to which this is a supplement, be so far amended, as that if satisfactory proof be given that goods or merchandise, the growth or produce of any foreign place or country, which shall arrive at the lazaretto coastwise, have been landed at any port or place within the United States for more than twenty days, and are free from damage, that the vessel bringing the same shall not be liable to detention therefor.

Sect. V. *And be it further enacted by the authority aforesaid,* That it shall be the duty of the said board of health, and they are hereby authorized, to invest all sums of money which may, at any time, be in the hands of their treasurer, over and above the amount which may be necessary to meet their current expenses, in the funded debt of the United States, and to sell and transfer the stock of the same at such times, and in such portions, as necessity may require.

Sect. VI. *And be it further enacted by the authority aforesaid,* That the number of the members of the board of health shall be increased to eleven, who shall serve without compensation or emolument, and shall be appointed in the manner following, to wit: The select and common councils, of the city of Philadelphia, in a joint meeting, to be held on the afternoon of the second Monday in March, annually, between the hours of two and six o'clock, shall elect, by ballot, six citizens, who shall be taxable inhabitants of the said city; and the commissioners of the township of the Northern Liberties, and the commissioners of Spring Gar-

den, shall, annually, on the same day, and between the same hours, elect, by ballot, three citizens, who shall be taxable inhabitants of the said townships; and the commissioners of the district of Southwark, and the commissioners of Moyamensing, shall, annually, on the same day, and between the same hours, elect, by ballot, two citizens, who shall be taxable inhabitants of the said districts, who shall constitute a board of health, of which a majority shall be a quorum, and be invested with all the estate, rights, and corporate powers which are defined in the act and supplements to which this act is supplementary. *Provided*, That in case the appointments hereby directed to be made, should not take place on the day specified, they may be made on any other subsequent day, prior to the third Monday in March, between the same hours. *And provided*, That the number of years for which an individual may be eligible as a member of the board of health, shall not be limited. *And provided*, That in case of the removal, death, sickness, resignation, inability, or refusal to serve, of any of the said board, their place shall be supplied by other appointments, to be made by the same authority which appointed the individuals, by whose delinquency the vacancies shall have been occasioned.

REES HILL,

Speaker of the House of Representatives.

ISAAC WEAVER,

Speaker of the Senate.

I do certify, that the bill entitled "An Act to amend and continue "An Act for establishing an health-office, and to secure the city and port of Philadelphia from the introduction of pestilential and contagious diseases, and the supplements thereto," which has been disapproved by the governor, and returned with his objections, to the house of representatives, in which it originated, was agreed to by two-thirds of the house of representatives, on the twelfth day of March,

one thousand eight hundred and seventeen, and that the foregoing is the act so agreed to by the said house.

REES HILL,

Speaker of the House of Representatives.

ATTEST,

SAMUEL D. FRANKS,

Clerk of the House of Representatives.

I do certify, that the bill entitled "An Act to amend and continue "An Act for establishing an health-office, and to secure the city and port of Philadelphia from the introduction of pestilential and contagious diseases, and the supplements thereto," which has been disapproved by the governor, and returned with his objections, to the house of representatives, in which it originated, was approved by two-thirds of the senate, agreeably to the constitution, on the thirteenth day of March, one thousand eight hundred and seventeen, and that the foregoing is the act so approved by the senate.

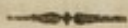
ISAAC WEAVER,

Speaker of the Senate.

ATTEST,

JOSEPH A. M·JIMSEY,

Clerk of the Senate.



Such are the provisions of the quarantine laws of two of the most populous and commercial cities of the United States. It would be superfluous to comment upon them in detail. They are predicated on the same hypotheses, the existence and apprehension of an imported fomes, of which we have already attempted to demonstrate the non-existence. If we seriously contemplate the embarrassments, and the penalties they impose, it must be admitted that justice imperiously demands a reformation. The solemn consequences that await those who infringe these laws, evince the conviction of the legislators who framed them, that the yellow fever is derived from foreign sources. While the police of

those cities professes to guard against the domestick origin of the disease, it is but too manifest, their principal attention is directed to foreign causes. There cannot be a more flagrant, or more lamentable proof that the framers of these laws were destitute of every ray of knowledge of the true qualities of contagion, than the exemption of the small pox from the provisions of their quarantine laws. That disease which assails our bodies through every sense but one, whose concentrated poison can be preserved for years, which ocular demonstration has proved to have been transported to every part of the commercial world, is permitted to scourge mankind, while we are legislating against a phantom, against a superstition, against a compound of fear and imagination, heightened by a mixture of the marvellous, as fabulous as any of the tales comprehended within the complicated machinery of the heathen mythology. The visions of contagion stand on a parallel with the calculations of judicial astrology, solemn exorcisms, enchanted castles, and the spells of wizards and witches. "The age of chivalry" is not gone. The attack on the wind-mills was not a more conspicuous example of the ascendancy of the imagination over judgment, than the tragi-comick scene we witness every year, a ship riding quarantine in the Delaware or North River, to protect the citizens of Philadelphia and New York against the yellow fever. The authors of this farce acted as judiciously, as the naturalist Hasslequist, who performed a voyage to Egypt, to view the grandeur, and analyze the constitution of the pyramids, but lo! he spent his time in classifying an insignificant *moss* that grew at their bases.

The quarantine laws of other states, and the municipal provisions of other places, might be exemplified as so many monuments of false philosophy, and the tyranny of custom. Even those who are destined to an annual visitation of the yellow fever, who inhale its remote cause at every breath, for six months of the year, are imitating the elder cities

and states. The state of Louisiana has passed laws to guard against the yellow fever from abroad, and the territorial governments will probably frame the same provisions against New Orleans, and the other populous establishments between them and the Atlantick. It would be as easy for the legislature of Louisiana, or the police of New Orleans, to remove the state further north, or to reverse the course of the Mississippi, as to prevent the yellow fever by any system of quarantine, which the ingenuity of man can devise.

But shall we enact and observe no quarantine laws? For the small pox we must legislate, or enact sumptuary laws. The rich must be compelled to vaccinate their children in infancy, and the poor must be vaccinated at the publick expense, or, the small pox will continue to infest us. Nay, it will then be a problem yet to be solved, whether the cause that originally inflicted this scourge, does not continue to act. We incline to the opinion, that the primary elements are not lost, but continue to operate, under certain conditions of the elements, which we cannot comprehend; and that, therefore, mankind can only be protected by the adoption of universal vaccination, confined, by legal authority, to the enlightened physician.* For no other general disease, for no other fever can we rationally enact protecting laws. They all depend exclusively on the atmosphere; the wind bloweth where it listeth. We cannot control the elements; can man stay the north wind, or say to the rainy south, so far shalt thou go, and no farther? As well might he attempt to still the planets in their orbits, veil the rays of the meridian sun, or wash the Ethiop white.

Our adversaries, admitting they were convinced of the indigenous origin of the yellow fever, would still employ the same means, as a protection against the *plague*. This

* Admitting the vaccine virus to be an effectual prophylactick, which is problematical.

disease, whose nativity is located by writers, in Africa and Asia, (if the doctrine of the advocates of contagion be true,) must have been transported over the Red Sea by the children of Israel, when they were emancipated from the bondage of Pharaoh, and although we do not learn that it infested the land of Canaan, or persecuted them in their progress, for several centuries, the contagion must have been kept alive. This hypothesis is as consonant to reason as any of the opinions by which it has been followed, respecting contagion. This disease has been viewed by men of science, with a mixture of terror and superstitious veneration, which seems to have made it a thing too holy to be approached, and sacrilegious to invade. On what foundation rests this profane temple raised to an unknown god? on the antiquated sophism, the doctrine of *contact*. The belief that the man who puts his finger on the body of one sick with the plague, is dead while he liveth. If the laws that govern this disease, are not at variance with all the other laws of etiology, as well as pathology, this pretended fact is a popular superstition, repugnant to analogy, and every mode of reasoning; refuted by experience, and abhorrent to common sense. If the plague be a general fever, (which is universally admitted,) and is communicated by *simple contact*, the principle of contagion necessarily arises from a vitiated secretion of the skin. How does this most virulent of poisons contaminate a healthy body? the hypothesis is soluble only on one of two principles. It must be admitted, that the poison brought into contact with the surface, is absorbed, and thus inflicts the lethiferous wound upon the nerves, or it must erode the cuticle, and like any other inoculation, excite local inflammation. The difficulty, nay impossibility of the absorbents acting through the unbroken cuticle, would be a sufficient refutation of this theory; but the notorious fact, that the plague never appears at any uniform period after contact, is irrefragable proof that it is not received through the skin. Although it has often

been asserted that the plague has been propagated by inoculations, there is not one proof of this opinion to be found in the annals of medicine. That it does not excite a local inflammation in the part touched, is beyond dispute, because such a phenomenon has never been seen. If it were received into the lungs, like other contagions, the effluvium, from the vessels first affected, would constitute the poison. This does not correspond with the hypothesis of the abettors of contagion, who rest their claim to credulity on simple contact. That such an effluvium from the lungs, is the *vis nocens*, is improbable, because the plague is not an eruptive fever. To us, as far as the question of quarantine is concerned, it is of little importance whether the plague be contagious, or received by infection. It has never been seen on our continent in the form described by foreign writers. Although our commercial intercourse has extended to all those countries which have generated it, no trait has ever been noticed; a fact which alone ought to outweigh all the visionary tales of travellers, writers, and quarantine makers.

What are the results of the quarantine laws of any nation, or of all the nations in which they ever existed? They have all eventuated as unpropitiously as our own. They have never arrested the progress of any disease, except the small pox, which, like all other contagious fevers, presents its own form and image to the senses, and bears witness for itself. Even the despotism of military discipline has failed to check the progress of the plague. A phalanx of soldiers, co-extensive with the range of pestilence, has failed to arrest its progress. The atmosphere is the seat and throne of the cause, and all the embattled legions of the Holy Alliance could not impede its course.

It behoves the United States to give the example; a practical illustration of the American doctrine of pestilential diseases. It cannot be deemed presumptuous to anticipate the era when the constituted authorities of our country will

make it a national concern, when a consular convention, at least with the nations commercially connected with us, will put a period to a system which is a reflection upon our philosophical character. Nay, the time is not distant when an American envoy will receive, as an article of his instructions, an injunction to stipulate, in all cases, against the tyranny of quarantine laws. The germ of this principle is already planted. It redounds to the immortal honour of an American Executive, first to have publicly protested against this remnant of barbarism. From the commencement of the late pestilential period in the United States, Mr. Jefferson manifested a lively interest, and instituted an analytical investigation of the origin of the yellow fever. After an elaborate research, he declared the disease *not contagious; and, therefore, not imported.* In his communication to congress, in 1804, on the state of the union, he marks an era in the history of our country, as the first publick functionary in the world, who dared to think for himself on this momentous subject. Some hundred years hence, it will scarcely be credited by posterity, that civilized nations had so long submitted to a system as oppressive to commerce, as it is hostile to reason and humanity.

Thus we have pursued the advocates of contagion through some of the mazes of theoretick speculation, and have met them with facts. In whatsoever light we contemplate the question, they are "weighed in the balance, and found wanting." The votaries of that medical heresy have sought their phantom in every clime, but found it in none. It has been courted by them with an enthusiasm worthy a better cause; but in vain. It is they know not what; it comes they know not whence; and goes they know not where. Pursue it as they may, it must still elude their grasp, vanish into circumambient air; and, *like the baseless fabrick of a vision, leave not a wreck behind.*

THE END.

ERRATA.

Page 39, 2d line from top, for "which although," read "*and although.*"

Page 49, 19th and 20th lines from top, for "it may be employed with great propriety," read "*it cannot be employed with propriety.*"

Page 51, 5th line from bottom, for "secretions," read "*excretions.*"

Page 63, 10th line from top, for "grivances," read "*grievances.*"

INDEX

Page 101. In the first part of the volume, the author discusses the history of the subject, and the progress of the science, from the earliest times to the present day. He also gives a list of the principal authors who have written on the subject, and a list of the principal works which have been published on the subject.

Page 102. The second part of the volume is devoted to a description of the principal works which have been published on the subject, and to a list of the principal authors who have written on the subject. The author also gives a list of the principal works which have been published on the subject, and a list of the principal authors who have written on the subject.

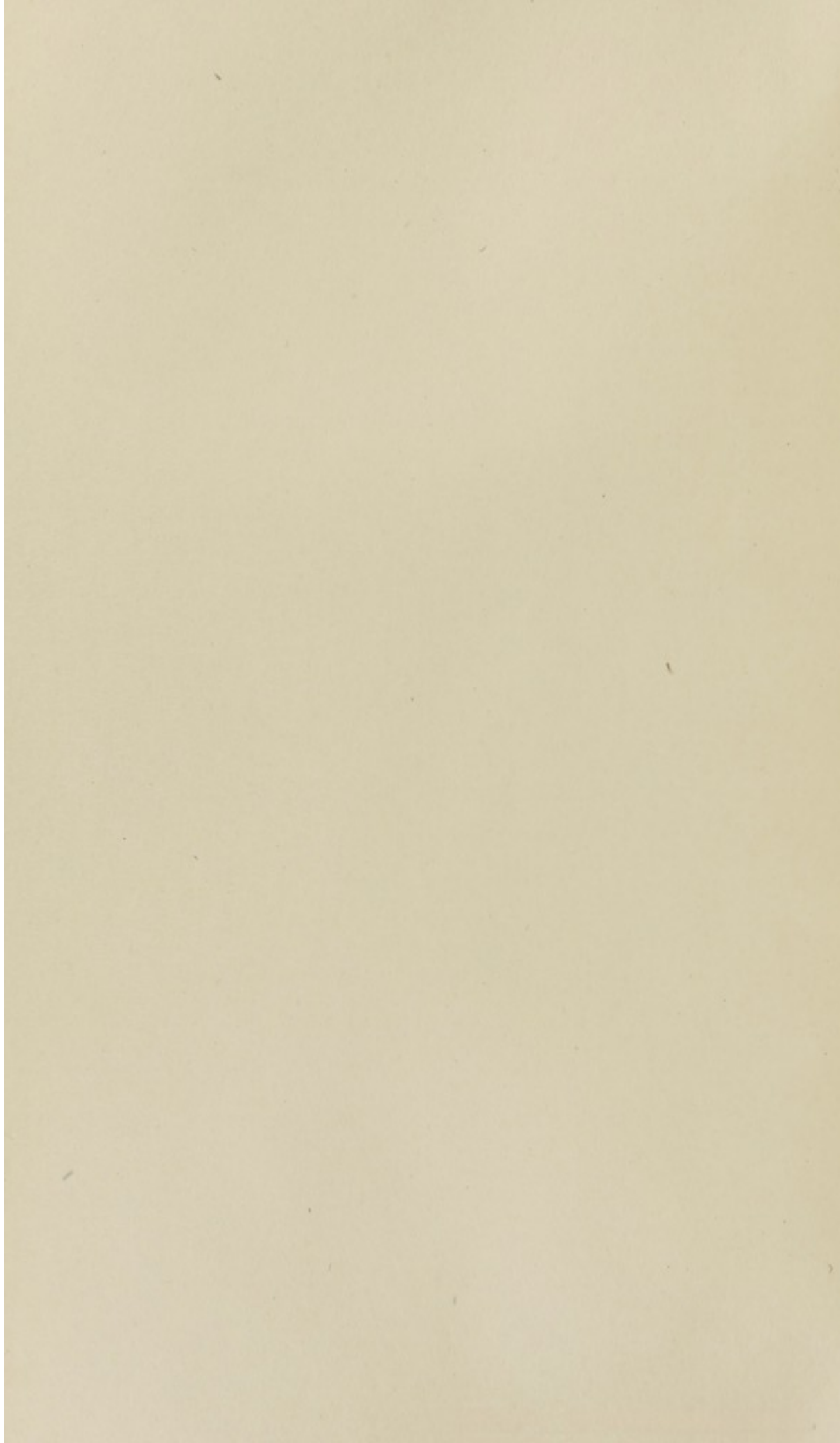
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Page 105. The fifth part of the volume is devoted to a description of the principal works which have been published on the subject, and to a list of the principal authors who have written on the subject. The author also gives a list of the principal works which have been published on the subject, and a list of the principal authors who have written on the subject.

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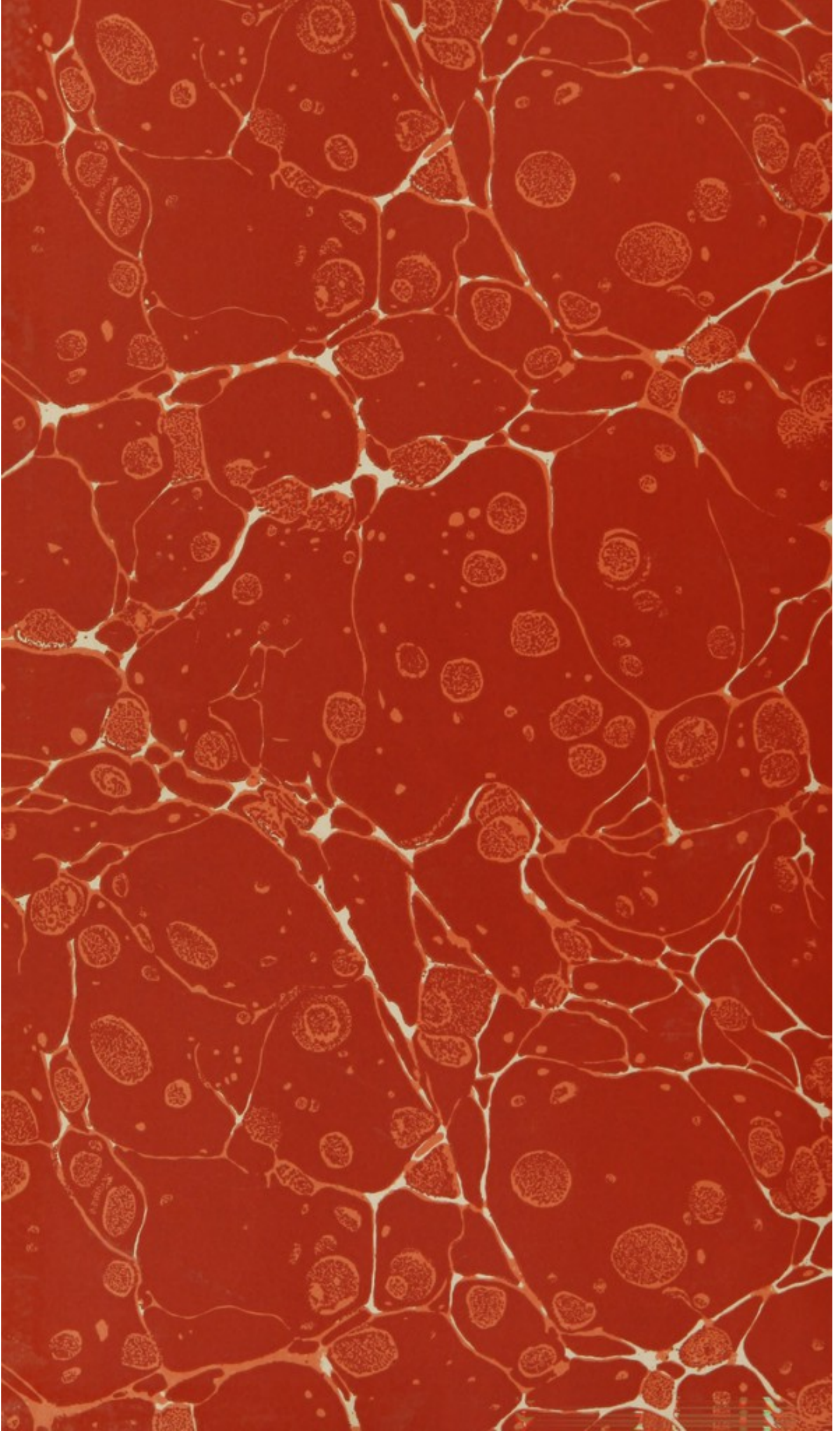
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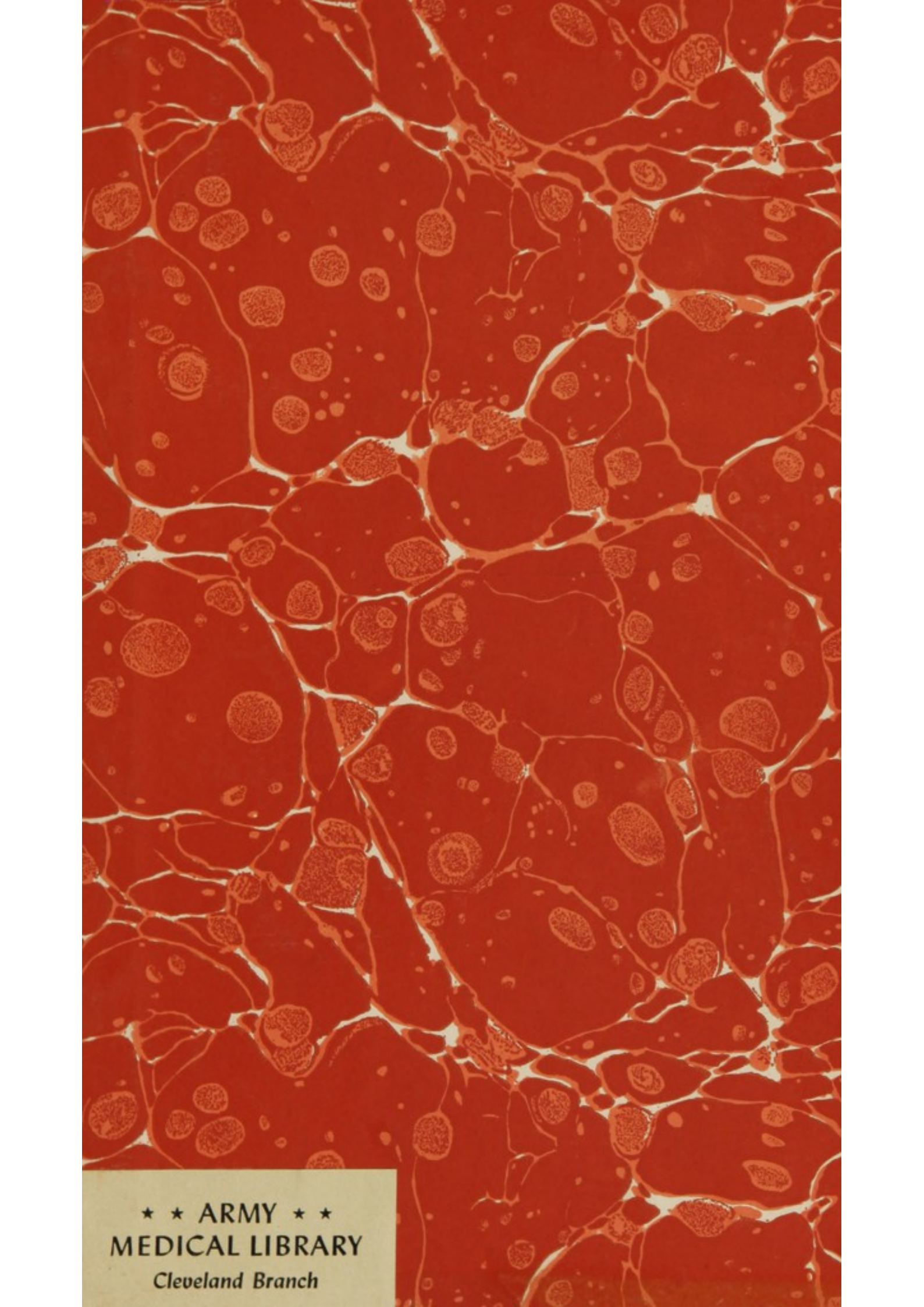
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