LETTER

From Dr. Miller, health-physician for the port of New-York, to the governor of that state.

[CONTINUED.]

Besides the points of analogy just mentioned, there is another equally or perhaps more remarkable. The remittent fever of the country and the malignant fevers (denominated *yellow*) of our cities have a similar irregularity which generally characterises them and leads strongly to the inference of the similarity of their origin. In the districts of the country where remittent fevers prevail, and in the cities which produce malignant fevers, we find these diseases, in seasons apparently similar, and even in the same season, often exhibiting a singular local unsteadiness in their appearance, extent and violence. In the operation of the causes which produce them, there is something unaccountably contingent and desultory. Remittent fevers will prevail sometimes in one district of a low country, and sometimes in another; while the whole extent of these different districts seems to be equally liable to the disease, and no cause can be assigned for the visitation in the one and the escape of the other. In like manner some of our cities are invaded by pestilence in unfavorable seasons, while others, apparently just as liable to be invaded, escape.

For these reasons, as well as many others which my limits will not allow me to state, I conclude that our late epidemic, and all the preceding similar ones, have been of domestic origin and, of course, nearly related to the remittent bilious fever of the country.

From this simple and consistent view of the subject, the attention of some has been unfortunately drawn aside by the mistaken opinions of the *importation of the disease from abroad*, and *the propagation of it by contagion*.

As the question of contagion, in this disease, is important and fundamental, and as the affirmative has been asserted with much confidence, it becomes necessary to consider this point with great attention.

But, before proceeding to offer reasons in detail against the contagiousness of yellow fever, it is proper to premise some general observations on the subject.

A contagious disease is distinguished from all others by the property of generating or secreting a matter, which, applied by contact, or inhaled with the air, by near approach to the sick, or to inanimate substances charged with their effluvia, successively reproduces the same disease. As this contagious matter is secreted by a morbid action of vessels, or a peculiar process of the disease, forming a specific and essential part of its character, it must always be generated when such disease exists: and being generated, & then duly applied or inhaled, its action is altogether independent of external circumstances, such as the state of the air, &c. and must always take effect, unless there be something in the condition of persons exposed to it, which renders them unsusceptible of the impression. This unsusceptibility, depending upon peculiar and unusual circumstances, (except in the diseases which attack the same person but once,) must, of course be extremely rare. The small pox affords an example of this operation of contagion. If forty persons, who have never undergone small pox, be closely exposed to the effluvia of a number of patients lying ill of that disease in the ward of a small pox hospital, thirty-nine certainly, and probably the whole number will be infected. This is an example of a contagious distemper. The contagious matter is the constant and universal product of the disease; and when produced, it generally reproduces itself in such as receive it; provided they have not been (in the case of small pox) previously subjected to its action. The principle of unsusceptibility cannot reside in the surrounding air, but is to be sought for in the body that resists the contagion. There are no facts to prove that pure atmospheric air is a neutralizer or destroyer of contagion; every day presents instances of the reverse; and when diffused through an extensive space, air renders it harmless, not by immediately decomposing, but by diluting and dissipating it. On the other hand, none of the truly contagious diseases derive any additional force from impure air; for the greater contagiousness of confined air in cases of this sort arises merely from the concentration of a greater quantity of contagious matter within a small space. The application of these principles to the subject in question, will presently be seen.

It is proper likewise to premise, that the attack of many persons in the same neighborhood, or even of whole families, by a reigning disease, affords no proof of contagion, for the intermittent and remittent bilious fevers of the country, which undoubtedly are not propagated by contagion, often attack families and neighborhoods so generally as scarcely to leave healthy persons in sufficient number to attend the sick. The want of due discrimination between the effects of an *impure atmosphere* and of *contagion* is one of the most lamentable deficiencies in the history of diseases.

The agency of contagion in the propagation of our malignant disease, is rejected for the following reasons:

1. No relation is observed between the source of the pretended contagion and the spreading of the disease to individuals or families; nor was there ever any foundation to attempt progressively to trace the propagation of it to any number of persons, from the first case, or from any single point of infection. If the first ten or twenty cases, which occur in any season, be strictly scrutinized, most of them are found, in their origin, to be distinct and independent of one another. Instead of pervading families, or creeping slowly from one neighborhood to another, in the track of infection, as is invariably the case with contagious distempers, this disease is found scattered at distant and unconnected points, and cases start up singly in situations where contagion could neither be traced nor suspected. The proportion of single cases in the midst of families is always great; and the instances of any large proportion of families being attacked were comparatively very rare in our late epidemic. It appears from the records of this epidemic, that there were thirty-one streets of the city, most of which continued to be crowded with inhabitants, in which only a single case in each occurred; and in the mass of six hundred cases reported to the board of health, there were only thirty-five houses in which more than a single case was found. If the number of deaths should be supposed to afford better ground of calculation, it will be found that there were 40 streets, & those generally crowded throughout the season, in which only one death severally took place; not more than 3 died in any one house; of this there were only two instances; & during the whole epidemic, there were only 12 cases of 2 persons dying in one house. The great mass of persons attacked with the disease, consisted of such as never had approached the sick, or any other assignable source of contagion; and on the contrary, as will presently appear, great numbers were exposed to close intercourse with the sick, without injury.

In order to explain this scattered, remote, and unconnected occurrence of cases, the advocates of contagion are obliged to resort to the extravagant supposition of the contagion being diffused through an extensive range of atmosphere, or, to use their own singular phrase, of an *inoculation of the atmosphere* by the effluvia of the sick, or of the infected cloathing or bedding which were supposed originally to have introduced the contagion. It is scarcely necessary to observe that this is a new and unheard of doctrine, utterly unknown and repugnant to all the principles and laws of the communication of contagion, which have been sanctioned by the experience of ages, and entirely subversive of all the hopes the contagionists themselves can derive from a separation of the sick from the well, or from the most rigid regulations of quarantine. This doctrine is likewise inconsistent with itself. If contagion from a single source can extend itself so far, what would become of the inhabitants of the city generally, when in the progress of the epidemic, cases are so immensely multiplied, & the disease so extremely diffused? If this contagion can exercise such a destructive activity at a distance, after being so much diluted in the air, what must be the effect of approaching near to the source? If a contagion really existed, capable of retaining its virulence, after such extensive diffusion in the atmosphere, it would bid defiance to all the barriers of quarantine, be incoercible by human means, and finally would depopulate the world. Another inconsistency is equally glaring. If this effluvium from a sick body, or from foul cloathing or bedding should be supposed to vitiate the air to such a distance around, it must, after such extensive diffusion, become light and fugitive, and liable to be blown away by the first breeze. But, how does it happen that this same space of air, after the inhabitants are fled, the sick removed, and houses shut up, continues till a change of season, to be permanently noxious? Nothing can account for this local, stationary and inexhaustible poison, but the exhalation from the masses of filth and pollution overspreading a large area of ground, forming a vast hot-bed of putrefaction, incessantly teeming with miasmata, & thereby, in despite of currents of air, loading with the seeds of disease every successive portion of atmosphere that sweeps or stagnates over the pestilential surface.

2. The pretended contagion is admitted to produce no effect in our climate, except in particular situations, and at a particular season of the year, when an impure and noxious atmosphere, which ought to be considered as a sufficient cause, is acknowledged to exist. But to consider a disease as contagious, which, at the same time exhibits no contagion but in certain climates, in such climates only in certain places, at such places only at certain seasons, and even at such seasons only after a particular degree of heat and moisture, is undoubtedly to lose sight of all the established properties and laws of contagion.

3. It is admitted that the disease does not spread when the sick are removed from the impure air in which it was contracted. By breathing this impure air, without exposure to the effluvia of the sick, persons are every day attacked; while, on the contrary, without breathing it, however exposed to such effluvia, no person is seized. The conclusion, therefore, is irresistable, that the impure air is the cause.

4. No communication of the disease was ever observed in yellow fever hospitals, situated at a small distance from the cities to which they belong. No exception to this has ever occurred, in any of the numerous seasons of this pestilence at our hospital at Bellevue, the marine hospital at Staten-Island, that of Philadelphia, or any other in the United States; provided the malignant air of the city had been avoided. The force of this fact seems never to have been duly considered or appreciated. The numerous retinue of medical attendants, nurses, washer-women, servants, &c. which belong to a hospital, must be known to every body. How greatly they are all exposed to contagion, if it could be supposed to exist in this case, is equally known. The most malignant degrees of the disease are constantly found in these institutions. The exposure of physicians and their assistants, is well understood. The duty of the nurses leads to an incessant and unreserved intercourse with the sick. They pass the greater part of their time, and sleep in the apartments of the sick, the dying and the dead. In lifting, undressing, dressing, administering remedies, and many other modes of assistance, they are very often in actual contact, and commonly within a small distance of the patients. They receive and carry away all excrementitious discharges. Several persons are employed in washing the foul clothes and bedding the sick and the dead. Not only all these have invariably escaped the disease, but likewise all persons occupied in the removal of the sick from the city to the hospital, who in this service went without reserve into the most pestilential quarters of the town, entered the most filthy apartments, and lifted the sick into their carriages dressed in their foulest clothes, and sinking under the worst degrees of the disease.

In order to account for these facts, the advocates of contagion contend that its activity is confined to *impure air*, and that by this alone it can be *conducted* to the objects of its attack. Our hospital at Bellevue, however, is not so constructed as to allow the supposition of great purity of the air; and indeed the state of the land air in the months of August, September & October, cannot be considered as pure, in any part of our country. But admitting the highest possible purity of air in these hospitals, the operation of contagion, if it existed there, could not by that means be avoided. When the naked hands of physicians and nurses are in contact with the skin of the patient, scorched with febrile heat, or bedewed with the matter of perspiration, how can pure air be interposed to arrest the passage of contagion? When they inhale, as they often do, the breath and effluvia of the sick, no man can doubt that such air is sufficiently impure to be the *conductor* of contagion, if it really existed. In all contagious diseases, contact and immediate inhalation of the effluvia and breath of the sick, are supposed to constitute the greatest possible exposure; and in such cases, it is plain, the interposition of air, pure or impure, must be equally unavailing to arrest the evil. Yet in these hospitals, persons not only escape this danger, but none were ever known to be infected by it.

5. The extinction of the disease by cold weather, is an insuperable objection to the doctrine of its propagation by contagion. That the disease in reality depends upon an atmospheric poison, appears from the fact, that all the means which operate to arrest and destroy it, such as cold, heavy rains and high winds are merely atmospheric agents. The healthy temperature of the human body is the same in all climates and seasons; and febrile heat is not less in winter than summer. Consequently, the morbid process by which the matter of contagion is generated, is under no controul from atmospheric temperature. Hot climates and seasons are universally held to be unfavorable to the spreading of contagion. The reason is obvious. In warm weather, the doors and windows of the appartments of the sick are kept open, and ventilation is carried to the highest degree. At this season, the effluvia of the body, whether in health or disease, are sooner dissipated, and, of course, can less readily adhere to cloathing, bedding, walls, furniture, &c. so as to be retained, and become noxious. In conformity to this, typhus, which is propagated by a poison produced in the cloathing, bedding, furniture, &c. of people living in filthy and crowded apartments, generally prevails and spreads chiefly in winter, when such apartments are deprived of ventilation. On the contrary, yellow fever, arising from a deleterious principle floating in the atmosphere, and produced by the operation of solar heat upon vegetable and animal filth, ceases to prevail as soon as this heat is reduced so low that it can no longer exhale a sufficient quantity of the miasmata of putrefaction. But if this disease depended upon contagion, instead of disappearing at the accession of cold weather, when houses are more closely shut up, it would be then more certainly communicated, and more widely destructive.

6. Yellow fever does not prevail in countries, where the heat if not sufficient to exhale the miasmata of putrefaction, in the requisite quantity and virulence. We hear nothing of this disease in Great-Britain, Ireland or France; though it is well known that persons ill of it, and shipping in which it has recently prevailed, very frequently arrive in their ports. The boarding-houses in the sea-port towns of these countries, in which seamen arriving from the West-Indies are generally lodged, are known to be often extremely filthy & filled with impure air; as appears from the prevalence and ravages of typhus; yet this impure air in those countries cannot *conduct* the contagion of yellow fever.

7. Many persons who had contracted the disease in New-York, died of it at Boston, Albany and other cities at a distance; many likewise at Greenwich, Brooklyn and other villages in the neighborhood. In no instance, did these victims of the epidemic communicate contagion. In all these places the air at that season must have been very *impure*; at Albany and Brooklyn violent remittent fevers were at the same time extremely prevalent; and yet this impurity of the air did not serve as a *conductor* of contagion.

8. Among the early cases of this disease in the late season, which were, as usual, most virulent, very striking examples of its non-contagiousness were displayed in some of the most crowded quarters of the city.—In the beginning of September, a considerable number of sick, who had taken the disease on the eastern side of the city, were removed to the western side; where they died with the most pestilential symptoms. In a house in Cedar-street, where two patients expired under the worst symptoms of this description, the beds of the deceased, in a very few hours after their death, were occupied by the survivors of the family.—Yet in none of these numerous instances was any contagion communicated.

9. The universal exemption of the physicians of New-York, amounting to at least fifty or sixty persons, from the late disease, is also irreconcileable with the doctrine of its contagiousness. I have not heard of any physician in Philadelphia, New-Haven, or Providence, suffering from their late epidemics. It is known that physicians neither use nor possess antidotes. Their exposure to the breath, effluvia and contact of the sick, was almost incessant from morning till night. They employed no precaution of dress or covering, no fumigation, no means of destroying, neutralizing or obviating in any manner the effluvia of their patients. The dissection of bodies dead of yellow fever, if contagion had existed, would also have formed another source of danger. Many of the physicians of the city were frequently engaged in this mode of investigating the disease, and minutely examining bodies in a very advanced state of putridity. The more happy escape of physicians in the late than in former epidemics, is to be attributed (under the protection of Divine Providence) to their having procured a residence in the higher and safer parts of the town, and to their comparative infrequency of their visits to the districts of envenomed atmosphere, owing to the early desertion of these districts by the chief part of the inhabitants. It is understood at the same time, that our physicians, in their confidence of the non-contagiousness of the disease, generally passed more time in the apartments of the sick, and were in the habit of making a more deliberate and minute examination of the cases which fell under their care, than in preceding epidemics.

10. The failure of every attempt to arrest the progress of the disease, by the separation of the sick from the well, is also incompatible with the doctrine of contagion. Besides the numerous ineffectual attempts in this city, the utmost endeavors were used with the same result by the board of health of Philadelphia, whose members had been purposely selected for this object, from those who embraced the opinion of the importation and contagiousness of the disease. It would be fortunate, indeed, for the purpose of arresting yellow fever, if its progress depended upon contagion. This appears from the example of the small-pox, a disease whose contagion is more active steady and permanent, than any other in the world. By a system of quarantine, extremely simple and very little burthensome, this distemper is excluded, or, if introduced, immediately arrested and banished, in Boston and other cities of New-England, where its admission and circulation are prohibited by law.

11. The inconsistency and contradiction which constantly attend the doctrine of contagion in this disease, make it altogether inadmissible. To explain one set of facts, it must infinitely transcend the contagiousness of small pox; to suit another, it must fall infinitely below it. On some occasions, it is more subtle, penetrating and rapid, than the electric fluid; on others, more sluggish and dormant than the grossest matter. Contrary to all other noxious substances, it is often more destructive at a distance, than near to its source; for at one time it cannot reach a single individual among a great number surrounding the bed of the patient, and in frequent contact with his person, while at another it must strike at the distance of several hundred feet. The noxiousness of the miasmata of putrefaction, exhaled by heat and floating in the atmosphere, explains all these facts, and reconciles all these contradictions.

If it were possible to add any thing to the evidence of these irresistible facts, I might subjoin, that yellow fever cannot be considered as a contagious disease—because, unlike all other contagious diseases, it has no specific character, no definite course or duration, and no appropriate, essential or pathognomonic symptom—because the supposed contagion rarely operates singly, and in general depends upon the co-operation of exciting causes—and finally, because the miasmata which produce this disease are more or less noxious as they are more or less concentrated, a property which does not belong to the specific poisons of small-pox, syphilis, &c.

Under the conviction of these facts I am compelled to conclude, that our malignant disease is the effect of a noxious exhalation floating in the atmosphere, and that it is *absolutely and universally non-contagious*.

For the accuracy of the facts on which this conclusion is founded I appeal to my fellow-practitioners and fellow-citizens, who have been witnesses of the disease. For the application of these facts in the deduction of principles and opinions, I appeal to the judgment of physicians in every quarter of the world where medicine is cultivated as a regular science. And, especially, I would offer this appeal to the liberal and enlightened physicians of Europe who are sincerely devoted to the cause of truth and professional improvement, who, on this subject, have hitherto received much incorrect information, and who, as soon as they become convinced of the real state of the question, will, I am confident exert the influence they so justly possess in procuring from their respective governments an abolition of the oppressive and useless restrictions of quarantine which have been recently imposed on American commerce.

[*To be Continued.*]

BY THIS DAY's MAILS

NINTH CONGRESS.

HOUSE OF REPRESENTATIVES.

Friday, February 21.

The bill for increasing the salaries of the judges of the territory of Orleans, was read the 3d time and rejected—Yeas 45—Noes 68.

The bill for the relief of Philip Nicklin and R. E. Griffith, was read the third time and passed—Yeas 69—Noes 40.

Mr. Jackson observed that the house having decided against augmenting the salaries of the judges of the territory of Orleans, in consequence, probably, of the idea that a general review of the salaries of the judges of the several territories of the U. S. should be previously made, he would in correspondence with that impression, offer the following resolution:

Resolved, That the committee of ways and means be instructed to enquire into the expediency of encreasing the salaries of the officers of the territories of the U. States, and of the district of Columbia, or any of them, and that they be authorised to report by bill or otherwise.

On the question to take this motion into consideration, the house divided---Ayes 23.

The bill authorising the sale of a lot of land in the town of Cincinnati, and state of Ohio, was read a 3d time and passed.

The speaker laid before the house a letter from the secretary of the treasury, enclosing an annual statement of the district tonnage of the U. States.

A bill was received from the senate, to suspend the commercial intercourse between the U. S. and certain parts of the island of St. Domingo.

This bill prohibits all commercial intercourse between citizens or inhabitants of the U. States, and any part of the island of St. Domingo not in the possession and under the acknowledged government of France; in violation of this provision, the vessel and cargo are to be forfeited. It is limited to one year, and the president is authorised at any intermediate time to take off the restraints and prohibitions.

Referred to a committee of the whole on Monday.

Mr. Gregg, agreeably to notice given yesterday, called for the order of the day, on a resolution offered by him on the 6th day of December, for the repeal of so much of an act of congress, regulating the grants of land, and providing for the disposal of the lands of the U. S. south of the state of Tennessee, as appropriates any portion thereof to the satisfaction of claims under certain acts of Georgia.

Mr. Merriwether moved a postponement till Monday.

Mr. Eppes moved a postponement till the second Monday of March. He said, every member knew his sentiments on this subject. He was in favor of the proposition of the gentleman from Pennsylvania, but while so many interesting subjects in which the national welfare was directly involved, remained unacted upon, he did think that every thing calculated to disturb the harmony of the house, ought to be withheld from consideration; that no unpleasant circumstances, or division of opinion on subordinate points, should prevent the concurrence of men of all parties in the adoption of measures called for by the interesting crisis of our affairs.

Mr. Gregg did not know on what ground gentleman inferred that this proposition was calculated to cause more division among the members of the house, than any other proposition which might be offered. It was a plain and simple question, whether it was not best, under all the circumstances of the case, to repeal the law making an appropriation for satisfying the claims under the act proposed to be repealed; that congress might thus forever be done with the subject. Mr. G. said he had forborne calling up this resolution for the reasons assigned by the gentleman from Virginia. Though he considered the subject important, and that it behoved the legislature to decide upon it an early day, he had thought it most advisable not to call it up till the great national business before the house were attended to. This last business had been unexpectedly to him delayed from time to time; and he thought it probable that the resolution, under consideration could be acted upon, before the house were prepared to act on the national business. He regretted that the subject of our differences with one of the belligerent nations had not before this time been acted on. He had laid a resolution on the table on this subject four weeks ago. But it had been delayed by a call for various treasury statements; which he regretted having consented to ask, as, in his opinion, they had no bearing on the subject.

Mr. Jackson rose to move a postponement indefinitely.

Mr. Leib said as this motion involved a decision of the main question, he would call for the taking of the yeas and nays.

Mr. Thomas hoped the gentleman from Virginia (Mr. Jackson) would withdraw his motion, as, from its going to reject the resolution, it would cause all the remarks which would arise from a direct discussion of it.—For the reasons which had been urged by the gentleman from Virginia (Mr. Eppes) who had first spoken, which he considered very cogent; and as the subject of compromise was progressing, and might be settled before the second Monday of March, he hoped the motion for an indefinite postponement would be withdrawn, and that for a postponement to the second Monday of March prevail.

Mr. Jackson said, if he viewed the subject in the same light with the gentleman who had just spoken, he would agree to withdraw his motion. He could, however, never make principle bend to expediency. Principle had heretofore governed his vote, and should still continue to govern it. Even on the ground of expediency, he doubted the propriety of adopting the resolution. It was known there was another subject connected with it, before the legislature. If that should be decided in the negative, it might be proper to agree to this resolution. As there was a probability that that subject would come before the house, he did not wish to bring the subject twice before them in one session. Its discussion had heretofore excited all the malignant passions of the human heart, and it was well calculated to disturb that harmony which ought assiduously to be cherished when they were on the eve of entering on business of the deepest national interest.

Mr. J. said he wished the subject could be avoided altogether. He was heartily sick of it, and wished to get rid of it forever. But he thought it most proper that the question of compromise should first be decided. If that were negatived, the course pointed out by the resolution of the gentleman from Pennsylvania might be necessary.

Mr. Alston hoped the motion for an indefinite postponed would not prevail. He said that though his sentiments were not changed on his subject, and though they were the same now they ever had been, he did believe the tranquility of the nation depended much on the decision of this question, and the meeting it fairly and fully. He hoped this would take place this session; but with his friend from Virginia, he hoped the subject would not now be taken up. He thought that the other question,