

HOLT. (Jos.)

EXCERPTA

FROM THE

BIENNIAL REPORT

—OF THE—

BOARD OF HEALTH,

—OF THE—

STATE OF LOUISIANA,

—TO THE—

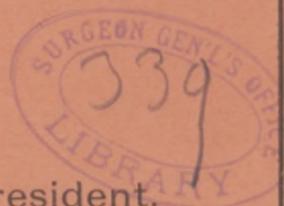
GENERAL ASSEMBLY

1884-1885.

JOS. HOLT, M. D., President.

NEW ORLEANS:

PRINTED BY E. A. BRADDO & Co., 34 MAGAZINE STREET.
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ANNUAL REPORT

OF THE

COMMISSIONERS

OF THE

LAND OFFICE

FOR THE YEAR 1880



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REPORT.

STATE OF LOUISIANA, }
OFFICE OF THE BOARD OF HEALTH, }
New Orleans, February 27, 1886. }

To His Excellency Samuel D. McEnery, Governor of Louisiana :

SIR—The Board of Health respectfully submits the following report, epitomizing an account of its transactions from January 1, 1884, to December 31, 1885.

For reasons of economy and of due regard for the time and patience of those upon whom it may devolve to examine this document, the utmost brevity consistent with its purpose has been sought.

As a preface to the statistical and financial statements, a resumé of its history since the reorganization, April 12, 1884, is appropriate.

Composed of a majority of members inexperienced in sanitary service; the newly organized Board carefully considered its position, and, with deliberation, determined a plan of action in accordance with established principles of business, tempered with a spirit of equity, of kindly consideration and absolute frankness towards everyone, at home and abroad.

Proceeding upon this line as its adopted policy, and after a thorough test under a pressure of anxieties and harrassments, frequently beset with importunities and assailed by powerful interests hostile to the public good, the Board of Health can truthfully declare that, in no instance, has it compounded with an enemy of the people, nor has it swerved an iota from the line agreed upon, nor fallen short of expectation in the performance of its whole duty.

Having no personal interest to conserve and devoid of ambition except to promote the general welfare, its members, as re-

presentative citizens, consented to assume a burden of labor and care in order to secure the greatest good to the greatest number in the preservation of the public health and for the industrial and commercial advantage of the State.

Assuming official duties and responsibilities of a peculiar kind, these gentlemen found themselves confronted by intricate questions involving trade relations; unsettled differences of long-standing between the Louisiana State Board of Health and other health organizations at home and abroad; and by financial embarrassment in the scant provision of equipment, inadequate to the necessities of municipal and quarantine sanitation.

Addressing themselves to an earnest study of every proposition associated with the health affairs of the commonwealth they have endeavored to recognize and clearly define the necessities and then to meet them with a remedy.

Foremost of the difficult problems which have been or could be presented to the Board of Health has been that of quarantine.

Before the advent of steam as a motor, time was of little consequence in the affairs of the world.

Men were content to live and to move in harmony with their surroundings. Since the application of steam and electricity, they still move in harmony with their surroundings, but are compelled to quicken their pace to one of the highest speed. The necessities of travel and of traffic have developed an increasing demand for rapid transit, until hours have now the significance of days in the earlier history of quarantine.

Between the arbitrary detention of quarantine and the slowness of commercial movement there existed the harmony of universal fitness which has been destroyed under the new dispensation of steam.

To solve the quarantine problem of the present requires a reconciliation between the preservation of the public health and the preservation of the public livelihood; for to throw the gates of commerce open to pestilence is destruction of the one and to shut them against trade destroys the other.

The fears, the impairment of confidence and the disturbance of inter-State and inter-national communication which have grown out of this question, have vexed boards of health and

heads of government, and have harrassed the ingenuity of political economists in every nation of the earth.

The international sanitary conferences held in Constantinople, 1866; in Vienna, in 1874, and in Rome, in 1885, with representatives from thirty-one of the national powers, were all convened to consider and, if possible, to solve the quarantine problem.

While the world is indebted to these assemblies of savants for an amazing display of scientific acquirement and contrariety of opinion, the subject itself was left by them no nearer a practical solution than it was in the beginning.

The Louisiana State Board of Health would fain have avoided the question, but was compelled to face it as a direct issue.

As if still further to complicate the terms of a proposition which seemed already hopelessly irreconcilable, the Board soon discovered in the ranks of commerce itself, hostile factions in vindictive array; those whose interests were favored by shutting up the port of New Orleans and outlet of the Mississippi, and those whose necessities demanded an unobstructed entry at all times. Besides this, the Board found serious disturbance involving the friendly relations between the health authorities of this and of neighboring States.

The foregoing statements are made in order to explain the course adopted by the Board of Health at the time of reorganization. Its purposes were formulated as follows:

First. To adjudicate all differences between itself and other bodies at home.

Second. To settle all questions at issue with health authorities of other States, and to establish with them relations of close alliance.

Third. To so regulate quarantine as to furnish the highest relative guaranty of safety against the introduction of pestilence, with the least obstruction to commerce.

Fourth. To discover some efficient method of suppressing a pestilential outbreak.

Fifth. To favor, by strenuous effort, the investigation of the pestilential diseases, with a view of ascertaining, if possible, their cause and methods of prevention.

These intentions have been realized to the extent that there

exists at present a perfect harmony between all local organizations having to do with the public health. There is a unity of purpose between the City Council and the Board of Health. The Auxiliary Sanitary Association is truly auxiliary in being the right arm of the Board, a wise counsellor and a ready help.

In every relation with the health authorities of the Gulf States, the States of the Mississippi Valley, and, indeed, of the Union and the Provinces of Canada, the Louisiana State Board of Health is in the enjoyment of that unquestioning confidence and cordial sympathy which friendship alone can secure. The bonds of fellowship have been strengthened by the cultivation of fraternal relations as members of those general sanitary organizations, "THE AMERICAN PUBLIC HEALTH ASSOCIATION," and "THE CONFERENCE OF BOARDS OF HEALTH OF THE UNITED STATES."

We bear the testimony of ample experience that the public welfare is greatly promoted in the unity of sentiment and harmony of action which controls in their mutual arrangements the health departments of the cities, States and Provinces of this Continent.

As the result of its effort to effect a reconciliation of the discordant elements in the quarantine problem, the Board of Health finds the creature of its conception,

MARITIME SANITATION,

so far progressed in development as to give reasonable assurance of a perfect and useful being. While this is our hope, time alone can prove the possibility of science interposing a bar to the sweep of pestilence.

During the season of 1884, the Board of Health, finding itself powerless to accomplish the cleansing of a vessel, was compelled to resort to quarantine in the literal sense of that obnoxious term. Having no legal warrant for a declaration of non-intercourse, which is the abandonment of quarantine, as was enforced the year before, it determined upon practically the same expedient, as offering the only available protection; but to keep within the pale of law advised a proclamation of the only true and original quaran-

tine of forty days. Until the duty of enforcing the ancient quarantine actually devolved upon us, it was impossible to realize the grossness and absurdity of a measure in which ignorance, stupidity and apathy were apparently the elements to insure success—in destroying commerce, but not in keeping out disease.

The ports of the North Atlantic sea-board and of England had less restrictive quarantines, although essentially the same in method, simply because high latitude saved them.

A careful study of the quarantine methods of every port in the world failed to discover any essential departure from the original idea of detention as the main protection in cases of actual danger.

Offended in judgment and dissatisfied in the official infliction of a great public injury, of injustice and of hardship as a routine duty, the Board of Health was urged by sharp necessity to grapple the question of quarantine, with a determination to solve it and liberate the State or fail in a supreme effort.

Convinced of the failure of detention as a reliable agent against the invasions of pestilence; throwing aside all regard for precedent and the platitude of books; the Board declared that time was no factor in clearing a ship of danger; but that decisive action in the immediate cleansing of a vessel and of all that she carried aboard, offered the only rational hope of defense.

To allow a ship to lie festering under a July sun, engendering pernicious miasms out of her own uncleanness, did not present itself as either a rational or a humane method of quarantine protection; but to attack her with an energy like that of the Fire Department; to cleanse her immediately, and to subject every possible carrier of disease to the searching action of the most powerful germicidal agents available, applied through apparatus capable of accomplishing the work, did present itself, not only as rational and humane, but also as practicable.

Upon this foundation the Board created a plan of practical MARITIME SANITATION, which it presented to the Conference of Boards of Health of the Gulf States and Tennessee and then to a convocation of the merchants of New Orleans. Approved by these, it finally submitted the plan as a concrete system to the General Assembly of the State. Although late in the season, July, 1884, the Legislature, impressed with the necessity

of reformation in the methods of quarantine as essential to every interest of the State, patiently investigated the proposed system of maritime sanitation and emphasized its opinion of the experiment, as worthy of trial, by appropriating \$30,000 to put it into execution.

In obedience to this decision, State warrants were issued, one-half of the appropriation to be derived from the revenues of 1884 and one-half from those of 1885.

Because of the lateness of the season and the inability to realize at once upon the appropriation, the ports of Louisiana remained sealed under the proclamation of forty days detention until the close of the quarantine period of 1884.

In the following spring the Board of Health, in order to lose no time in establishing the "new system" and to spare itself the infliction of emasculating the port of New Orleans by another forty days detention against a part of her commerce, urged upon the merchants the acceptance of the warrants of 1884 at their face value. The proposition was accepted, and warrants were disposed of at par to the amount of \$12,550.

With this in hand the Board was enabled to accomplish its work sufficiently to permit the inauguration of maritime sanitation June 10, 1885, from which time to the end of the season, November 1, the port of New Orleans was opened to the commerce of the world.

Profiting by the experience gained in the operation of the new system, every preparation has been made for its perfection when again to be opened, early in May, 1886.

An elaborate description of the system of maritime sanitation in the detail of its technique would burden this report without increasing its value. A general outline will serve every useful purpose.

To compel all vessels from quarantinable ports to reach the city through the fully organized and equipped stations on the Mississippi river, below New Orleans, all other maritime approaches are sealed during the quarantine season under a restriction of forty days detention.

The maritime system consists of two stations and two supplemental points of inspection.

The Upper Quarantine Station, which is the one heretofore in use, is situated on the left bank of the river, about seventy miles below the city. All vessels entering the Mississippi are compelled to stop at this station for inspection. If from a port not within the scope of the quarantine proclamation, and if presenting a clear record of health and in good sanitary condition, they are permitted to proceed on their way without further delay.

If from a port quarantined against, the vessel is brought alongside the wharf. All on board, officers, crew and passengers, are at once sent ashore, where they find ample accommodation in commodious buildings, provided for their entertainment during the time occupied in the sanitary treatment of the ship and disinfection of all baggage.

As soon as this is completed, they are permitted to return aboard ship, where they remain under observation during the prescribed period of three or five days, determined by the remoteness or nearness of the port against which these precautions are taken.

The object of this brief detention for observation, after the sanitary treatment of the vessel has been completed, is to allow for a possible outbreak of an infectious disease already incubating in the system of any one aboard.

To extend this beyond five days, in the case of a vessel which has given no proof of actual infection from cholera or yellow fever, is merely to acquiesce in the sinister designs of those whose trade interests are opposed to an open port, or to pander to the imaginations and oracular utterances of self-constituted authorities, whose conclusions are drawn from loose observations and impressions, usually suggested by the hap-hazard reminiscences of long-past events, or from hearsay testimony. These state the period of incubation all the way from ten to sixty days.

* "The entire weight of testimony established by such exact observations as furnish a scientific test, confirmed by the experiments of recent investigators, shows that the deadly ferment of these two diseases, once received into the human system, is not

* Extract from the address of Joseph Holt, M. D., before the American Public Health Association, December 10, 1885.

dilatory or uncertain in its incubatory movement, but is almost explosive in its action.

“That a person should move about in the routine of his daily life, for days or weeks, with the germs of yellow fever engendering in his blood, or of cholera upon the mucous surface of the intestinal tract, and the victim, all the while, unaware of his disorder, is contrary to expectation, to common sense, and to all the teachings of carefully guarded observation and scientific research.

“However common the reported cases of prolonged incubation, in every instance of clearly ascertained moment of exposure, and in the experimental tests declared to be true, the period of incubation has been remarkably short—usually within forty-eight hours, never beyond three days.”

As an essential part of the service, there is a tug-boat of sufficient power to move a sailing vessel to or from the wharf. In addition to this requirement, this boat is equipped with a complete outfit for generating and applying germicidal gas, for displacement of the entire atmosphere within the ship, transported, perhaps, directly from some infected port.

The apparatus invented for the particular purpose, consists in a compact battery of twelve furnaces, for the rapid combustion of sulphur. These open into an iron reservoir, to the further end of which is connected a powerful exhaust fan (Starkevant's).

The gas, drawn through the fan, is driven into a twelve inch pipe, through which it is conducted over the side and down a hatchway of the vessel, into the bottom of the hold.

The highest test of the disinfection powers of any plan is, perhaps, the treatment of a full cargo of coffee.

To elucidate this statement and the new methods, the following letter, which it became the duty of the President of the Board to write for the information of certain importers in the Interior in reply to inquiries touching quarantine exactions, is reproduced:

“We can state, in general terms that the facility of passing coffee through our quarantine, under the new system of Maritime Sanitation has been so improved both as to time and expense, as practically to have removed all hindrance to its importation.

“The period of delay of vessels from intertropical ports, south of the Equator, during the quarantine season, from May 10 to November 1, will be three days.

“While in quarantine, vessel and cargo are subjected to thorough disinfection without disturbing cargo, except—when the removal of bags of coffee is required to permit at one point, the passage of the fumigation pipe, which is twelve inches in diameter, down into the dunnage at the bottom of the cargo.

“I have given explicit instructions to importers whereby the expense of removing bags to make this ‘well or shaft’ through the cargo, can be wholly avoided.

“It is necessary to have an open, frame-work shaft, allowing a clear inside space of fifteen inches, corresponding with the centre of the main hatch in a sailing vessel, or with the centre of each hatch in a steamship having bulk-head compartments. The frame-work of this shaft is set before loading and should be cut flush with the top of the cargo.

“This simple arrangement avoids all handling and delay.

“The quarantine inspection fee of steamships and ships, (fixed by legislative enactment) is \$30 00, barks \$20 00, brigs \$10 00 and schooners \$7 50.

“Fees for disinfection of vessels—Steamships \$130 00, ships \$70 00, barks and other vessels down to two-masted schooners, not including the latter, \$60 00, two-masted schooners \$17 50.

“It is the positive determination of the Board of Health that the quarantine charges shall not exceed the actual running expense of the system, so that the above disinfection charges will be reduced pro-rata, as rapidly as the increasing amount of shipping will allow.

“With encouragement from importers, these rates would soon so far decline as to make them of slight consideration.

“To furnish an exact idea of the above quarantine expense, I will cite the incoming of a cargo of 20,000 bags of coffee from Rio de Janeiro per steamship.—Reckoning all quarantine charges *as if borne by the cargo*, (as a rule the ship bears all such expense) the rate per bag would amount to four-fifths of one cent. The same cargo per sailing vessel would amount to one-half cent per

bag, as against the former cost, under the old system, of not less than ten cents per bag."

The peculiar manner in which coffee is stored aboard ship, almost hermetically encased in the narrowest possible compass, presents an opportunity for its thorough disinfection, for which we can never again hope, after breaking cargo.

Besides, the fact that the sulphurous gas is heavier than the air, and fills the vessel from below upward, like carbonic oxide or water, it is important to remember that it is driven in under an immense pressure and high velocity. From all influences combined, including the law of diffusion of gases, we have indubitable evidence that it penetrates every part of the compact mass of cargo, and displaces the resident atmosphere. If the coffee is dry and in good condition, there is no trace of effect upon the grains; if, however, it is damp and sweating, and therefore more or less spoiled, there is a bleaching, determined in intensity by the degree of moisture. The effect upon color is quite compensated, however, in the check upon fermentation in an ill-conditioned cargo.

As soon as the fumigating pipe has been laid, a blast of sulphurous acid gas is commenced and maintained, one, two or three hours, according to size and sanitary condition of ship. Every opening is closely battened during the process, and remains so for at least eight hours after it is discontinued.

Opening the hatches soon clears the vessel of an excess of the fumes.

The amount of sulphur used varies from fifty to two hundred and fifty pounds on each vessel. The fumigating pipe is made of galvanized iron, and is jointed in fifteen and thirty-foot sections, like a stove-pipe; or, preferably, it is made of close and heavy asbestos cloth (manufactured expressly to order) contained in an outer covering of duck, and in lengths similar to the metal.

The details of the system, while not complicated or difficult, can only be learned by a personal inspection.

Sulphurous acid gas is chosen for atmospheric displacement.

To any one intimately acquainted with the interior structure of a sailing vessel, it is perfectly apparent that under the condi-

tions of its use, involving high pressure and velocity, the sulphurous fumes not only displace the atmosphere of the open hold, but penetrate the interstices of cargo, and make their way freely into the bilge, through the airstrakes and limbers, and displace the atmosphere between skin or planking and ceiling. As to a steam-ship the conditions, due to construction, are of the simplest kind.

The decks, fore-castle, saloon, bunks, ballast and all such parts as are usually treated with carbolic acid or other disinfectant fluids, objectionable on account of odor, staining or inefficiency are freely wetted with a solution, (one to one thousand) of the bi-chloride of mercury, the most powerful and unsparing germicidal agent known. Colorless, stainless, odorless, not injurious to fabrics, perfectly safe to handle for months at a time, and exceedingly cheap, it is impossible to imagine a substance more efficient and as free from objection in practice, whether in maritime or municipal sanitation.

While the thorough wetting of the ship with the mercuric solution is in progress, the baggage, bed-clothing, mattresses, curtains, and other fabrics in use, are spread out on the wharf and well sprayed with the same solution.

To facilitate the subsequent drying and to get the additional effect of high temperature as a germicidal agent, these various articles of apparel, etc., are hung in a large patent drying chamber (built by the Troy Laundry Company). This is supplied with a double coil of tubes, charged with superheated steam from a twenty-horse-power boiler. When filled with baggage and a ship's linen, by closing the vents the temperature is speedily raised above 212° Fahr. Again opening them the moisture rapidly escapes and the drying is completed.

The amalgamating power of the mercuric salt presented many serious obstacles in the contrivance of an apparatus for its application, all of which have been overcome without sacrificing simplicity and economy.

The Lower Quarantine Station is intended for infected vessels only. It is located on the west bank of Pass-à-l'Outre, an unused outlet of the Mississippi, which affords an ample and a safe harbor for vessels of any draught. While only three miles from

off the highway of commerce, it is as isolated as in mid-ocean, except that it is quickly accessible to the quarantine authorities.

Under the direction of Col. John W. Glenn a hospital was built here in the spring of 1884. It is founded upon substantial piling and includes a large ward for male and a smaller for female patients, a room for the resident physician, an apothecary department, kitchen, dining and storeroom.

The wards are provided with the most comfortable of beds, those of the "United States Army hospital patent," and all other things needed for the care and comfort of the sick.

The same provision exists at the hospital and general reception buildings at the Upper Station. The comfort of sailors and passengers has been made a chief consideration in the construction of the system.

Stationed at Port Eads, upon the main entry to the Mississippi, is a medical inspector of shipping, whose duty it is to board every incoming vessel and ascertain her exact health status.

If there be no evidence of infection the vessel is permitted to pass on to the Upper Quarantine Station. If, on the contrary, she be found to be infected, that is to say, if anyone be ill of cholera, small-pox or yellow fever, or if the vessel shows a record of any one of these diseases on the voyage, she is instantly remanded to the Lower Quarantine Station described, her sick are removed to hospital, the vessel and baggage subjected to exceptionally rigorous and repeated disinfection in the manner already explained and she is held until, in the opinion of the Board of Health, she may be allowed to proceed to the city.

The quarantine tug from the upper station accomplishes the sanitary work required.

A vessel discovered to be infected, whether at the time entering the river, or at the Upper Station, or at the city wharf, is immediately isolated by being sent to the Lower Station, where her sick are at once removed; and the work of disinfecting and cleansing is speedily accomplished.

It is impossible to suggest a safer provision against the spread of pestilence to other vessels, or to inhabited shores, for neither are here.

On duty in the harbor, passing from one vessel to another

along the entire city front, and ever on the alert, is the Port Medical Inspector of shipping, who makes a daily report to the office of the Board of Health.

Every quarantine officer and employe, from city to gulf, is under the immediate supervision of Dr. Thomas Y. Aby, resident physician at the Upper Station and directing quarantine officer of the entire system; every part of which is in telegraphic communication.

He receives the orders of the Board of Health; and has administered its wishes with such integrity, such prudence and admirable comprehension of necessities as they arise, that it may well be doubted if another could have been found, his equal. It would indeed be graceless not to bear testimony to the eminent service he has rendered in the practical enforcement of the principles of quarantine, through his executive ability.

In this connection it is equally proper to mention the names of Mr. John J. Barr, Mr. Joseph A. Shakspeare and Dr. L. F. Salomon, the Chairman and members of the Quarantine Committee. But for their judicious course in management, and untiring energy in behalf of improvement, MARITIME SANITATION would have been to-day nothing better than a scientific abstraction.

To the engineering skill and indefatigable zeal of Col. John W. Glenn, the early opening of the quarantine under the new system was due. The liberality of the General Government in allowing his professional services to the State, free of charge, he being at the time in its employ, is gratefully acknowledged.

The substantial foundation of piling and excellent superstructure, at the Lower Station, attest his interest and his skill. The excellent design and construction of these buildings, assist as an important factor in

QUARANTINE MAINTENANCE.

Through legislative appropriation, the State has paid for construction and equipment of quarantine stations. The maintenance is accomplished through a carefully arranged schedule of charges, not as a tax upon tonnage, but as a return, a *quid pro quo*, for services rendered in the inspection and sanitary treatment necessary to permit entry without jeopardy to the port.

The inspection fees are fixed by legislative enactment. The cleansing and disinfection charges are established by the Board of Health, in strict accordance with the amount of work done.

The income so derived is not allowed to exceed the actual expenditure necessary to carry on the quarantine work; and under no circumstances is it allowed to become a source of revenue in favor of any other fund. Not a dollar of it is expended except for quarantine maintenance in defense of the life, health, and industrial prosperity of the people of the State.

The question of the Constitutional right of a State to protect its citizens by interposing quarantine as a bar to the importation of pestilence, and of maintaining the same by an equitable charge upon shipping, for services rendered in such treatment as may be required to allow entry without endangering the inhabitants of its ports, and thence of its interior, is one vital, not only to the health and industrial integrity of the people, but involves the whole question of the reserved right to regulate the internal arrangements affecting its police powers.

The Constitutionality of charges for quarantine services is now before the Supreme Court of the United States, in the case of Morgan's La., and Texas R. R. & S. S. Co. vs. The Board of Health of the State of Louisiana and the State of Louisiana, intervenor.

The Board of Health holds in this suit the ground that no such inherent or natural right has ever been parted from the State and lodged by any Constitutional provision in the Federal Government. Indeed the Constitution does not contemplate in any clause the regulation of health matters within the States; therefore, by its reticence, we may believe, it has properly left the question entirely to the States themselves, to be determined in practice by the particular exigencies, varying in time, according to locality as they arise.

Upon the decision to be rendered in this case depends the *existence*, we may say, of a self-sustaining quarantine system in every port of the United States.

Whatever the decision as to Constitutional right in this matter, the natural right is perfectly apparent and is universally admitted.

In the codified "Laws Relating to quarantine of Her Majesty's Dominion at home and abroad, and of the principal foreign States," prepared by Sir Sherston Baker, Bart., this principle of right is distinctly announced.

"Quarantine is established and recognized by International Law, for the common security and protection of States against those diseases which are supposed to be importable.

"Although the chief source of the intercourse of States, in their individual capacity, is the exchange of commodities of natural or artificial production, and a mutual exchange of superfluous commodities is, as a rule, reciprocally advantageous to both nations—and it may even be said that it is the moral duty of a nation not to refuse commerce with another nation—yet this duty always pre-supposes the safeguard that such commerce is not hurtful to the nation which imports. * * * * *

"And although it is contrary to sound policy for a nation to impose quarantine merely for the purpose of providing a revenue to the country in which it is established, this is not to be understood of certain dues or duties which are imposed on ships entering the ports of a State, for the legitimate purpose of maintaining the quarantine or sanitary establishments of the country."

While it is true that foreign nations are here referred to, the principle of self-protection is the same; whether it be against small-pox from New York or yellow fever from Mexico.

In the natural conditions affecting quarantine, the States of the Federal Union, subdividing a vast part of a continent, have the significance of nations.

They present every variety of climate and of physical condition known on the continents of Asia or of Europe, between the extremes of north temperate and semi-tropical latitudes.

Some of the nations—so called States—in this confederation are adjoining, while widely separated from others. The natural conditions which influence the quarantines of Boston and of Galveston, are as widely removed as those governing St. Petersburg and Barcelona.

The dangers of the introduction of infection and the sacrifice of human life in Louisiana, is not mitigated because the destructive agent may have been imported from a sister State; nor is

protection, and all that may be required to secure it, less incumbent.

If a State has a natural right to protect itself from the importation of pestilence from one direction, it has an equal right to do so from another; and if it is reasonable and just to charge for services rendered a visiting ship in enabling her to conform to needful regulations under that right in the one instance, it is also just and reasonable in the other.

To discriminate against any one, by failing to make uniform charges for uniform services, is invidious, harsh and unjust.

Every vessel enjoying privileges afforded by the quarantine measures of a State, is obligated by every rule of justice, to return a fair compensation for the maintenance of the institution of which it is the beneficiary.

Imbued with these sentiments, and believing its course in strict accord with Constitutional Law, the Board of Health has determinedly held to its convictions; and has compelled a legal contest, which has continued since 1874, and, has passed through the District and Supreme Courts of the State, and is now pending before the Supreme Court of the United States. The case having been fixed for trial early in the approaching spring—1886—a final decision may be expected within a few months.

^{*}See foot note.

TEXT OF THE QUARANTINE PROCLAMATION.

To avoid an unnecessary state of uncertainty in shipping circles as to future quarantine regulations, the Board of Health has adopted a permanent form of proclamation, subject to such slight alteration as future circumstance might require. The 10th of May has also been fixed as the regular period for the beginning of the annual quarantine.

The text of the future proclamation, together with important suggestions to shippers, agents, masters and passengers, is appended to this report.

THE TERM "SUSPECTED PORTS" EXPLAINED.

A port known to be free from pestilential infection is referred to as a "A HEALTHY PORT;" and one known to be afflicted with

^{*}While the above was in press, the decision was rendered by the Supreme Court of the United States in favor of the Board, and maintaining the constitutionality of the quarantine charges.

any one of the three great pestilential diseases, small-pox, cholera or yellow fever—is termed “AN INFECTED PORT.”

In practice, the integrity of quarantine cannot be assured by a restriction to this simple schedule. There is an intermediate class of ports which cannot be ignored without serious danger.

Within the American and West Indian tropics, and along the borders of the Mediterranean sea, are many small seaports, liable at any time to become infected with yellow fever, in the case of the former, or, of cholera, at present in the latter, but which are so remote from the highways of ready communication, as to make it impossible to know their exact sanitary condition at any given time.

Such places are often dangerously contiguous to a port known to be infected.

In the absence of responsible consular agents, our quarantines are left to the mercy of chance in regard to places of this class, if they act only on positive information.

No quarantine is justified in hazarding a chance.

In thorough quarantine work, any port not known to be infected, and yet, not known to be healthy, but equally liable to be one or the other, must be *suspected* of danger, in order to exercise a prudent watchfulness against surprise.

The wisdom of this rule is abundantly demonstrated in quarantine experience; and, also, of that other excellent rule: to pay no heed to the expostulations and vehement assurances as to wonderful health of a doubtful place, on the part of “they that go down to the sea in ships.”

Even without proof, the terms of the proposition create a class for which can be found no better name than, “SUSPECTED PORTS.”

The only safety in practice is to treat vessels of this class with the same measures of cleansing and of disinfection, and sometimes of delay, as though from a known infected port.

This is the rationale which has shaped the conduct of the Board of Health, as set forth in the QUARANTINE PROCLAMATION.

MUNICIPAL DUTIES OF THE BOARD AND ITS LABORS IN RELATION THERETO.

While having to do with such numerous and intricate questions as relate to quarantine, the Board of Health is also to a greater extent occupied with municipal cares.

For proper reasons, it has been made the custodian of important records, which belong by natural association to the functions of a Board of Health.

These appertain particularly to the accumulation of data for vital statistics, and are the records of Marriages, Births and Deaths. The privilege of issuing marriage licenses and the inspection of coal oil, has also been granted.

The sanitary supervision of the city constitutes the chief labors of the Board.

This has been simplified, and the expense reduced by employing two instead of six medical sanitary inspectors.

Besides the attention to special complaints of nuisances, the sanitary work is carried on by a systematic course of house-to-house inspection, whereby the cleansing of premises is enforced throughout the city.

This work is accomplished by a regular force of officers detailed by order of his honor the Mayor, and City Council. They are paid from the City Treasury.

The municipal expenses of the Board are defrayed from the money received in recording-fees and from the privileges above mentioned.

The persistent failure on the part of the City Council to appropriate an additional fund, absolutely essential to the sanitary necessities of the city, seriously impairs the powers of the Board in the accomplishment of work essential to the public welfare.

NEW ORLEANS PAVING AND DRAINING ASSOCIATION.

The necessity of a perfectly devised and complete system of municipal drainage and sewerage is too evident to need argument.

While the highest interests of the city depend upon it and seriously suffer in its absence, the work can only be accomplished by first determining an established plan through the

elaboration of the highest engineering skill, which shall serve for all future work.

In any effort there can be no permanency and hence no good results unless the disturbance incident to frequent changes in local and State governments are carefully provided against, which can be done in one way only: *create a supervising authority, free from all political influence and entanglement.*

Until the people and their representatives are ready to concede this much it is useless to begin.

Thorough sanitation and drainage is the one absolute essential to the development and substantial prosperity of New Orleans.

The question of its attainment is one purely of the patriotism and energy of its citizens.

In conformity with these views, the Board of Health would earnestly beg the special consideration by your honorable body of the plans which will be submitted by citizens who are representative of every class and calling, and of the whole mass of the population of New Orleans, whose ideas are embodied in the charter of the New Orleans Draining and Paving Association.

THE DUAL EXISTENCE OF THE BOARD OF HEALTH ESSENTIAL TO THE WELFARE OF CITY AND STATE.

The Board of Health of the State of Louisiana, being also the Municipal Board of Health of New Orleans, seems, at first glance, an incongruous official combination, and one, therefore, not wisely so created. An accurate knowledge of existing conditions very quickly establishes an opposite opinion.

Although a State as well as a municipal organization, its members are invariably chosen from the city, which precludes any idea of conflict between country and city interests. Its State functions appertain almost wholly to the administration of quarantine, which centres in New Orleans, and is so intimately blended with the question of the health of that city as to make of the two elements, essentially one system, a perfect unit, without natural dividing line. Its members, as representatives of the city, are as competent to manage municipal health affairs while

nominally State officers, as they would be under any other arrangement that could be suggested.

The important question of economy is in favor of the present form. One-half the salaries of the President, Secretary and one clerk and one-half the office rent is paid from revenues allowed by the State and not raised within the corporate limits of the city.

The relation of pestilential disease to the commerce and general welfare of city and State, involving issues of life and happiness of the entire population, demands that there shall be one head, one authority in the management of municipal and quarantine measures to prevent its introduction into the city, and, if possible, its spread in the event of an outbreak, for this is the initial point of danger, menacing sometimes not only the State but other States, and putting in imminent jeopardy inter-State relations with all of our neighbors.

These health duties are simply parts of a uniform whole, interdependent and perfectly co-ordinated. Any attempt to divide them, putting the management of quarantine, which includes the shipping in the harbor along the levee front, under one authority, and municipal health affairs under another, would be a violence which would inevitably place the State in the direct line of a disaster through dissensions which are bound to occur and that quickly.

However smooth at first, a diversity of opinions and a clashing of interests must presently arise. The occasion of the first mishap, however accidental or unavoidable on either side, in the appearance of a case of cholera or of yellow fever, would be the signal for crimination and recrimination between doctors and their associates, engendering irreconcilable hatreds, with a divided popular sentiment and wrangling factions in the community.

In the conflict of authorities the higher interests of the people would be neglected and the whole State exposed to an overwhelming disaster which might have been avoided by a singleness of purpose and attention to business in the beginning.

Even one Board of Health has been known to quarrel violently with *itself*, and the public interests to suffer in consequence. Let the State beware of two.

The members of the Board of Health, having no individual interest in the matter except as citizens, willing at any time to retire in obedience to its supreme head, the legislative powers, have studied this question closely, with no other purpose than to ascertain what is best for the public good. The foregoing is submitted as the result of the inquiry.

It should be borne in mind also that the Louisiana State Board of Health, while the constituted legal officials of this commonwealth, in effect discharge important functions, which bear immediate, direct and close relations to the welfare and health of the neighboring States. To retain the confidence and support of our commercial neighbors, it is necessary that they should be treated with the utmost good faith and promptly informed of every material circumstance affecting their welfare. From this point of view it will be profitable and proper to discuss

THE POLICY OF THE BOARD IN REPORTING AT ONCE EVERY
ACTUAL OR "SUSPECTED" CASE OF CHOLERA
OR OF YELLOW FEVER.

The diagnosis of small-pox is usually so positive as to make the case unmistakable, and therefore at once to be reported as actual. With cholera or yellow fever, on the contrary, the first case, or cases, is so equivocal, so invariably lacking in some of its confirmatory features as to make a positive diagnosis, in a matter of so grave consequence to the community, a most serious and difficult affair.

If the question were limited to the patient and his friends, as in the case of other diseases, the amount of evidence essential to a positive expression of opinion would be much less; but in these two terrific, pestilential infections, the consideration of the patient is overwhelmingly lost in that of the community, for thousands of lives and millions of money, involving the populations of cities and States often hang upon the tiny thread of an exact diagnosis in the first case.

The mind shrinks appalled from the contemplation of the mighty responsibility; and yet the whole weight of this responsibility must rest upon the attending physician, for he is

the first apprized ; he alone can interpret and he alone can sound the timely warning.

To the physician is intrusted the life-care of the people. He has deliberately chosen a calling, has educated himself for its pursuits, and has formally accepted all of its responsibility at the hands of the State. Announcing himself the legal custodian of a trust, there can be no extenuating circumstance which can relieve him of its obligation, not even the hazard of his life. The appointed protector of human life and health, *he* knows that a little spark kindles a great fire, and so may his doubtful case kindle a mighty epidemic.

Whatever the official relations of a Board of Health to these first cases, the vast weight of moral responsibility rests upon the attending physician. If he, with professional doubts and fears aroused, through motives of cowardice touching popular favor, or of indifference, or of bad temper and personal animosity, is reticent, so that neither the family, nor the neighbors, nor the community through its appointed officers can know of the case to take such reasonable steps as personal and public safety would demand, that physician is criminal beyond any murderer the law has ever hanged, and should be execrated.

Happily for humanity and the fair name of the medical profession there are few such.

The community in this matter is also profoundly responsible and sometimes fearfully to blame ; for if it has allowed and encouraged the growth of a pernicious and suicidal spirit of concealment, and has pandered to the vicious passion of a trade element, as merciless as it is sordid and depraved, and is ready to raise a hue-and-cry against a physician who makes properly known a case which his professional knowledge and experience leads him to believe is a case of cholera, small pox or yellow fever, then the community itself becomes not only a partaker, but the instigator of this mighty guilt.

It is inconsistent with every known law of God, of every principle of sound policy and of well-doing among men, that an individual, or a city, or a State can successfully protect itself behind the flimsy barrier of a lie, particularly in dealing with the phenomena of nature.

No amount of falsification on the part of the River Commission could lessen the rainfall in the valley of the upper Mississippi, or protect the lower valley from inundation. It is not the proper way to deal, either with the phenomenon itself, or the inhabitants who are subject to its mischievous action.

If a case of cholera occur in a city and be hidden under the disguise of a simple intestinal derangement—"to avoid public clamor and injury to the commerce and revenues of a State," as was done in Naples, in the cities of Spain and in Marseilles, the last hope of destroying the contagion, or of enabling the people at least, to save themselves by flight, is wiped away, distant communities are not forewarned, and thousands of lives and the general ruin of every industry must pay the penalty of a sordid, short-sighted, wretched policy. So of small-pox, and so of yellow fever.

These may prevail in spite of human effort ;—but let it be, *in spite of human effort.*

COMMISSION OF EXPERTS.

In order to mitigate the tremendous responsibility resting upon the Medical Profession in New Orleans, and in view of the nature of the question as a strictly public one, paramount to every other, the Board of Health has selected from the leading physicians of the city, five gentlemen who, appreciating the motives of the Board in the light of a public necessity, have consented to serve as a Commission of Experts in the diagnosis of the first reported cases of cholera or yellow fever.

The formation of this Commission was in no sense a reflection upon the professional ability of any physician, but was intended simply to share with him so great a burden of responsibility as that of declaring the actual or probable existence of one or other of the most dreaded of all pestilential infections.

While admitting all that professional prerogative may reasonably claim, there is still a higher claim: *No man or calling has any right which transcends the general safety.*

It is essential to make known cases of a threatening kind, it is equally essential that the community shall not be exposed needlessly to alarms and the attendant derangement and

depression of business, by premature and unwarrantable announcements.

It is not the intention to make consultation with this Commission compulsory, but to have such a professional body, representing in a dual nature the medical faculty and the Board of Health, accessible in the moment of emergency; a disciplined preparation for the shock of the first assault.

Composed of gentlemen in whom the entire community impose a perfect confidence, won through a life of professional experience and trial, the peers and associates of the first medical gentlemen of the city, no man could bring forward a valid reason for not selecting at least one out of the number.

The majority opinion, in a consultation of the attending physician with any two of the five, determines the action of the Board. If there be one voice of doubt, and two of affirmation of a case as actual cholera or yellow fever, the case is declared "*suspicious*."

While the Board is willing to accept the conclusion of an ample consultation of physicians of established position and of known ability, outside the Commission, yet the question is too momentous to the city and to the whole country, for it to accept as final the opinion of anyone man, or of any set of men, not of established responsibility in the general estimation. The Board must itself be satisfied with the integrity of the evidence before it will act, it matters not whom it offends.

In dealing with the first reported case of supposed pestilential infection the position of the Board of Health is singularly like that of the Fire Department in dealing with conflagration.

Inasmuch as the earlier cases are generally of a doubtful kind, and inasmuch as delay may fatally compromise the community, while waiting for the development of other cases to confirm the nature of the first, the Board is compelled to recognize certain doubtful cases as "*SUSPICIOUS*," to announce them as such, and to act vigorously in the prompt application of every safeguard in isolation and the disinfection of premises, prudently conducted in the welfare of the patient.

Municipal disinfection comprehends the thorough application of germicidal agents to the apartments, stairways etc., of the

house, outside the sick-room, and, if consistent with the safety of the patient, inside of it; to the entire premises and those surrounding, and the immediate sanitation of the whole district; all articles from the sick room being at once treated.

The bi-chloride of mercury solution is the agent chiefly relied upon.

In its relation to the community, the Board of Health is the trusted guardian not of its trade and traffic, its stocks and bonds, but of its women and children, of the life-security of its toiling masses as well as of its financiers and the members of its Exchanges.

It gives no guarantees against the appearance and spread of pestilence, nor any guarantee except to do all that human intelligence and faithful service can accomplish; first, in the effort to *keep out* pestilence; second, in the effort to *extinguish it* if it appears. Other guaranty than this, *belongs to the charlatan*.

The question of the local or the exotic origin of yellow fever, the Board willingly relegates to the medical profession, content to act upon the fact of its occurrence from either direction. When the Fire Department is summoned to a burning building, the inquiry is not whether an incendiary conveyed or spontaneous combustion originated the fire, but is one of more immediate interest: "Can it put the fire out?"—without lessening however the importance of the other questions.

The Board *knows* that pestilence can be brought and from several directions, and occupies the middle ground of safety between two factions by holding itself ready to attack, whether its origin be exotic or local, or,—*wiser to say*, known or unknown.

An open danger is measured and prepared for, a hidden danger is magnified and paralyzes with terror.

So long as a citizen, with his family about him, knows that he will be duly apprised, whether it frightens him or not, he feels protected in the knowledge that he is not menaced by a concealed harm; he feels that he may at least, make a timely retreat, and is not likely to be hedged in with his little ones, unawares.

It is his right to be instantly informed, and he should compel it, even if it does turn frantic the feeble minded and disturbs the stock market.

This is the position he occupies in regard to fire, which can only consume his property, how much the more reasonable in regard to pestilence, which consumes all that binds his affections to earth! Why shall he not be consistent!

What is declared here of the sacred right of the citizen at home, is extended in the recognition and maintenance of the same right of the citizen abroad, whether he be of the State at large, of a sister State or of another nation.

This right is a principle of universal application whether the issue presents itself in Galveston, or Boston, or San Francisco.

Obedience to it is a humane and wisely politic recognition and fulfilment of a duty. To ignore it, or to come short in its interpretation, is a mischievous yielding to a purely selfish trade influence, (for no other is exercised) whereby physicians and health authorities make themselves the super-serviceable instruments in the perpetration of an outrage.

Self-preservation, an inalienable right of every man, woman and child, the real interests of trade itself, all the relations of a community or State, interior and exterior, the suppression of a spirit of panic, and the integrity of every element of confidence at home and abroad, demand a plain statement of the truth, timely expressed, as a matter of fact performance of a duty, exacted by all, surprising to none. *Upon this doctrine one man can prevail against a host.*

When the Fire Department ceases to sound the alarm by night, and to roll to a summons of conflagration, for fear of awakening the nervous or of disturbing the banker in his financial calculations, then will the Louisiana State Board of Health cease to publish, timely, every actual or suspicious spark of pestilence; *but not until then.*

THE NATIONAL BOARD OF HEALTH IN ITS RELATIONS TO THE
MISSISSIPPI VALLEY AND STATES OF THE GULF.

While the relations existing between the Louisiana State Board of Health and every other local, State and general health

organization on this Continent are cordial because of a community of interest, and because the controlling influences exercised through the medium of such institutions as the American Public Health Association, the Conference of Boards of Health of the United States, and the Sanitary Council of the Mississippi Valley are wholesome and sufficient, such cannot be said of its relations to the National Board of Health, which is not a general organization, but a centralized, an autocratic and strictly a limited body.

Besides the several occurrences which have compelled the State Board to defend the interest and acknowledged right of a people to regulate those affairs within their own State, not bestowed by the Constitution upon the Federal Government, and therefore not administrative or even regulative, except by the people themselves, there has been and is perfectly apparent such an opportunity, with irresistible temptation to discriminate, in the treatment of the different ports in the different parts of the country, as to make the existence in power of a National Board of Health, tantamount to the destruction of Gulf ports and the closing of the Mississippi, which is the longitudinal high way for the interchange of north—temperate and tropical products between the great valley and the regions of the south, as ordained in the construction of the world.

With a painfully increasing experience of that body—the National Board—we reiterate to-day the sentiments expressed in the address of Dr. Joseph Holt before your Senate Committee on Finance, in 1884.

“The subject of State quarantines has long been a matter of national interest.

On account of the great disquietude for years existing between the States of the Gulf, and in fact throughout the Mississippi valley; the general apprehension and mutual lack of confidence; these States and different communities in the States being at times in a condition closely bordering on one of actual war, with their shot-gun quarantines; the general government conceived the idea of harmonizing these discordant elements by systematizing the whole quarantine as a national institution, which would

equalize the practical working of quarantine, and give a stronger guarantee by scientific methods.

The people of Louisiana at first blush, looked upon this with great favor, and presently there sprang into existence the National Board.

With true human instinct this body immediately displayed an intense and grasping desire for more authority.

Our people quickly saw that these national health preservers were certain to become the destroyers of our commercial interests; saw that if it were true, as is generally believed, that the powerful railroad lobby of Eastern capitalists could control Congressional legislation at the National Capitol, how much more easily could it handle any central health board of a few men, should the inducements so to do seem sufficient to that gigantic power.

The tremendous incentive to that course became more and more evident as the present and constantly increasing struggle for the bonanza of trade to the South of us grew in intensity between the longitudinal lines leading from the heart of the continent to the Gulf ports, and the monster latitudinal railroads running to the Atlantic cities.

With the power in the hands of a Central Board, selected and controlled by Eastern capitalists, to proclaim a quarantine of arbitrary detention against vessels from the South, the keys to the gates of the Mississippi Valley would be in the possession of an agency most intensely hostile to the interests of Louisiana and the neighboring States.

Our ports could and would be hermetically sealed arbitrarily for six months in the year, and the vast export trade of the valley forced to travel by the long and expensive latitudinal lines of railroads, to New York, Philadelphia, Boston and Baltimore, our commercial rivals, and hence by extended sea voyage to the tropical ports of delivery, and the import trade forced to seek the reverse journey. In other words, the one side and the hypotenuse of a right-angled triangle would have to be followed, instead of proceeding on the shorter base line.

That these powerful aggregations of capital could thus force this trade from the natural channel is evident, if we consider for a moment their immense capacities to achieve the result.

“Weigh for an instant the pressure of hundreds of millions of gold upon feeble human flesh represented in nine members of a National Board, with the controlling power presently in the hands of appointees from New York and other Atlantic ports.

“The great seaports of Norfolk, Baltimore, Philadelphia, New York and Boston, the whole system of transcontinental railroads, would send a swarm of agents every summer into Louisiana with microscopes and chemicals, hunting for germs; the telegraph wires playing day and night transmitting startling accounts of suspicious discoveries, and the public mind of the whole country whipped into a fever of anxiety, as a prelude to shutting up our port, ostensibly for yellow fever, really, in the commercial interests of rivals.”

Besides, too, the very existence of the National Board, in respect of its importance in the public appreciation and the pay of its members *only while on duty*, depends upon its finding something to do, *even if it has to make it*, which are dangerous incentives, not to be trusted.

The question involved is not one of recent origin, or an issue solely of to-day. The possession and control of the import and export trade of the Valley of the Mississippi and its tributaries has been the cause of a constant struggle between the people of the Atlantic seaboard and those dwelling on the banks and at the mouth of the Great River, coeval in its origin with the earliest settlement of the country.

The first great aim of the French settlers of the Canadas, in 1675, was to find a cheap and convenient outlet to the Gulf.

Subsequently, in 1716, the French people, under the lead of John Law, invested millions of money in establishing a chain of settlements and military outposts along the Mississippi and its tributaries to connect the Canadas and the great Northern Lakes with the Gulf of Mexico, seeking thus to control the commerce of the whole Valley.

An attempted invasion of a portion of this territory by the English “Ohio Trading Company” led to the French and Indian war, which began in 1745, and was waged against the English with relentless fury for eighteen years.

Our interest in this struggle is usually limited to such incidents as Braddock's defeat in the attempt to capture Fort Duquesne, now Pittsburg—the gallant extrication of the British and Colonial troops by young Washington, then twenty-four years of age, and second in command, and the romantic legends which furnished Cooper the themes of his most charming stories. Let us now consider briefly the philosophy of the history of this war.

Besides the natural desire of England, France and Spain to possess themselves, each one through their colonists, of as much of, or if possible, all of the American Continent a second great purpose on the part of the English was to divert the trade of the Mississippi Valley across the Continent to the Atlantic coast. These were the causes of the war.

In his march to the Ohio, Washington became thoroughly imbued with this idea which grew with increasing years, until it developed one of the most remarkable exhibitions of the comprehensive knowledge and far-sightedness of the man who was truly "The Father of his Country."

To possess himself of exact information he made an extensive tour; and may be said to have been the originator of the Chesapeake and Ohio canal.

His maturer views on the subject of maintaining the commercial supremacy of the Atlantic seaboard over the Mississippi river are shown in his letter to Thomas Jefferson, March 29, 1784, and to Benjamin Harrison, October 10, 1784; but nowhere so forcibly as in the one to Richard Henry Lee, President of Congress, August 22, 1785.

"However singular the opinion may be, I cannot divest myself of it, that the navigation of the Mississippi *at this time*, ought to be no object with us. On the contrary, until we have a little time allowed to open and make easy the ways between the Atlantic States and the Western territory, *the obstruction had better remain.* * * * * *

"It is clear to me, that the trade of the lakes and of the river Ohio, as low as the Great Kenhawa, if not to the Falls, may be brought to the Atlantic ports easier and cheaper, taking

“the whole voyage together, than it can be carried to New Orleans: but once open the door to the latter before the obstructions are removed from the former, let commercial connections which lead to others be formed, and the habit of that trade be well established, and it will be found to be no easy matter to divert it; and vice versa.

“When the settlements are stronger and more extended to the westward, the navigation of the Mississippi will be an object of importance; and we shall then be able, reserving our claims, to speak a more efficacious language, than policy, I think, now dictates.”

The idea of the great Virginian, speaking in the interest of his State and of the Atlantic seaboard, that “*the obstruction in the Mississippi river “had better remain,”* as promotive of the turning of the channel of Western commerce to the Atlantic States, has not only been judiciously and consistently followed by the East, in all their votes on Congressional appropriation bills, but would be materially advanced, indeed, finally secured by surrendering into their hands the key of the “Gate of Valley,” through a National Board of Health.

But, to continue our history: Early in the life of our present Government the “Ohio and Chesapeake” and the “Erie,” and subsequently the great Welland canal through the Canadas, were projected and dug with the same object in view, at an aggregate expense of tens of millions of dollars.

These artificial rivers, intended as commercial rivals of the “Father of Waters,” have since been maintained by immense annual appropriations, making them navigable for vessels of considerable tonnage.

The Legislature of New York has at the present moment under consideration an appropriation of \$200,000, to enlarge the canal locks; and the question of allowing navigation, free of toll, as an additional inducement for trade, has been of late years one of the political issues of the Empire State, which will assuredly prevail.

Supplementary and auxiliary to these great water ways, in the effort to control the trade and commerce of the Mississippi

basin and to hold it in tributary bondage, railroads of unlimited carrying capacity have been constructed, leading from the great Valley, tapping it at a multitude of points, and reaching out to Norfolk, Baltimore, Philadelphia, New York, Boston, Montreal, and Quebec.

Liberal subsidies from various States, counties, cities and towns, assisted and favored by the prevalence of the civil war, which interrupted the direct Southern trade for five years, have enabled the commercial rivals of the people of the South and West already to deflect the tide of a portion of this commerce, constantly swelling in volume, to latitudinal lines of ingress and exit, which should, by natural laws and facilities, pursue the more direct and cheaper longitudinal routes in the interchange of surplus products between the temperate and tropical zones.

With the far-reaching view of enlightened statesmanship, President Jefferson had, by the exercise of Executive power doubtful in its Constitutionality, without the authority of Congress, concluded a treaty, one of the principal objects of which was, not only to acquire the rich and vast territory of Louisiana but to command the outlet and trade of the Mississippi River, the possession of which by a foreign power had, even at that early day, been the fruitful source of disagreement and diplomatic embarrassment.

At the beginning of our late civil war the great heart of the Northwest was not fervently aroused for the preservation of the Union until it saw the outlet of its waterways pass into hostile hands.

While the Commercial Enterprise and acumen of the East has lavished annually the money of the National Government upon the improvement of eastern harbors and rivers, even at one time attempting the making of the Erie Canal a National Governmental work, to be fostered by the United States Treasury, the same sectional influence has jealously and vigilantly opposed and resisted every appropriation of National treasure to the improvement of the great Southern and Western water-ways, which would induce the return of commerce to its natural and direct channel, through the outlet of the Mississippi river, into the Gulf.

To surrender to the hands of these our commercial rivals, the keys to the portal through which the whole of that commerce should naturally pass and to allow any federally centralized board to hamper, fetter, or embargo the trade of the people of the valley, at the caprice, pleasure or interest of Eastern capital under the pretense of preservation of the public health, would be an act of supreme simplicity and utterly inane folly on the part of the States of the Mississippi Valley.

In vain then would the work of the great Engineer have afforded us deep water to the sea; in vain then would improved methods of quarantine and non-detention have been accomplished by the lavish use of money and improved scientific appliances; in vain then would we adopt expensive and improved methods of sanitation and drainage for the Southern Metropolis, if the communication of this great valley with the outside world were to pass under the arbitrary control of those, whose interest it would be, to block with walls of adamant other routes of commercial traffic than those which lead to their own doors and favor their own local interests.

No more effectual system could be devised by the cunning of human ingenuity to consummate this discrimination so sinister and direful to the commercial and industrial interests of the States of the valley, than the establishment of a *Centralized National Board of Health!*

In addition to these historical considerations, an undisguised eagerness for authority and an inordinate grasping for money have too plainly stamped the character and history of the National Board to be mistaken by any American who values the methods and traditions of our republican system.

The States are not yet *sufficiently enlightened* to surrender to a centralized National Board the power to bind and to loosen. They are still in that state of primitive ignorance in which they maintain the principle that the people of a State are the best judges of their own internal necessities, and best able to determine police and other regulations growing out of them.

In the matter of public health-preservation and the management of quarantine, the States can better agree upon a mutual arrangement than afford to commit such vital affairs, with the

enormous power they confer, upon any central board of nine men, itself to be wielded presently by the vast moneyed monopolies representing hostile commercial, railroad and steamship interests to tyrannize over and crush the weaker State or section.

The recently attempted forcible seizure of the Yellow Fever Commission was simply a desperate first step in the direction of regaining the power and patronage which slipped from its grasp when permitted no longer to hold its thumb upon the latch of the portal of the Mississippi.

The Louisiana State Board has resisted the National Board of Health, profoundly convinced that to do so was a righteous and patriotic resistance of the most mischievous and threatening organization to which the calamity of a people ever gave birth.

THE YELLOW FEVER COMMISSION.

Profoundly impressed with a sense of duty to exhaust every effort in strengthening the barriers against pestilence and in adding others, and in view of the recent advances in the field of Bacteriology, particularly in the startling announcements of Pasteur and other investigators, the Board of Health determined to bend its energies to the accomplishment, through competent scientists, of a patient investigation of the causes and, if possible, the individual protection against yellow fever.

Being a disease of a specific nature and usually of one attack, the hope of achieving the latter result was not unreasonable, particularly as a vast number of alleged experiments of a successful kind were reported, by Carmona and his disciples in Mexico and Central America, and by Freire and his followers, in Rio de Janeiro.

Ignorant as to the truth or error of these statements, the fact of their emanating from several different sources, sanctioned by their governments, and the experiments themselves being in line with the alleged discoveries of European observers, the Board of Health resolved to do all in its power to have a full investigation made of yellow fever in its native home, and to have tested and settled the inoculability of yellow fever as a protection against that disease. If it proved to be false, the

amount of money expended in ascertaining it would be trifling, and at least well spent in quieting fruitless expectation; but if, in the marvelous discoveries of a great natural law, it should be verified, and the affirmative declarations prove to be true, the good results would be far beyond the computation of hundreds of millions of dollars.

The Board of Health passed a resolution determining to lay the matter before Congress, December 1, 1885.

The President of the Board was sent to Washington, where the petition received the unanimous indorsement of an immense convocation of medical men from all parts of the United States and Canada, in a meeting of the American Public Health Association, and of the Boards of Health of the United States.

A carefully drawn bill, setting forth the purpose of the proposed Commission was laid before both Houses of Congress and referred to appropriate committees.

The text of the bill is appended to this report.

With great respect, I submit the foregoing general exhibit of the operations of the Board of Health during the past two years, making special reference to the motives and controlling principles of its action.

Very truly, your obedient servant,

JOSEPH HOLT, M. D.,
President Board of Health, State of Louisiana.

APPENDIX A.

PROCLAMATION OF QUARANTINE

Directing and requiring that quarantine shall take effect from and after the tenth day of May, A. D. 1886, with the following specifications, to-wit:

All vessels arriving at the several quarantine stations in the State, together with their crews, passengers and cargoes, shall be subjected to the inspection of the quarantine officers at the said stations.

All vessels, together with their cargoes, crews, passengers and baggage, arriving at the Mississippi Quarantine Station from intertropical American and West Indian ports, shall be subjected to thorough maritime sanitation, according to the following schedule:

First Class—Vessels arriving from non-infected ports.

Second Class—Vessels arriving from suspected ports.

Third Class—Vessels arriving from ports known to be infected.

Fourth Class—Vessels which, without regard to port of departure, are infected; that is to say, vessels which have yellow fever or other contagious or infectious disease on board at time of arrival, or have had same on voyage.

Vessels of the first class to be subjected to necessary maritime sanitation at the Upper Quarantine Station, without detention of either vessels or persons, longer than may be necessary to place such vessels in perfect sanitary condition.

Vessels of the second and third classes to undergo the same conditions, together with detention for observation for a period of five (5) full days from hour of arrival in quarantine.

Vessels of the fourth class to be remanded to the Lower Quarantine Station, there to undergo sanitation and detention of vessels and persons such length of time, as the Board of Health may order.

The five days' detention as above provided shall apply to all ports of the Gulf of Mexico, and the Caribbean Sea, exception

being made in regard to vessels coming from ports south of the Equator, whose period of detention shall be three (3) days.

All vessels arriving from Mediterranean, or other ports known or suspected to be infected with cholera, or which may hereafter become infected, shall be subjected to the same conditions as above.

Vessels arriving from the above named ports and places, and belonging to the second, third, or fourth class, as set forth in the foregoing schedule, shall not be allowed to pass the Rigolets or Atchafalaya Quarantine stations, or other State quarantine stations which may hereafter be established, without having undergone a period of detention of forty (40) days, and thorough cleansing and disinfection.

Also the following:

SPECIAL SUGGESTIONS TO OWNERS, AGENTS, MASTERS OF VESSELS AND PASSENGERS.

The Louisiana State Board of Health recommends the following suggestions to agents, owners, masters of vessels and passengers for the purpose of facilitating the work of quarantine officers and reducing the period of detention to a minimum:

1. That vessels should be stripped during the quarantine season of all woolen hangings, sofas, carpets, curtains and such like materials, as far as practicable. Hair or moss mattresses to be replaced by wire or wicker beds.

2. That as far as possible vessels trading with tropical ports should be manned with acclimated crews.

3. Masters of vessels, ship and consular agents are earnestly requested to instruct passengers from quarantinable ports to dispense, as far as possible, with baggage which may be injured by wetting while undergoing disinfection. Such passengers are especially warned against bringing silks, laces, velvets and other fabrics of delicate texture, as they will be compelled to assume all risks of injury.

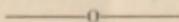
4. While in ports infected with yellow fever, vessels should be anchored out in the harbor when this is possible, and the crew prohibited from going ashore, especially at night.

5. When practicable, cargoes should be loaded in such a manner as to allow access to the pumps, and also to enable the quarantine officials to pump out and wash the bilge.

6. Special attention should be given to cleanliness of vessels and persons, and provision should be made for all possible ventilation of the entire vessel. The best disinfectants and instructions for using same can be obtained by application to the Board of Health or any of its officers.

7. Fruit vessels particularly should be kept thoroughly cleansed for the purpose of avoiding delay at the Quarantine Station. Masters should, before arrival, see that the bilge is thoroughly pumped out and cleansed, and that the entire vessel be put in such good sanitary condition as to permit of the least possible detention.

8. Vessels observing the above recommendations will receive special consideration at the Quarantine Station, detention and cost of cleaning, disinfecting, etc., being materially lessened thereby.



APPENDIX B.

MORGAN'S LOUISIANA AND TEXAS RAILROAD AND STEAMSHIP COMPANY *vs.* THE BOARD OF HEALTH OF THE STATE OF LOUIS- IANA. INTERVENOR.

Col. F. C. Zacharie, Attorney of the Board, furnishes the following history of the case :

In 1874 the Board of Health was enjoined from collecting fees for quarantine inspection by Charles Morgan, of the Morgan Steamship and Railroad Company. Their action was immediately followed by the steamship owners, John H. Clarke et als., Fred. Baker and the Cromwell and Mallory lines *vs.* The Board of Health.

In these cases, and some others not specially named, judgment was rendered *pro confesso*, no defense having been set up by the Board until Col. Zacharie was elected Attorney of the Board.

In November, 1881, Col. F. C. Zacharie was employed as an outside attorney to investigate the subject and to give an opinion to the Board of Health under the presidency of Dr. Joseph Jones.

On December 21, 1881, he gave an opinion affirming the constitutionality of the quarantine charges, which was adopted by the Board, in which he recommended an alteration of the statute by an act of the Legislature so as to regulate the charge by the build and rigging of the vessel and not by the tonnage, and recommended an active defense of the suits and a settlement of the question.

In 1882 Col. Zacharie was elected regular attorney of the Board.

The Legislature of 1882 changed the statute as desired and as recommended by Col. Zacharie. On notification to the attorney of the Morgan Line, he transferred the suit to the Civil District Court for Orleans, November 8, 1882, taking out an injunction against the Board, reiterating all the original grounds, and affirming the unconstitutionality of the act of 1882.

The case was tried and decided by Judge Frank A. Monroe in favor of the company and against the Board. An appeal was taken by the Board to the Supreme Court of the State of Louisiana, where it was again argued by the attorney of the Board and Judge E. D. White, who had been associated with him; and that court, on the 21st of January, 1884, reversed the decision of the lower court and affirmed the constitutionality of the quarantine laws.

After an ineffectual effort for a rehearing, the company appealed by writ of error to the Supreme Court of the United States. At this stage of the proceedings Judge Albert Voorhies, a member of the Board of Health, was retained as associate counsel in place of Judge E. D. White, and the counsel for the Board, in January, 1886, made a motion to advance the case on

the docket of the Supreme Court of the United States, on the ground that it was a matter of great public importance.

This motion was granted, the case advanced and set for trial on the 26th of April, 1886. Afterwards, Senator William M. Evarts was employed as additional associate counsel for the Board and ex-Senator McDonald as additional associate counsel for the company.

The case was argued on the 26th and 27th of April, 1886, by Mr. H. J. Leovy and ex-Senator McDonald for the company, and by Col. Zacharie and Senator William M. Evarts for the Board, and was decided Monday, May 10, 1886, in favor of the Board.

This decision sets at rest the question that the States have a right to charge for quarantine inspection services for the purpose of maintaining a quarantine system, and will enable the Board to collect a large sum of money for back dues, which they have been⁴ prevented from collecting by the injunctions.

It is also important in its bearing on all the quarantine systems of the different States of the Union, as, had the decision been adverse to the Board, the expense of maintaining the quarantine system of all the States would have had to be borne by appropriations from the treasuries of the different States, which would have entailed upon all taxpayers a heavy outlay for that purpose.

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APPENDIX C.

A BILL

Providing for the appointment of a commission to investigate the truth of alleged discoveries of the specific cause of yellow fever, and of a method of preventing that disease by inoculation, and to obtain all information possible as to the cause and prevention of that disease.

Whereas, protection against yellow fever is of the highest national importance, affecting our commerce, foreign and domes-

tic, the health of our seaports, efficiency and safety of the Army and Navy (perchance necessarily operating in an infected region), the lives of the sailors of our merchant marine, and also virtually involving the social, industrial, and commercial growth of Tennessee and the Southern Atlantic and Gulf States of the Union, including such prosperous and populous cities as Memphis, Charleston, Savannah, Pensacola, Mobile, New Orleans, and Galveston; and

Whereas there is a large and accumulating mass of testimony that the power of protecting against yellow fever has been discovered in the inoculation of the essential germ or cause of the disease, by methods distinctly formulated and made available, there being cited in support of the discovery declarations and numerous instances of the successful application of the methods, emanating from Doctors Freire and Carmona, medical scientists at the head of the biological departments in the highest institutions of learning in Brazil and Mexico, authorized by and under the patronage of their respective Governments; and

Whereas it is a manifest public duty that under the sanction and authority of the United States the said discoveries should be thoroughly investigated, tested, and, if found to be efficacious, made available for the protection of our people: Therefore

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the President be, and is hereby, authorized to appoint a commission which shall proceed to Mexico, and if necessary, to the Central American States, Havana, and Brazil, and there make a careful and complete investigation of and report, after thorough examination, the methods of inoculation pursued and their effectiveness in protecting against yellow fever, together with all other information relative to that disease which may be discovered by experiment or otherwise.

SEC. 2. That the said commission shall consist of three persons, two of whom shall be officers of the Government, medical men of known ability and special attainment in biological research, particularly in the department of microscopic investigation and

methods of culture of the essential germs causative of the infectious and contagious diseases. The other member of the commission shall be a medical man not an officer of the Government, of recognized ability, based upon long and ample experience in observation and treatment of yellow fever, competent to give expert consideration to all phases of the symptoms and course of that disease in any form wherein the phenomena of the disease may present themselves, whether induced in the course of pestilential invasion or in purposely devised inoculation.

SEC. 3. That the commission be authorized to employ such skilled assistants as it may deem necessary, and to fix the rate of their compensation: *Provided*, That the entire expenses of the commission shall be limited to the amount of the appropriation herein named.

SEC. 4. That the commission shall make, within twelve months of its appointment, a detailed report of its labors to the President of the United States, to be submitted by him to Congress. But if necessary for the accomplishment of its work, it may continue its labors two years, making also a final report: *Provided*, That that portion of the report covering the expenses of the commission shall be made under oath.

SEC. 5. That the sum of twenty-five thousand dollars, or so much thereof as may be actually required to pay the necessary traveling and other expenses, and the salary of the member of the commission who shall be appointed from civil life, and its employees, be, and is hereby, appropriated out of any money in the Treasury not otherwise appropriated.

SEC. 6. That the sum of five thousand dollars per annum shall be paid as a recompense to the member of the aforesaid commission not already in the service of the Government.

