I would respectfully submit to your favorable consideration, in general terms, a plan to which I formerly called the attention of the public for draining and reclaiming the swamps and low lands of Louisiana.

It is our good fo tune to live upon a soil naturally the most productive in the world. The Missis-sippi, the Missouri, the Ohio, and fifteen hundred other streams, have, as it were, selected the richest ingredients of the soils of nearly a whole continent, and by filling up and encroaching upon the depth of the ocean, have formed for the use and purpose of man, a new country, than which the world offers none richer or more productive. That the whole delta of the Mississippi was once a Mediterranean sea cannot be doubted. The geological formations of the alluvial deposits prove this clearly and conclusively.

Unfortunately, the agent of formation, and the cause of fertility of our soil, water, is at this day, a source of danger and an element of destruction. These very waters, which have made our country, annually flood and lay waste some of its most fertile and valuable sections. The question naturally presents itself, how is this to be prevented?

How are we to reclaim the inundated lands of Louisiana? How are we to bring into safe cultivation those immense swamps and low lands, by far the most productive lands of the State? How are we to protect the upper parishes, without injuring those lower down? And how are we to secure the lower sections, without prejudice to the upper? In a word, what means must we adopt to protect and reclaim the State at large, without injury to any portion of it? This is the problem to be solved. Can it be accomplished by levees? For local and temporary purposes, levees will answer, but as forming a general and permanent system, they are defective. In addition to a great and constant expense, the gradual elevation of the bed of the river is the inevitable consequence of confining its unchecked waters between levees. This operation, of course, must end in inundation. Experience has proved this, wherever it has been instituted. The most superficial observer must have noticed this effect upon the Mississippi. The most serious danger of this operation is, that it is slow, almost imperceptible in its progress, but certain and fatal in its effects. The bed of the river is finally raised to a point where there is no remedy but the demolition and destruction of many very levees, consequently of so great a cost and loss of time. General inundation is, of course, the consequence; the waters resume the old, or make new channels, and the main body of the river returns to very nearly its original state, with the exception of its bed, which remains elevated. The situation of the country is, therefore, in no way improved by the final result. On the contrary, we find the difficulties of protection and drainage greatly and permanently increased. To this state of things are we approaching, and these fatal consequences are we rapidly bringing upon ourselves, if we persist in levecing the banks of the Mississippi, and at the same time close its natural outlets. There is no fancy in this. It is the inevitable result of existing causes. It is as certain and true as that the waters of the Mississippi contain matter to deposit, and that these waters will seek their own level.

Can we fix upon a better system? The question is easily answered, if we consider the formation of the country through which the Mississippi flows. The upper strata of the formation of the country through which the Mississippi flows. The upper strata of the Mississippi, at high water, by which I mean those above the level of the lowest backlands on either side, lies apparently along the crest of a ridge. (Here I do not, of course, refer to the Mississippi in its whole depth, as must be evident to any one, but simply to the surplus waters—the meandering portion, which it is our object to discuss.) This ridge has two slopes or inclinations, one in the direction of the general course of the river, and one at right angles to it. Every one is aware of this. Can we desire, or meet with a case where the mode and means of drainage and protection are so clearly pointed out, and so easy of application? Take a similar case, on a small scale, upon the farm of a planter of ordinary intelligence. A small bayou, subject to overflow during heavy rains, runs through his plantation; the land falls in declivities from and into the bayou on both sides. How would he permanently protect the banks of this bayou from inundation without an embankment? Naturally by throwing the surplus water up on the low ground on either side, through outlets or canals leading from the bayou. In this way the object is most admirably and easily accomplished.

Now, suppose, that after increasing the facilities of discharge of the stream itself at its mouth, we should, along the lines of limit of the adjacent low grounds, which line will be nearly parallel to the course of the stream, extend these lateral canals to the lake or reservoir into which the bayou is discharged.

Let us place a boat in this manner the whole surplus water can be disposed of, the banks of the bayou completely secured, and the very adjacent low grounds and swamps drained and reclaimed, down to the lowest level of the lake or gulf, into which the waters are discharged? Is not this almost self-evident? Is it not practicable, no matter how immense the quantity of water to be disposed of? Clearly it is. The question then becomes one of expense, not of truth. Any country can be drained, any river brought within its banks, and reduced to its bed at its highest flood, no matter how extensive the area, or how high the elevation, or great the quantity of the waters of the other. The river waters assist in this system by washing out their own channels. In most cases it would be sufficient to commence the works, and leave the balance to be finished by the velocity of the waters, so that water now to us an element of destruction becomes the strongest and most effective agent in the system.

This is the system to be applied to the Mississippi. As briefly am I convinced of its practicability and success, the operation, as I am satisfied, of the clearest mathematical demonstration. The water can be reduced to near the level of the Gulf of Mexico, and many thousand acres now brought into safe and successful cultivation, or there is not a particle of doubt. Shall we do it? Shall we adopt and vigorously prosecute an enlarged system, calculated to develop in a thousand fold the vast resources of the State, regardless of local and particular interests, and unawed by the magnitude of the project? Nature has commenced the work—will it not be continued? Under millions be conceded on the beds of our swamps. Shall we lay them bare? The world offers no country more susceptible of improvement in one where it is taught so cheaply, none where it can be accomplished at so little outlay; none where the results can be as grand and as beneficial.

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The present system of internal improvements labors under many serious disadvantages. The State Engineer has no discretion whatever, as to the improvements to be first accomplished, nor as to the manner to be employed on any particular work. Too many works of a local nature are ordered without any preliminary survey or examination; each work is considered the most important by its particular advocate, and of course expects to be accomplished in a day, when many the time is limited, without any regard to the magnitude of the work or its necessity.

Works are left unfinished by the adoption of more or less importance, and the result is that the State funds are constantly in bayou to bayou, and each leaving its present bed, unfinished at the end of the year, but a single traces of permanent improvement behind them. It is a position to find the most accurate estimates, that to finish properly any of the works recommended, as ordered by the Legislature, and now on record, would, with the present force and means at the disposal of the department, consume the best part of a quarter of a century. There is, therefore, no reason to make the State Engineer responsible for not having completed all those works which he was compelled to commence, and which, for reasons, but the very few ordinary appropriations. The Legislature would do well to adopt a remedy for this. Improvements would then be based on more mature surveys, the necessary examinations and estimates made and permanently completed previous to passing to the consideration of minor importance.

Colonel Hebert's position as made in 1845, with regard to the effects of the Cut-off at Red River, need hardly be noticed in this report.

The present State Engineer, Mr. A. D. Weeks, judges in his recent report to the Legislature of the same opinion in favor of the cut-offs. His report is based on the tables of levels made out by the Senate and House of Representatives.

One word here in regard to cut-offs. Many of arguing in their favor, reason as if cut-offs, as a system of drainage were commenced always at the mouth of the river, and below all points at which the Delta is most subject to overflows. The cutting off of the Red River, for instance, is the property as mentioned by the removal of the bars in the river. As the bed shall be deepened, the waters will be relieved of the pressure which now forces them over the banks, and a certain quantity of its surplus waters, and projects its bed for the reception and removal of the increasing flood from above. The bend being nothing more or less than a vast and useful reservoir, similar in some respects, in its operation to the Lake on the Western shore of the upper part of the Delta.—Spa Lake is one with a back and shallow gate—supposing the locks and locks all the time—for the reason you will perceive, that the gate is producing an overflow. Naturally you reason that the water of the part forms the reservoir into which the streams discharge. The same remark is mainly applied to bends, and with probably nature's same results. There is almost no one near "Cut-offs" at the Balize.—How many will come now? Where will they be located? Will you cut off all the bends of the river, from a specific engineer? There is not a point from the parish of Pointe Coupee to the city of New Orleans, where a "Cut-off" can be made without destroying an established property. Again, suppose the "Cut-offs" all made. The water come to the country, enter a enlarged; lands and plantations under cultivation for scores of miles, transverse from one side of the river to the other, or destroyed what the improvements, dwelling houses and sugar houses in the further element of the "Father of Waters," and finally the river made perfectly straight in the whole length of the alluvial Delta. We ask them: *how long will it* [illegible]

In a word, in a word, however, all of what information, so easy to wash away, so subject to regrets, to direct and keep in a straight course so vast and gigantic a river as the Mississippi?

Has not the river a tendency to resume their original "regimen" where this is disturbed by extensive engineering? Do not ordinary rivers running through alluvial formations, exhibit the slightest deviation of the current at any particular point, from no matter what cause, commence the operation of washing away the shore; and when under way, where, and when will it stop? Does it not increase with what it feeds upon? Can we not in this manner imagine the "Great Father of Waters" rolling his angry floods in every direction across this delta, destroying the works of man and his own works of creations? Is there no possibility of this? Let us be certain, as respect we, before we adopt a system of that kind. The "Great Father of Waters" cannot be trifled with; we must treat him prudently and gently.

We will here refer to the system of levees, quoted above, of leaving a wide berth for the waters and once applied to the Levee. This system cannot be well applied to the Mississippi. To be effective even partially, the levees must necessarily be placed at a considerable distance from the present limits of the bed of the River. This will sacrifice too much property. Nearly all our improvements, villages and cities, would be embraced by these levees if placed at the distance absolutely necessary to accomplish the object in view. We would find much difficulty in making exceptions in favor of particular villages to the detriment of protect a large extent of the Coast containing vastly more property and wealth; and in the lower portions of the State, there would be but little and left for cultivation by the application of this system.

Your Committee could easily collect masses of testimony and opinions of the same tenor as the reasoning and arguments given above, but think that sufficient has been shown to justify them in the following conclusions and recommendations, which they respectfully submit to your consideration.

1st.—They recommend the adoption in principle of the system of outlets, levees to be used in certain cases.

2d.—They recommend a board of Engineers to be appointed by the Governor with the advice and consent of the Senate. This board to be composed of two or more scientific persons, one of whom shall be a geologist—the State Engineer to be an ex-officio member of the board.—The board will organize by electing a President.—The Assistant State Engineer to act as Secretary to the board. All information and instruction of any of the Departments, the board will have a right to use. The duties of the board as soon as organized, shall be to make, or cause to be made an accurate and complete topographical and hydrographical survey of the whole alluvial delta of Louisiana. The board will determine and fix upon a permanent plan of drainage and protection based upon the system of outlets as above recommended.

The details of the plan with its specifications &c., with a full report shall be submitted to the Legislature at the first Session after the completion of the Survey. The report will indicate the points at which artificial outlets if any shall be made, what affluents or streams shall be enlarged; suggest means and measures for the perfection of the system fixed upon, and give all useful and necessary information for the guidance of the Legislature.—Should any member or members of the board differ materially in opinion two reports will be made. The functions of the board shall cease, so soon as the report and system are adopted or rejected by the Legislature; unless the Legislature shall think proper to renew said board.

3d.—We respectfully recommend that our Senators and Representatives in Congress be requested in order to have detached from the U. S. Corps of Topographical Engineers two or more officers to be employed in subservient, and to cause at the head of the work contemplated and on the meantime your Committee would recommend that the State Engineer be authorized to concentrate all the available force of the State, with boats and other necessary implements, as may be thought practicable, on the Atchafalaya river in order to remove all obstructions from the bed; commencing at points nearest the Gulf and to open and deepen such outlets as he may deem necessary and conducive. Second to submerging of any section of country and to facilitate the rapidity of the current, so as to carry the waters into the Gulf; your Committee would further recommend that the State Engineer be also authorized to perform such works on bayous Pagueminy and Lafourche for the same purpose, as he may deem necessary. The State Engineer may divide the State Force, so as to accelerate such works, as far as practicable, before the next season of high water.

4th.—For the present purpose, we recommend the passage of an uniform law with regard to levees; the dimensions being based upon the head of water to be retained. We recommend also, for the same reason, the closing of crevasses when the water permits, and that a levee department be created, with a sufficient fund placed under its control to meet all emergencies, and which fund shall be levied by direct taxation; that all levees in the State be declared public works, to be made and kept up by the front proprietors, under such obligations as are now imposed on them by law; said proprietors to receive, however, a compensation for works thus executed, according to the quantity of earth removed, to be measured by the cubic yard. We respectfully recommend that an appropriation be made to carry out the views of this report, should the Legislature think it expedient.

S. VAN WICKLE,
Chairman of Committee, on behalf of the Senate.

On motion of Mr. Cole, one thousand copies of the foregoing report and accompanying documents, were ordered to be printed, in English and French.

On behalf of the Committee on Internal Improvements, Mr. Van Wickle reported "An act for the relief of the town of Alexandria," which was read for the 1st time.

Mr. Gardere, of the Committee on Enrollments, reported:

An act to change the time of holding Courts in and for the Parish of Point Coupee," and the "Resolution directing the State Engineer to remove obstructions to the navigation of the Coushatta Wand," as correctly enrolled.

He further reported the following Bills and Resolutions of the House, as correctly enrolled:

"Resolution fixing the salary of the Assistant State Engineer at two thousand dollars."

"An act for the relief of Elkin T. Jones."

"An act to provide for the constructing of a Railroad from the Mississippi river to Grand River.

"An act to provide for the greater security of opposers."

And the "Resolution to improve the Huff power."

The President of the Senate signed these bills and resolutions, and the Assistant Secretary informed the House thereof.

He further reported the signature of the Speaker of the House to the aforementioned enrolled bill and resolution of the Senate.

The Assistant Secretary also reported the concurrence of the House in—

An act to revise and amend the act entitled, An act to establish Free Public Schools in the State of Louisiana, approved 31 May, 1847, and amending the same, approved 20th December, 1848—

An act for the relief of H. H. Barkston—And in

An act to amend the 4th section of An act to organize corporations in this State, approved 30th April, 1847, so as to exclude free persons of color from the provisions of said act.

Mr. Layet, Clerk of the House, informed the Senate that the Speaker of the House had signed the enrolled bill of the House entitled—

An act to confirm the proceedings of Bynum Haynes, late appraiser of the Canton and Port Hudson Railroad Company—and

An act for the relief of Jean Brunet—

Also reported the signature of the President of the Senate to said bills.

Mr. Gardere, of the Committee on Enrollments, reported said bill was correctly enrolled, and the President attached the same.

Mr. Van Wickle made the following report:

The Special Committee, to whom was referred the memorial of John C. Stone, a resident of the parish of Pointe Coupee, beg leave specially to report through their Chairman, that they have attentively considered the memorial above referred to, and which has for its object indemnification for loss of land by reason of the Reservoir "Cut Off." The memorialist complains that he has not received 200 acres of land awarded on the Mississippi, opposite the mouth of the Atchafalaya river, under the provisions of the act of 1842, and further therein, that the location of the "Cut Off" as to that land and water, has taken away the most valuable part of the land, which in exchange, was surely not worth more than the sum of four thousand dollars.

Your Committee, from the evidence published before them, have no reason to doubt the facts contained in the memorial. As the case is, they are of opinion, that should the Legislature deem it proper to grant relief, the Committee are not prepared to say what amount should be awarded by said "Cut Off," would make a just application for relief, which, from the circumstances and the large loss of property would be entailed, which memorialist at present writes, is a very great injury to the Sugar and Cotton interests of the State. Believing that the case is one which calls for the special action of the Legislature, your Committee would recommend that the memorial be referred to the Committee on Internal Improvements, with instructions to report upon the matter at the present session.

All which is respectfully submitted.

S. VAN WICKLE,
Chairman of Committee.

Mr. Van Wickle, from the Committee on Internal Improvements, reported a bill entitled "