The New-Orleans Bee.

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OFFICIAL PAPER OF THE STATE ..... NEW-ORLEANS, FRIDAY MORNING, OCTOBER 11, 1850.

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TERMS OF THE BEE.

DAILY PAPER ..... year in advance $12 00
TRI-WEEKLY PAPER, semi-weekly, (one year 5 00

ADVERTISING—Twenty cents per week for each square (or less) for the first insertion, and FIFTEEN CENTS for each subsequent insertion. No Advertisement inserted for less than one dollar for each week.

Advertisements not specified as to time will be published until forbid, and charged accordingly.

Advertisements (except Auction sales, which are charged one dollar for every FIVE lines for each insertion) must be left at the office before 3 o'clock, P. M.

☞ The insertion of Annual Advertisers is limited to such matter as is strictly within the line of their business, and in EIGHT lines per square every other day.

The New-Orleans Daily Bee.

Official Journal of the State, General Council, First Municipality and Board of Liquidators.

Friday Morning, Oct. 11, 1850.

The Niagara Mail came through yesterday, with the latest dates.

The New Custom House.

We published, on Sunday, at some inconvenience, the able and interesting letter of Jas. H. Dakin, Esq., architect, commissioned for the erection of a Custom House in New Orleans, in which the various architectural deficiencies of the present edifice are exposed, and a number of original and useful suggestions offered. We have preferred giving the letter entire, because in no other way can it be done justice to, or any of its explanations by endeavoring to condense them.

It will be seen that most of the changes proposed by Mr. Dakin are indispensably necessary not only for the convenience, security, and furtherance, that by his calculations, they can be effected at an infinitely smaller cost than would be required to carry the original plan into effect. It is not proposed to make any alteration in the exterior of the building; or to disarrange with the four entrances—one on each side—imposed in the former plan. There can be no objection therefore for sectional measures, such as where our the Collector's office is now located, it will be constantly accessible from the streets bounding the four sides of the edifice, and precisely similar in size and construction.

Every step must and must defect in the old plan was that it contained no provision for a yard. The very idea of so enormous a pile as the new Custom House, being destitute of a yard, is astounding with a feeling of suffocation and oppression like ours, the absence of so essential a feature in every building, would be fraught with serious danger to the inmates. Without a free circulation of air, the even in moderate cases, cannot be preserved. *A fortiori* in a climate like ours, especially to the combined influences of a confined atmosphere and intense heat. In connection with this, it will be perceived that a large proportion of the changes proposed by Mr. Dakin, has absolute reference to the necessity of abundant ventilation. The suggestion for the location of the Collector's room in the rear, is under consideration of proprietary and convenience. Whether the office of the Surveyor of the Custom House street is a matter of the greatest possible consequence, and the fact above stated that there are to be four distinct entrances leading to it, from the four sides of the structure. The whole front of Old Levee street will be occupied by the Post office. But we refer to the letter of Mr. Dakin for full and satisfactory explanations.

The commissioners are of course reluctant to change a plan, but some of the changes proposed to leave them unnecessary, we think necessary to make, if not absolutely for the usefulness of the building. The Commissioners have made no decision. The assertion that a petition to have the business room removed, has been forwarded to Washington, is entirely groundless and unfounded. Nothing has yet been acted upon, though it is undeniable that some of the proposed modifications must be sanctioned by special and immediate reasons.

We close the notices of the First Municipality election, by the receipt of a few hours to the 2nd and 3rd wards, so as to give the precise standing, when the returns are tabulated from Friday night's election. It is evident to every one, that some of the gentlemen who are elected belong to the wrong purposed to be done to the First Municipality, are not familiar with the subject, and have not given it calm and careful consideration. Let them look at both plans and peruse Mr. DAKIN's cogent array of reasons in support of his suggestions. If they should still adhere to the opinion that the main business room ought to remain in the rear of the edifice, we will be compelled to differ from the sectional procedures overpower the dictates of common sense. It is true that the Council have no authority in the premises, the act of donation being clear and unincumbered with any restrictions touching the location of the several departments; but we would regret to see the progress of the building delayed by unnecessary bickerings on the Secretary of the Treasury embarrassed by complaints springing from a jealous fear, in the present instance, of an unwarranted and undemanded.

There are no warmer friends of the First Municipality than the conductors of this sheet. It has upheld their just rights menaced with encroachment, and will continue to defending and upholding them. Such, however, is not the case. Where natural grievance exists, we shall not be wanting to fabricate imaginary ones. Let us refer under to the attempts to create such a sectional difference, and endeavour to act as members of one community, having at heart its interests, its prosperity and its advancement as a whole. Any other course is unworthy of the citizens of New Orleans, and tends directly to our disparagement and prejudice.

New Works.—We are indebted to J. C. Morgan for a batch of new publications, among them are "Rose Foster," the conclusion of Reynold's novel of the Mysteries of the Court of London; History of Penderis, No 6; Hy. Smith's, a novel by Mrs. Grey; Three Strong Men, by Alexander Dumas, and vol. 3 of Poe's Literary remains, comprising critical notices of the prominent writers of the day, American and European. The last is a book well worth reading. It is original, caustic and original, though seldom unjust.

Le Nouveau Journal of Commerce—one of our most valued exchanges—has been enlarged, and appears in a new and handsome typographical dress.

Bankruptcy.—The tow boat Conqueror sunk on Friday morning with a portion of the cargo on board, the large Jonathan, ashore in West Bay, consisting of sugar, Tobacco, Cigars, &c. The boat lies in two and a half feet water, but it is probable that she will be got off to-day.

Carrollton Hotel to Lease.—We invite attention to the splendid establishment for lease. We are told it can be secured upon very reasonable terms.

Florida.—An election for a member of Congress, and for State officers took place in Florida on the first Monday in October. Cabell the Whig, and Brabe, the Locofoco candidate for Congress. The Pensacola District elected Cabell a small majority—ten or fifteen votes.

Mayor of Baltimore.—J. H. F. Jerome has been elected Mayor of Baltimore by 416 majority. The Council is equally divided.

Ohio.—We learn by the telegraph that Wood, the Locofoco candidate for Governor, is elected, and that the Whigs have carried the Legislature, having gained 12 members. The election of Judge Wood was expected, as the entire Whig force of the Western Reserve was given to the Free Soil candidate. We are unexpectedly gratified at the triumph of the Whigs in the Legislature.

New Hampshire.—Hon. Jared Perkins is the Whig candidate for Congress in the Third District of New Hampshire, to supply the vacancy occasioned by the resignation of General James Wilson.

☞ We are requested to call the attention of purchasers to the sale of Boots, Brogans Ladies' and Children's Shoes, that takes place THIS DAY, at Silas Hyde & Co's Auction Sales Room, 51 Magazine street, 3d story. The sale will commence at 10½ o'clock.

Important Movement.—The Whig General Committee of New York, which represents the nineteen wards of the city, met in convention on the night of the 9th inst., and by a very large majority, and with much determination, announced the Whigs of the city to assemble and to elect delegates to attend the Union Whig State Convention, to be held in Utica on the 17th inst. This is the first response, and the State will follow.

The *Express* says the resolutions were adopted on Monday evening, by the Joint Executive Committee, and on Tuesday evening by the own Whig General Committees of the city—The resolutions speak for themselves, and need no comment at our hands. They were adopted as will be seen, by overwhelming votes in the senior Committee, and by a larger majority in the Whig Young Men's Committee.

Union, Whigs, is the word. We are Whigs for the Union, not of a section. Our platform is not the one-legged stool of Buffalo, but the platform of the Union, from Main to Oregon.

James Hallet, the fugitive slave, who was reclaimed at New York by his master, and taken to Baltimore, will be probably redeemed from slavery—as his owner asks $800 for him, and seven-eighths of the amount has been subscribed in New York. We haven't the smallest objection to the emancipation of slaves on such terms.

☞ The murderers Foote and McCaffrey, were executed at New Haven, on the 2nd. Foote is convicted of murdering a young girl, his adopted sister. McCaffrey, of murdering an old man named Smith, and his wife, on East Rock, near New Haven.

Further by the Cambria.

Baltimore, Oct. 4.

It is stated on the authority of the Paris correspondent of the London *Herald*, that an arrangement is on foot between Spain on one side, and England and Holland on the other, by which Spain, on condition of her being protected in her possession of Cuba by those powers, engages to pay the debt due to English and Dutch creditors.

Preparations are making at Vienna for the reception of Marshal Haynau on his return with the most distinguished honors. It is stated that the Austrian Minister at London has been instructed to demand the punishment of those who maltreated him.

The President Louis Napoleon has returned to Paris. The only important political incident of the week is the discovery of an Orleanist plot. The documents connected with it do not appear to implicate any one.

The Danes and Holsteiners still continue to skirmish with each other. The Danes have decided to give battle.

The cholera has broken out in China, and the Governor of Macao has become one of its victims.

Commercial affairs at Bombay are improving, and the prospect of the Indigo crop is encouraging.

No sales of Tar and Turpentine Common Rosin is in fair demand at 3-1d per cwt. Spirits of Turpentine is scarce, and has advanced in price. Rice, low to fine qualities, 13s. 9d.

Money is abundant, but its value has slightly increased. At the Have Bourse, on Thursday, the Five per Cents closed at 93 60.

The Great Compromise and Union Meeting at Mobile took place on Tuesday last, agreeably to notice. The Mobile *Register* says of it:

Judge Hopkins engaged the attention of the meeting from over o'clock till the hour of refreshment arrived, when the crowd adjourned to a different entertainment. After the feast was disposed of, George N. Stewart, Esq., assembled the crowd and occupied the remainder of the day. The theme of their speeches was, of course, the late measures of Congress bearing on the slavery question, which they cordially approved.

At sunset, the meeting which was a very large one, adjourned to the Market House, where, at the time of this present writing, other orators are addressing a numerous audience.

We shall doubtless have a full account of the proceedings in the Advertiser to-morrow.

Boston, Oct. 2.—Three large buildings near the State Prison in Charlestown, occupied by Murdock's saw mills, Plummer's cotton factory, and Burdett's sash factory, were nearly destroyed by fire, last night. The fence of the prison was burned and the roof was several times on fire. The prisoners were not taken out, although the walls of the prison at one time were quite hot. The loss is $30,000 only; $3000 insured.

Springfield, Mass., Oct. 2.

Mob Slave Excitement.—The whites and free black citizens and fugitive slaves held a meeting last night, which was largely attended. The fugitives were recommended to arm themselves, and resist all attempts at arresting them. Inflammatory speeches were made against the new fugitive slave law. It was denounced as a great evil.

Baltimore, Oct. 4.

Capture of Fugitive Slaves.—Ten runaway slaves from Virginia, who had taken refuge on the ridge of the Alleghanies, eight miles from this place, were discovered yesterday. During the melee which ensued two of the slaves were wounded, one mortally, and the other dangerously. Three were captured this morning—Six sought shelter in a mountain hut, occupied by a man and his wife. The clothes of the fugitives were very ragged, and nearly torn off in their hurry to escape from the bloodhounds which would have overtaken them but for the timely interference of the citizens.

The woman of the hut supplied the outcasts plentifully with food, while the husband procured assistance and captured them. He received a reward of two hundred and fifty dollars for their recovery. The remaining two have not as yet been found, although all attempts to arrest them, and are doubtless concealed somewhere hereabouts.

They are closely watched by Pennsylvanians who are eager to obtain the reward offered for them.

Appointment by the President.

By and with the advice and consent of the Senate

J. C. Booth, of Pennsylvania, to be Melter and Refiner of the Mint of the U. S. at Philadelphia; James W. Osborne, of North Carolina, to be Superintendent of the Branch Mint at Charlotte, in the State of North Carolina; Andrew W. Redding, of Georgia, to be Superintendent of the Branch Mint at Dahlonega, in the State of Georgia; Robert H. Moore, of Georgia, to be Coiner of the Branch Mint at Dahlonega, in the State of Georgia; Matthew F. Stephenson, to be Assayer at the Branch Mint of the United States at Dahlonega, in the State of Georgia.

Officers of the Customs.

COLLECTORS.

Wm. B Smith, District of Machias, Me; Laban Cook, Niagara (Lewiston) N Y; Ezra Smith, Champlain (Plattsburgh) N Y; James C Barker, Oswegatchie (Ogdensburg) N Y; John M Hanson, St. Augustine, Fa; Wm. Freret, New Orleans, La; John H William, Pearl River, (Shieldsboro) Mi; Wm M Gallaer, Sonnono (Bennett Cal.; Madison Walthall, San Joaquin (Stockton) Cal; H E Robinson, Sacramento (Sacramento City) Cal; W. C. Ferrell, San Diego, Cal; Chas Cavilier, Minnesota (Pembina) Minn; Chas W Hill, Miami (Toledo) Ohio; Levi Jones, Sabaria, (La Salle) Texas; Allen W. Hatch, Milwaukee, Wisconsin.

NAVAL OFFICERS.

Jacob Alexander Cost, San Francisco, Cal.

APPRAISERS.

Geoffge G. Campbell, port of New York, N Y; Alex Kerrig, Jr., San Francisco, Cal; J Vincent Brown, do. do.

ASSISTANT APPRAISERS.

Antonio Meteyer, New Orleans, La; Alexander Andre, do. do.

SURVEYORS.

E E D Skinner, port of Greenport, N Y; B. Reddick, Suffolk, Va; D.W. Sanders, Jacksonville, N C; Thomas Wolf, Memphis, Te; Chas. H. Applegate, New Albany, In; Wm Brown Butler, Evansville, In; Hart Fellows, San Francisco, Cal.; James B Stevens, San Pedro, Cal.

Appointments by the President.

Under the Seal of the Department of State.

John McKelway, of New Jersey, Commercial Agent for the Island of Curaçoo, vice Evans H. Young, deceased.

Appointment by the President.

Under the Recess of the Senate.

Alexander M. Rose, of New York, to be Consul at St. Catherine's, in Brazil.

Important from Africa.—A letter to a commercial house in New York, furnishes the subjoined information:

Sierra Leone, Aug 2, 1850.

The British brigantine-of-war Bonetta arrived yesterday from the leeward coast, and will leave for England direct this afternoon, with information that the King of Dahomy has ordered the missionaries and recaptured slaves at "Understown" to leave the country before the 1st of October. If they do not, he says he will behead them all, commencing with the missionaries. Commander Forbes, of the Bonetta, had an interview with the King, and the result was the immediate deportation of the vessel for England.

Architect's Office, New Custom House,

New Orleans, Sept. 21, 1850.

To the Commissioners for the Erection of a New Custom House in New Orleans:

Gentlemen—After having made myself acquainted with the general design for the erection of the New Custom House at this port, the mode of construction, and the materials used and to be used in its erection, by a careful examination of that portion of the edifice which is already constructed, together with such plans for the prosecution of the work as have been placed in my possession I have arrived at the conclusion that there are certain features in the building which may be advantageously changed for the better accomplishment of the purposes for which it is intended. I feel it, therefore, my duty to present to your consideration the following *points in the premises*, with such observations and *suggestions* growing thereupon:

First—The arrangement of the various apartments; their *means of light and ventilation*; and the convenience and comfort of their disposition; and

Second—The manner of constructing the edifice and the materials employed; together with the strength and economy arising therefrom.

To make this subject plain to all, I will begin by pointing out what I conceive to be a serious error in the original position of the chief apartment of the edifice—namely, the "Collector's General Business Room." This room is 90 by 116 feet square, and is situated on the second floor, at about the centre of the area of the building, say about 110 feet from the face of Canal street front, 108 feet from Old Levee street front, 100 feet from Custom House street front, and 89 feet from New Levee street front, and is surrounded by rooms and passages which rest in all from light and air, by the depth of the several dimensions above named; therefore, it must depend upon light through its roof, or upon gas light. It could be lighted sufficiently through its roof, but at the same time a volume of heat would be admitted during at least eight months in each year, that would be intolerable.

The proper ventilation of this room as now located, must depend entirely upon mechanical or artificial means. The little air that reaches it from and through the rooms, passages and stairways surrounding it, must necessarily become heated and vitiated in its passage amongst human beings and merchandize, and were it even so pure, not one ten thousandth part of the requisite quantity would thus be afforded.

To ventilate this room by artificial or mechanical means, would involve great cost and complicated difficulties, and at the same time be uncertain in producing its proper effects, more especially in a southern climate like this, where every advantage should be taken to obtain free ventilation by unobstructed natural atmosphere. By inspecting the plan of the second floor, it will be seen that the several rooms between the Collector's Room and the rier of rooms on the Canal street front, which have no means of light except gas light, and no air except by mechanical or artificial means, and that the rear of nearly all rooms bounding the four streets open into dark hallsor passages, in consequence of the centre of the block of the edifice being occupied by its chief apartment, and no court or yard whatever being open up to the heavens

The rooms fronting upon the several streets, with very few exceptions, are void of ventilation from front to rear, or of light from their rears, which facts will readily appear upon the examination of the plans. The insufficiency of light and air to the various apartments of this building will be the cause of continual dampness of the atmosphere, which will be injurious to health and cause great damage to merchandize. To save the merchandize from such damage, artificial heat must be resorted to every day in the year—this again will prove another cause of ill-health and disease.

On the inspection of the plan of the first floor, it will be seen that the most remote possibility of ventilating or lighting is void of the question, except by purely mechanical and artificial means. So no light whatever can get to it through the roofs from above, and no ventilation can take place that will be sufficient to move a feather; because all the passage-are on the same level, or in other words, these passages all run exactly the same height; consequently there can be no current of air. A natural draught requires some portion of the vacuity to be much above the remaining space, and to be open to the atmosphere above, that the heated air may rise and escape, thus only, via natural draught effected. In case a cold norther would set against either front, the air may be forced into the passages and openings a short distance, and a vortex, short distance only, as the atmosphere towards the centre of the building is more dense and difficult to move even by mechanical means.

To correct these errors and objections, I propose to move the "Collector's General Business Room" forward, so as to front directly on Canal street, and open in the centre of the mass of the edifice by an uncovered court or quadrangle, 164 feet long, by 54 feet wide; in that case, the Collector's Room would be 126 feet by 110 feet square—containing 14,994 superficial square feet, while the present room has but 10,440 superficial square feet, being a difference of 4554 superficial feet.

This room so situated, will have the benefit of the southern winds (which are always the most healthy), directly and pleasantly through twenty-eight windows in front on Canal street, and by a draught of the same number of windows at the rear opening upon the court. These openings will afford 392 superficial square feet of opening for light and air, which equal to an area of 25 by 72 feet square. This area as you will readily perceive, will be most ample for light and air.

By the formation of this open court, the rear of most of the other rooms of every story which front on the streets, will be well lighted and ventilated, and each will be the completeness of the system of lighting and ventilation throughout the whole structure, that no further mechanical or artificial means whatever will be required.

There is a gallery around the open court in each story, which takes the place of the enclosed halls in the original plans, and answers the same purposes.

The floor to the original plan 2d story) occupied by dark rooms and useless passages, between the Collector's room and the tier of rooms on Canal street, measures 9600 superficial feet. The same space occupied between the galleries of the open court measures 5200 superficial feet, therefore, there are 3400 superficial square feet more available room obtained by this proposed alteration.

At the end of the United States District Court Room, corner of Canal and Old Levee streets, second story, there are two small rooms which I would propose to unite to the opposite end of the Court Room, in order that the latter may have the advantage of direct light and air from the window openings on Canal street. There are a few other changes that I would suggest on this story of minor importance, all of which will be explained by an inspection of the plans.

In regard to the first story now being erected it will be noticed that it is intended to be entirely covered by the second floor, and that not an opening of any description whatever pierces it for the purposes of light or ventilation; consequently, the only natural light that enters this story is that which enters the opening on the various streets, leaving at least two thirds of the whole area of the first floor in total darkness, to be dissipated only by gas light. The means and machinery as proposed in position are even more dark and mysterious. Powerful and complex machinery will be required to ventilate this story even in a tolerable degree, and the air cannot be introduced except by artificial means. The foundation for any mechanical ventilation is illusion. If the suggestion of the open court should be adopted, then all these difficulties vanish at once.

There is a blank wall between the Custom House and the Post Office Departments, (basement story) with a passage on each side—one being 11 feet and the other 19 feet in width, and each passage is very nearly 300 feet long, with 1 opening at both end of each, on opposite fronts of the building. The passage contiguous to the Post Office department is 11 feet wide, with one window each story. The passage will be very dimly lighted, and I am unable to discover its use for any purpose whatsoever. The passage on the Custom House side of this dividing wall is 15 feet wide, with a window in one end and a door in the other. This passage is available to the admission and transmission of goods, etc., and I would propose to take away the blank wall between these two passages, turning both into one, making one passage 26 feet 6 inches in width; this will add materially to its usefulness for any purpose, and cause the space it occupies to be better lighted and ventilated.

It will be seen that the main entrance on each side of the principal entrance on Canal street front, agreeably to the works as now being erected, is 8d feet 9 inches long; should the proposed alteration be adopted, they will each be 119 feet 4 inches long.

I would propose to take away the walls of the short passage entering from New Levee street, near the corner of Custom House street, and convert the two small rooms and passage into one large apartment.

There are a few other trifling changes proposed on the first floor, as represented on the modified plan.

All the changes and modifications suggested above could be made with but very trifling alterations in the works as at present erected.

The necessity at this period for cellars, for the storage of wines, liquors, etc., is a subject of great importance, no such storage room being at present in existence. I would therefore suggest that the entire area of the open court, and all the area from said court out to Canal street front (according to the proposed modified plan) be excavated, and cellars formed—the foundation walls as now constructed so sufficiently deep into the earth for that purpose, rendering it perfectly practicable to obtain dry cellars from the fact of the soil under the New Custom House being composed of stiff blue clay. The only objection to cellars would be a trifling one under present circumstances, and the convenience afforded by them would be invaluable, as the evaporation of wines and liquors to this climate, where they are kept above ground, is a very serious loss. These cellars would occupy an area of 150 feet by 280 feet square. There will be no difficulty whatever in sufficiently lighting and ventilating these cellars. They require but little light, and any quantity that be admitted by inserting thick glass bulls-eyes in the pavement of the court, and by means of windows through the external foundation walls below the banquette, guarded by grated areas, as is universally the practice in Northern cities. Ventilation would be given by somewhat similar means.

I am led to believe that it would be good policy to excavate and form cellars under the entire edifice, as the importance and wants of New Orleans will ere long require all such cellar room as the area and arrangement of the building will afford.

I think it would be a great misfortune to this gigantic edifice and to the commerce of this port, to omit the formation of a cellary story under the whole structure, more especially when the circumstances are so favorable, and the cost would be so comparatively trifling.

We now come to the consideration of the second point, namely: the manner of construction and the materials used and to be used in the erection of this edifice.

The original design contemplates covering each story with brick arches, supported upon the various walls and numerous brick piers, as will be seen by the plans, etc. These brick piers already erected in the first story, which *are to be continued up through all the stories, are each four feet square*, standing in ranges through many apartments, and in every case most materially interfering with the occupation and use of the rooms, by the great amount of space they occupy. From these piers and the various walls, the arches are to spring, and when turned, their haunches are to be filled in, and the whole upper surface levelled up with solid master, bricks or concrete. When this is accomplished the walls of the first story (at the Post Office department upon Old *Levee*, and that portion of the wall of the court room facing the same street, on the second story, will be found to be entirely inadequate to withstand the thrust of the arches, which press against those parts.

To carry out and complete this extensive system of groined arch work as contemplated by the present plans and works, will require at least three years time, during which no other works can be prosecuted on the building.

The great variety and space of its arches, and, in some cases, as rassing in the same apartment, will cause a great variety and inequality of pressure upon the foundation and upon the abutments; consequently the settlement of the foundations will be unequal, and this inequality will be greater in the horizontal thrust upon the abutments—they, in many cases, being insufficient, thereby endangering the stability of the structure to a serious extent. Please to reflect that this system of groined stairways surrounding it, must necessarily become heated and vitiated in its passage amongst human beings and merchandize, and were it even so pure, not one ten thousandth part of the requisite quantity would thus be afforded.

To ventilate this room by artificial or mechanical means, would involve great cost and complicated difficulties, and at the same time be uncertain in producing its proper effects, more especially in a southern climate like this, where every advantage should be taken to obtain free ventilation by unobstructed natural atmosphere. By inspecting the plan of the second floor, it will be seen that the several rooms between the Collector's Room and the tier of rooms on the Canal street front, which have no means of light except gas light, and no air except by mechanical or artificial means, and that the rear of nearly all rooms bounding the four streets open into dark hallsor passages, in consequence of the centre of the block of the edifice being occupied by its chief apartment, and no court or yard whatever being open up to the heavens

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The cost of the original design, as per estimate of the Messrs. Town, Architects, is as follows, viz:

Cost of the brick arched floors and ceilings, together with expenses incurred by the same time and expense as well as endanger the stability of the structure, the exterior walls of which in most cases, I assure you, are by no means adequate to the arches they have to perform, and great trouble and cost must be incurred to render them sufficient. The thickness of the exterior walls in most places is only 4 feet, and with of the piers between the window and door openings from 8 to 11 feet, from magnitude of the arches that would push one of these piers over, supposing that on an average they are 9 feet 6 inches wide, 12 feet high, and 4 feet thick, sustaining the weight above them, which will have an approximate idea of the resistance they will each be able to sustain. Compare these dimensions with works already erected, and also take into account the load that these arches are to sustain, and you will find that no structure for commercial purposes or for the purposes for which this edifice is intended, has ever stood from and safe for one moment in a legitimate manner, when erected on such erroneous principles of construction.	$15,000
5th—The omission of the dark rooms, their arched floors and finishings, between the Collector's room and the front on Canal street	$30,000
These reductions amount in all to the sum of	$83,457
Which, added to the sum of $213,104, brings the amount up to	$296,561
Now, add the cost of artificial or mechanical means for ventilation and light, which cost will be at least $25,000, and the total will be	$321,561

Without estimating the constant cost and trouble of working and keeping this machinery in repair, etc.

There are a few minor items of reduction and addition that would occur in case of the adoption of those alterations, which would *about balance each other, and, therefore, I* have thought it *unnecessary to specify* and detail them.

In relation to constructing cellars under the whole, or a part of this *structure*, I would remark, that according to the present design, the entire area has to be filled up with earth to the depth of from 3 to 5 feet, and dwarf walls built to support a stone floor over the same.

The cost of filling up this vacancy and building the dwarf walls, will be much greater than to excavate the whole area to the depth required for cellars, as that the cost of constructing these cellars, compared with their usefulness and value, would be trifling indeed.

I have now presented this subject in its various points, and will close by giving a brief abstract of the same.

I have suggested the removal of the Collector's room from the centre of the block, or mass of building—where it was almost impossible to light or ventilate it—to the front on Canal street, and to form an interior open court, by means of which every room will be well ventilated and lighted, and rendering perfectly unnecessary all artificial and mechanical means whatever for that purpose. I have proposed the substitution of iron floors, etc., instead of brick arched floors, and also shown that the exterior walls as now erected, are, in my judgment, entirely insufficient to withstand the thrust of the arches against them, and, that extraordinary means must be employed to ensure perfect safety in the structure. I had omitted to mention that the above system of iron flooring will have an effect to anchor and tie the walls of the edifice in every direction and that there will be no lateral or horizontal pressure against them in the least degree. I have also suggested the construction of cellars under the whole or a part of the edifice. These are the chief alterations suggested

In reference to the expense attending these alterations, it has been shown above that their adoption would reduce the cost of the edifice as follows, viz:

Cost of the brick arched floors and ceilings, together with expenses incurred by the same time and expense as well as endanger the stability of the structure, the exterior walls of which in most cases, I assure you, are by no means adequate to the arches they have to perform, and great trouble and cost must be incurred to render them sufficient. The thickness of the exterior walls in most places is only 4 feet, and with of the piers between the window and door openings from 8 to 11 feet, from magnitude of the arches that would push one of these piers over, supposing that on an average they are 9 feet 6 inches wide, 12 feet high, and 4 feet thick, sustaining the weight above them, which will have an approximate idea of the resistance they will each be able to sustain. Compare these dimensions with works already erected, and also take into account the load that these arches are to sustain, and you will find that no structure for commercial purposes or for the purposes for which this edifice is intended, has ever stood from and safe for one moment in a legitimate manner, when erected on such erroneous principles of construction.	$ 160,614
Cost of blank wall dispensed with,	7 455
Cost of roof over area, dispensed with	20 000
Cost of cellar floor over area, dispensed with	15 000
Cost of stair cases, etc., dispensed with	10 000
Cost of rooms and floors etc dispensed with	30 000
Cost of machinery for ventilation dispensed with	25 000
	$270,069
Deduct total cost of cast iron floors and ceilings etc proposed to be substituted for the above	254 508
	$221 561

Thus, there will be a clear gain to the Government, of $221 561, and finally, the structure would be much more convenient and comfortable, and in every far better adapted to the purpose for which it is designed. Before leaving this subject, however, I would beg to add a few words on the relative strength of bricks and iron, as applied to architectural purposes.

Brick work can only be compared with iron, in cases where the weight or pressure has a tendency to crush the material. A square foot of brick work will sustain, with safety, 10,000 lbs. A square foot of good cast iron requires a pressure of 921,600,000 lbs. to crush it. Now, let us take three fourths of these 921,600,000 lbs. as the proper resistance in crushing power that good cast iron will sustain with perfect safety, then we have 691,200,000 lbs. to compare with 10,000 lbs., or, in other words, that a square foot of cast iron will sustain, with safety, a weight of 690