# SECOND AND THIRD BIENNIAL REPORTS

OF THE

# BOARD

OF

# CAPITOL COMMISSIONERS

TO THE

# Governor of Iowa.

JANUARY 1, 1874, AND NOVEMBER 30, 1875.

DES MOINES: R. P. CLARKSON, STATE PRINTER. 1876.

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# CAPITOL COMMISSIONERS' REPORT.

To his Excellency, Cyrus C. Carpenter, Governor of the State of Iowa:

The Commissioners appointed by the act of the Fourteenth General Assembly, entitled "an act to amend the act to provide a State Capitol, approved April 13th, 1870, and making an appropriation therefor," and charged with the execution of the provisions of law in respect to the erection of the Capitol, respectfully submit the following report:

The first meeting of the Commissioners, called by the Governor, took place on the 17th day of April, 1872. A. R. Fulton, Secretary of the preceding Board, was continued in office till February 1, 1873, when he having resigned, Ed Wright was elected in his place, and now continues to hold the office.

The first duty imposed on the Commissioners by the law by which they were appointed, is defined in these words: "it shall be their duty to cause the present foundation and material on hand to be carefully and skillfully inspected and examined with regard to the quality of the material and the character of the work, and shall cause to be changed, rejected and removed any part thereof, that in their judgment does not conform to a proper standard of material and workmanship." This duty the Commissioners proceeded, at once, to discharge. On an inspection of the face of the wall as it stood, many of the stone appeared to be broken or burst by the action of the frost during the Some of the broken stone were at the bottom of the wall, others were so distributed through it, that in order to remove the defective stone, it was necessary to take down nearly the whole wall; when this was done, much of the stone showing an unbroken face was found crumbling to pieces and in a condition not much less dilapidated even than the others. Most of the stone in the foundation were from Rock Creek in Van Buren county, a highly argillaceous magnesian limestone, absorbing a large quantity of water and always in danger of being burst by the action of frost. Such blocks of this stone as remained

unbroken and apparently uninjured were similar in texture and chemical composition to those that were the most disintegrated, and all alike unsafe for the foundation of a massive structure designed to endure for a thousand years. The stone from the Bear Creek quarry, and a few others, were not affected by the frost, and now stand in the wall in a perfect condition. The Commissioners resolved that the Rock Creek stone were not fit for the foundation of the Capitol, and ordered them to be removed from the grounds; and they have all been removed, with the exception of five blocks, containing a little over three cubic yards, which were thought suitable to be retained in the wall.

The whole cost of taking down the wall and rebuilding it with good stone and removing the defective materials is \$52,353.76. A detailed account of the work, and of the expenditure of money in doing it, will be found in the joint report (which is herewith transmitted), to the Board, of the executive committee, and the superintendent of finance.

The Commissioners found upon entering on duty a subsisting contract with the old Board to furnish the stone for the foundation and cellar wall from the Bear Creek quarry, in Dallas county, for \$10.25 per cubic yard, entered into by Tuttle & Robertson, of Des Moines, who had constructed a railroad two and one-half miles in length, from the C. R. I. & P. R. R. to the quarry, at a great expense, and had commenced the delivery of stone; but, after delivering a small quantity of stone, the quarry failed and was abandoned, and the cost of the railroad became a total loss to the contractors; afterwards, with the consent of the old Board, they repaired to the Rock Creek quarry, in Van Buren county, and from that quarry furnished, still at a great loss to themselves, the stone before spoken of, which proved to be nearly worthless, but which nevertheless was approved and received by the local superintendent and the former Board as good stone, equal to the requirements of the contract, and by them placed in the wall. It was evident that Tuttle & Robertson, in consequence of the failure of the Bear Creek quarry, had already incurred heavy losses in their efforts to perform their contract, and that suitable stone could scarcely be obtained from any source for less than double the price stipulated in their contract, and to require them to furnish the stone at \$10.25 per cubic yard, would be likely to reduce them to poverty, and greatly impair the means of their sureties. Tuttle & Robertson were informed, however, that the Commissioners had no alternative but to insist on the contract. They appealed to the General Assembly. The result of their appeal was the passage of the following Joint Resolution:

"Resolved, By the General Assembly of the State of Iowa, That the Board of new Capitol Commissioners shall have power to modify, or with the consent of the contractors, cancel the contract with Messrs. Tuttle & Robertson for the remainder of the stone, for the completion of the foundation and cellar walls of the new Capitol building, upon such terms as the Board shall deem just, and for the best interest of the State; but such Commissioners shall in no manner so modify or alter said contract so as to release said contractors from any damage sustained by reason of the poor material already furnished."

It appears from this resolution, that the General Assembly of Iowa did not think it was for the best interest of the State, to take advantage of the improvidence of Tuttle & Robertson in not foreseeing that the Bear Creek quarry would prove a failure, to appropriate their private property, or that of their sureties, to build the new Capitol. The Commissioners have sought to be governed by the spirit which dictated this resolution in making an arrangement under its authority with the contractors. The Commissioners saw the necessity of selecting some quarry, from which they could feel the strongest assurance that a sufficiency of stone could be procured that would stand every test as to its durability. From inquiries and personal examinations, the Commissioners became satisfied that such stone could be obtained from the old Capitol quarry near Iowa City, and from the quarries near Winterset, in Madison county. The stone from these quarries had been thoroughly tested and pronounced by the highest authority to be of the first quality. Tuttle & Robertson were invited to state the price for which they would furnish the stone from either of these quarries for the foundation of the Capitol, according to the specifications of their contract; the alternative of the Commissioners declining their proposition was to be the canceling of their contract. They possessed all the machinery and apparatus requisite for quarrying stone and could go into any quarry in the State, or elsewhere, with a considerable advantage over any competitor, and in case their contract should be canceled, their apparatus and machinery would remain useless on their hands. It was evident, that it was much for their interest to make their propo sals so low, that the Commissioners would not be disposed to reject them and cancel their contract. They proposed to furnish the stone from the Winterset quarries at twenty dollars per cubic yard, and in case this proposition should be declined, they asked to have their contract canceled. It seemed to the Commissioners, that this proposition was not unreasonable; indeed, that they could scarcely expect one

much more favorable. It was an inducement to accept it, that if it should be declined, it would be necessary to advertise anew for proposals, and it would be so late in the season before a new contract could be made, that little or no work could be done before another year. The Commissioners therefore, determined to accept the proposition, and by authority of the Resolution above cited, to modify the contract accordingly, inserting therein the provision, that this modification "shall not release the contractors from any damage sustained by reason of the poor material already furnished."

The Commissioners have not been unmindful of that provision of the law which requires them to "direct all their action with a view to the completion of the building for the sum of one million five hundred thousand dollars," or of the oath taken by them, which exposes them to the pains and penalties of perjury, if by any action of theirs that sum is exceeded in the construction of the Capitol. The plans and specifications were virtually adopted by their predecessors and the execution of them actually commenced. The plans were indeed formally adopted by a vote of this Board, without any inquiry, or judgment, however, as to their merits, but, because their adoption was considered an accomplished fact. It was important for the Commissioners, if they should build the Capitol according to the plans which came to them from their predecessors, to know whether they would be in danger of transgressing the limit of expenditure fixed by law. Messrs. Cochrane & Piquenard, architects were instructed to prepare a careful and detailed estimate of the cost of the building according to the plans and specifications received from the old Board. They did so, and reported their estimate to the Board, which made the cost of the building \$1,420,981.50, without, however, including any estimate of the expense of supervision, which if it did not exceed \$79,000.00 would bring the estimate within the limit fixed by law. This estimate, together with the plans and specifications was referred to a committee consisting of Mr. Finkbine and Mr. Dey, with instructions to examine them and to report their opinion to the Board. In their report, (which is herewith transmitted,) they estimate the cost of the building according to the plans and specifications, including the expense of supervision, at \$1,584,115.59. The same committee were then instructed to inquire and report, whether it was advisable to reduce the cost of the building by diminishing its size. The committee in their report, (which is herewith transmitted,) advised against reducing the size of the building, and their report was adopted. The Board then determined, in order to reduce the cost of the building within the limits prescribed by law, to change the plans and specifications, as follows: to change the cut stone cornice to galvanized iron; the cut stone capitals to cast iron; the grand stair case from marble to iron; to put hard wood floors in the halls and corridors instead of marble; to leave out the committee rooms over the library, and in the upper story of the east wing; to change the glass from French plate to French cylinder, double thick or English chrystal. By making these changes, which is considered preferable to reducing the size of the building, the Board estimated that a saving would be effected of \$116,945.91, and the cost of the building brought within the limit fixed by law. But it should be distinctly understood, that these changes are not made in accordance with the taste of the Commissioners, they are made from necessity, not from choice. If the Legislature would place another hundred thousand dollars at the disposal of the Commissioners, they would be cheerfully abandoned. The conceptions of the great architects of ancient times, embodied in the orders of architecture and displayed in the capital of the column, and in the architrave, the frieze and the cornice of the entablature were designed to be executed in stone; a cornice of galvanized iron or a capital of cast iron is an imitation and a counterfeit. The rooms over the library and in the upper story of the east wing can be constructed at a more convenient season, hereafter; marble can be substituted at some future time, for iron in the grand stair case, and in the halls and corridors for wooden floors; and an inferior kind of glass can be exchanged for that of a superior quality, but the iron cornice and the iron capitals can never be replaced by stone, but must remain disfigured by rust, to mar forever the beauty of the building and to exhibit to future ages the depraved taste of the present generation.

The old Board conducted the supervision of the work through the agency of an executive committee, the architects, a local superintendent, and their own Secretary. Their successors did not deem it expedient to alter materially their system of organization. The resignation of Judge Fulton of the office of Secretary and the election of Gen. Wright in his place have already been mentioned. Mr. Cochrane was obliged by the pressure of professional business in Chicago to resign his post, and, thereupon, Mr. Piquenard was appointed sole architect. Mr. Appleyard had been discharged at the closing of the work for the season in December, 1871.

The Board felt keenly the need of a competent person for overseer, and the difficulty of finding such a man. Mr. Robert S. Finkbine had been

strongly recommended to the attention of the Board by many intelligent citizens. But there was a seeming incompatability in a man being commissioner and overseer at the same time, and by appointing one of their own colleagues, the Board might incur censue and the charge of favoritism. As the season was far advanced before an overseer was wanted, (it was passed the middle of June,) the Board concluded to carry on the work during the remainder of the year through the agency of an executive committee, and Mr. Fisher, Mr. Dey and Mr. Finkbine were appointed as such executive committee, and they invested Mr. Finkbine, as they were authorized to do by the Board, with all their authority, and he entered upon the work and discharged in the name of the committee the duties of local superintendent during the rest of the year. At the extra session of the Legislature in 1873 a knowledge of the scruples of the Board as to the appointment of one of their colleagues, came to the General Assembly, and they passed a Joint Resolution authorizing the Board to appoint one of their own members local superintendent or overseer, and immediately afterwards Mr. Finkbine was unanimously elected to that office, and his annual salary established at three thousand dollars, which includes his compensation and travelling expenses as commissioner.

At the same time, the executive committee mentioned above was appointed, Mr. Foote was appointed a committee to act as superintendent of finance, with the duty of auditing and signing all vouchers for the auditor, "and in arranging for the disbursements in the construction of "the State Capitol."

There were found on file in the office of the Board at their first meeting, proposals sealed and unopened for furnishing two millions of brick according to the advertisement of the old Board. On opening the bids, the bid of Janes & Redhead, at \$11.20 per thousand, was found to be the best as to price and quality, and was adopted, and a contract was ordered to be made with them according to the advertisement and specifications.

Notice having been advertised for proposals to furnish granite for the base course of the wall, two bids were received, one from David and James Gibson, at \$1.35 per cubic foot, and one from David Armstrong, at \$1.47½ per cubic foot. The first bid was accepted, but the bidders failing to enter into a contract, afterwards Mr. Armstrong's bid was accepted, and a contract was made with him to furnish the stone. Mr. Armstrong, after having delivered a part of the stone, failed entirely to perform his contract, and the overseer was obliged to

procure the stone from other sources, at a cost exceeding the contract price of \$1,441.27, a sum due from Mr. Armstrong and his sureties, which they acknowledge, and which they are abundantly able and ready to pay.

The Board on the 31st of August advertised for proposals to furnish the stone for the basement story, to be received till the 17th of October, and to be opened on that day. The bids were opened and filed, but the awarding the contract was postponed till the next meeting of the Board. In the mean time, the executive committee and architect were directed "to examine buildings which had been built of different qualities of stone, for which proposals have been received for furnishing stone, and to visit the different quarries, and report their opinion of their relative merits." The executive committee and architect, in obedience to instructions, made the examinations directed to be made, and recommended that all the bids be rejected for reasons stated in their report, (which is herewith transmitted,) and that the Board advertise for proposals to furnish the stone for the whole superstructure. The recommendation of the committee was adopted, and the Board proceeded to advertise anew for proposals to furnish stone. Twelve proposals were received, and on the 9th day of January, 1873, were opened and the bid of Munson & Turner was found to be the lowest, to furnish stone from quarries near Quincy, Illinois. Before acting on the proposals, the Board visited and examined the quarries, and sent a specimen of the stone to Professor Hinrichs, of the State University, to be submitted to his analysis and tests, who, in his report on the subject, says: "The stone may be fairly called a coarse-grained marble. I consider it the best limestone which I have seen from any part of the Northwest; it is also one of the most beautiful building stones, and will retain its light color indefinitely." The bid of Munson & Turner was finally accepted by a unanimous vote of the Board, and a contract was made with them to furnish the stone from their quarries for the whole superstructure of the Capitol.

The delivery of stone was to commence on or before the 15th day of April; but the contractors encountered many obstacles in opening these quarries and introducing the machinery for getting out stone; and on the 22d day of July had delivered only four car-loads of stone, and these were rejected on account of their not corresponding with the specifications of the contract. Several members of the Board visited the quarries to learn the cause of the delay and the prospect for the future delivery of stone. From the information which they communicated, the Board was satisfied that a sufficiency of stone for the basement story

could not be obtained during the current season, and that it would be necessary to postpone the construction of the story till next year, or to resort to some other quarry for a supply; besides, there were discovered running through the stone in various directions black veins, or seams, which it was thought, by some members of the Board, might seriously impair the beauty and durability of the wall constructed of it; and it was extremely doubtful whether a sufficient quantity of stone free from these veins could be found in the quarry for the whole superstructure. The Quincy stone is of a very light color, almost white, and it is not probable that stone of as light a color can be procured elsewhere without incurring an enormous expense, and to put a dark stone above one of a lighter shade would be a transgression of all the canons of good taste and altogether inadmissible.

Influenced by these considerations, the Board, on the 22d day of

July, passed the following resolution:

"Resolved, That the executive committee be directed to select and make arrangements to work some quarry that will furnish stone for the basement story, and also be directed to organize a sufficient force and procure the necessary machinery to enable them to furnish stone for said basement at the earliest time practicable."

Under the authority of this resolution the executive committee have selected the old Capitol quarry near Iowa City, and have organized a force and procured the necessary machinery and proceeded to quarry the stone and deliver them on the Capitol grounds as rapidly as practicable. It is unnecessary for the Commissioners to describe in detail the qualities of the stone of the old Capitol quarry; they are well known. It is enough to say, that it is a chrystaline carbonate of lime, very similar in its chemical composition to the Quincy stone, a little coarser and a little darker. These two kinds of stone, the lighter being placed above the darker, will give an agreeable diversity to the appearance of the wall.

The foundation is now finished complete in all its parts, solid, massive, indestructible, and fit to receive and support the stately edifice designed to surmount it. The Commissioners offer it with satisfaction to the inspection of the people and of the Legislature.

The Commissioners have endeavored to use the utmost vigilance to curtail expenses, and have effected a considerable saving in the cost of the supervision of the work, but it has been found to be the most practicable way to exercise a proper supervision over the construction of an edifice so large and costly as this Capitol, to employ a Board of Com-

missioners, an architect and an overseer or local superintendent. The compensation and traveling expenses of these officers can scarcely be less than \$10,000 annually. But it is as easy and as little expensive to superintend the expenditure of \$300,000 or \$400,000 as of \$100,000. The existing law makes an appropriation of \$125,000 annually until the Capitol is finished. With this appropriation, it will take ten years to complete the building and the cost of supervision will be \$100,000; with an appropriation of \$300,000, the Capitol can be finished in four years, and the expense of supervision will be only \$40,000. Economy and the best interests of the State require that the Capitol should be constructed as speedily as the financial condition of the Treasury will permit.

The Commissioners call your attention to the papers enumerated below which are herewith transmitted, an examination of which will give you a better understanding of the progress of the work for the past two years, and a detailed statement of the expenditures for the same period.

No. 1. Report of the Executive Committee and Superintendent of Finance, on the cost of removing and replacing rejected material.

No. 2. Report of the Committee appointed to examine the estimates of the architect on the cost of the building.

No. 3. Report of the Committee appointed to examine and report upon the necessity and advisability of reducing the size of the building.

No. 4. Report of the Executive Committee, in pursuance of a resolution of the Board directing the Committee to examine buildings which have been constructed of the different qualities of stone for which proposals had been received.

No. 5. Report of the Architect, on the same subject, as stated above, for the Executive Committee.

No. 6. Condensed report of the Overseer of the work for the years 1872 and 1873.

No. 7. Complete report of the Superintendent of Finance, of the expenditures in detail for the years 1872 and 1873.

No. 8. Report of the Architect for the years 1872 and 1873.

JOHN G. FOOTE,
MATURIN L. FISHER,
R. S. FINKBINE,
PETER A. DEY.

#### APPENDIX.

#### NO. I.

Report of the Executive Committee and Superintendent of Finance on the cost of removing and replacing rejected material.

#### TO THE BOARD OF CAPITOL COMMISSIONERS:

Gentlemen—The undersigned would respectfully submit the following report of the work on the new Capitol building from the time of their taking charge of the same to this date:

In accordance with a resolution of the Board rejecting the Rock Creek stone, all of said stone on the grounds, both rough and dressed, and all taken from the walls, with the exception of five pieces, were removed

from the Capitol grounds.

The Rock Creek stone, where used, occupied invariably the two lower courses; it therefore became necessary to take down all of such walls, in order to remove the defective stone. The upper courses were built of Rock Creek, Bear Creek, Earlham, and Lock stone.

In re-building, none of the Lock stone have been placed in the face of the wall, on account of their appearance (being cut,) along side of pitched or rock food work

side of pitched or rock-faced work.

The amount of wall taken down in order to remove the defective stone, was 2,352 cubic yards.

The account of the Rock Creek stone rejected and removed is as follows:

	Y'ds.	F't.	In.
Rough stone on grounds	174	12	3
Dressed stone on grounds	134	3	11
Dressed stone taken from walls	1,211	10	2
Total rejected stone	1,519	26	4

The superficial feet of cutting on the above, is as follows:

Cutting on stone on grounds	
Cutting on stone taken from walls	57,868 feet 10 inches.

Total cutting...... 64,431 feet 5 inches.

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14 CAPITOL COMMISSIONEM		
Y'ds.	F't.	In.
The above stone were measured and received in the rough, and paid for as	0	0
Total rejected and retained 1,523	11	11
Making a difference between the measurement in the rough and after dressing, of 205	15	1
REJECTED MATERIAL ACCOUNT.		
The cost of the rejected material and work is as follows:		
1 700 wards stone at \$10.25 par vard	\$17,729	2.25
feet 5 inches, at 8½ cents per superficial foot	5,470 1,528	6.67
Cost of laying 2,352 yards, taken at the price of re-laying the same, being \$2.22 1-6 per cubic yard  Excavating and re-filling trenches around walls, taking	5,32	5.70
down walls, and removing defective stone from the	4,55	0.72
Sand estimated at 8,000 bushels, at 3 cents per bushel	24	0.00
Water, estimated	12	4.80
	34,96	5.41
To the above should be added the cost of Secretary, Board, Architects, and Superintendent, for three months	3,27	2.55
Total cost	\$38,23	7.96

#### REPAIR ACCOUNT.

The repair account, taking the building in the condition it was at the incoming of the present Board of Commissioners, and keeping an account of the cost of taking down the walls, removing the defective stone from the grounds, excavating, and grading up again, the cost of the material necessary to replace that condemned, and rebuilding the walls which were taken down, leaving the work at the precise point it was when such repairs were commenced, stands as follows:

Taking down wa	 						* 1					4.7			c.	10	(a)	* *		0.75		00,000,00
Stone cutting	 											*			()	×	**		000	(m) / h		9,305.39
Stone masonry .	 								0								4			* (		5,325.70
Cement	 				*		*				* 4		 8				*	* *				1,020.21
Water	 . 5								*				 *				*	* *		*		
Salaries	 * *	1.0	8.5	* : *		1.1		1. 1	18							• •	*	* 1			*	1,122.00

To which should be added sand used, which was on hand and does not appear in the account of expenditures...

240.00

Total cost of repairs ..... \$52,593.76

DES Moines, December 20, 1872.

JOHN G. FOOTE,

Superintendent of Finance.
R. S. FINKBINE,

For Executive Committee.

#### NO. II.

Report of the Committee appointed to examine the estimates of the Architects on the cost of the building.

TO THE BOARD OF CAPITOL COMMISSIONERS:

Gentlemen—The Committee appointed to "examine and report upon the estimates of the Architects for the new Capitol building,"

submit the following report:

The estimate submitted by the architects gives, in round numbers, an amount for each item, and with the exception of concrete work, dimension stone, stone-work, brick and brick-work, gives neither the quantity nor price; we were unable, therefore, to test its accuracy, except by making a new estimate. In doing so, we have endeavored

to preserve as nearly as we could, the same classification.

In order to make an estimate of the cost of a building which can be relied upon as accurate, it is necessary to have general plans, elevations, and sections, together with full detail, drawings, and minute specifications, which together, make a full and complete description of the proposed building, and from which the amount and quality of all the material and workmanship in the building may be definitely ascertained. Without these no estimate can be relied upon as accurate, and with them, an estimate, even carefully made, may fail of verification in the construction of the building from errors of judgment, as to the value of material to be furnished, or of work to be done, or from the change in value during the progress of the work, in both labor and material.

We have labored under the difficulty of having the general plans drawn to a small scale, thereby increasing the chances of error in measurement, and having but few detail drawings, whilst the specifications are general rather than specific in their descriptions. We can rely upon the items of excavation, concrete, stone, and stone-work, brick, and brick-work, plain plastering, roof covering, marble floors and heating, as reasonably accurate.

The ornamental plastering, wood-work, plumbing, glass, glazing and painting, are at best only approximate. There is nothing in the plans or specifications by which we can even approximate the cost of the wrought and cast iron and stairs. We have therefore adopted the sums given in the estimate of the architects for the three last named items.

The specifications describe the quality of the iron-work, wood-work, and painting, but in the absence of any detail drawings, it is impossible to ascertain the quantities. We could approximate the quantities

in wood-work and painting, but could not the iron.

In making the estimate, we have made a reasonable allowance for contingencies and superintendence, and have named a gross sum to cover the expenses of the commission and for architectural services.

In those items which for want of detail drawings, and minute specifications, we have been compelled to approximate, we have endeavored to estimate the quantities large enough and the value high enough to cover the cost, of what in our judgment, the work should be.

We estimate the total cost of the building, in accordance with the

plans and specifications on file, to be \$1,584,165.59.

This amount exceeds the limitation fixed in the law providing for the

erection of "a new Capitol building."

Two courses are open to remedy this excess, either to change the specifications as to the material to be used in portions of the work, thereby lessening the cost, or changing the plans, in order to reduce the size of the building.

The latter course will necessitate, in order to preserve the architectural symmetry of the building, the adoption of entirely new plans, and the abandonment of all the work done, a course we do not deem

advisable.

Your Board, at its session of April 20, 1872, directed the architects to change the specifications in the following particulars: "To substitute galvanized iron for cut stone, in the cornice; to use cast iron for all capitals, instead of cut stone; to use iron in place of marble in the grand stair case; to substitute hard wood for marble in the floors of the halls and corridors; to use English crystal or French cylinder in place of plate glass; and to leave out the committee rooms over the library; and the upper story of the east wing."

None of these changes should be made except from the necessity of bringing the cost of the building within the requirements of the law. This applies especially to the two first named items, the capitals of columns and cornice, which if changed, cannot be hereafter remedied.

The other items are not so material. These changes in the specifications will in the aggregate reduce the cost of the building \$116,945.91,

leaving then the total cost of the building \$1,467,215.68.

In conclusion, we submit as our judgment, that keeping within the limits of the plans and specifications, as modified by the resolution before referred to, and at present prices, the building can be completed for the sum herein named.

All of which is respectfully submitted.

R. S. FINKBINE, PETER A. DEY, Committee.

#### NO. III.

Report of the Committee appointed to examine and report upon the necessity and advisability of reducing the size of the building.

#### TO THE BOARD OF CAPITOL COMMISSIONERS:

Gentlemen—The committee to whom was referred (under resolution of the Board passed May 20th, 1872) the consideration of "the necessity and advisability of reducing the size of the new Capitol," respectfully report, that after careful consideration of the subject they have come to the conclusion from the evidence offered by the several estimates of the cost of the Capitol building that the work can be completed for the maximum sum named in the law. We therefore think there is no necessity of reducing the size. We have examined several of the Capitol buildings now in process of erection in other states, and regret that we do not have the necessary data from which to make a detailed comparison as to the size of buildings, the number and size of the several rooms, and the general arrangement of the plans, between these buildings and the proposed Iowa Capitol.

Of the Capitols now building we find our own smaller and much less costly than those of either New York or Illinois, and a little larger and somewhat more expensive than that of Michigan. So, comparing the recognized needs for like purposes in other states with our own, and believing that we are building for the future full as much as for the present needs of the state, we do not deem it advisable to reduce the size of the building.

We call the attention of the Board to the fact that the records show the election or appointment of an architect, on October 6th, 1870. A contract was made with the architect to prepare plans for the Capitol building. The plans were prepared and referred to Mr. Edward Clark, architect, for examination. Mr. Clark reported, through Mr. Dudley, a committee of the Board of Commissioners, on January 4th, 1872. We find no action of the Board formally adopting any plans for a Capitol on record. The plans now in possession of the Board and on which estimates of the cost of building have been made, and in accordance with which the work has been carried on, should be identified in some way as the property of the state, and with this end in view we submit the following and recommend its adoption:

Resolved, That the plans prepared by Messrs. Cochrane and Piquenard, now in possession of the Board, be and are hereby adopted:

Resolved, That the President and Secretary sign, after writing the words, "Adopted August 3d, 1872," the following:

Plan of cellar or foundations;

Plan of basement;
Plan of first story;
Plan of second story;
Plan of gallery story;
Longitudinal section;
Transverse section;

Cross sections of Senate, and House of Representatives;

The elevations of the four fronts, and the specifications; and that the said plans, when so signed, shall not be removed from the office except by permission of the Board.

R. S. FINKBINE, PETER A. DEY, JOHN G. FOOTE, Committee.

#### NO. IV.

Report of the Executive Committee, in pursuance of a Resolution of the Board directing the Committee to examine buildings which have been constructed of the different qualities of stone for which proposals have been received.

# TO THE BOARD OF CAPITOL COMMISSIONERS:

Gentlemen-The Executive Committee, under direction of your Board of date of October 18th, 1872, would respectfully report, that in pursuance of your resolution they have visited the quarries at Anamosa, Crow creek and vicinity; also the old Capitol quarries in Johnson county; that they have visited the new insane hospital at Independence and examined various structures in Anamosa and Cedar Rapids, built from the Anamosa stone; also various buildings at Iowa City built from the stone of the old Capitol quarries; that one member of the committee has visited the St. Genevieve sandstone quarries and examined structures erected from that stone.

The committee did not visit the Earlham quarries, being satisfied from the character of the stone furnished for the foundations that the variety of color and texture rendered it unfit for the basement story.

The stone in the vicinity of Anamosa are a buff colored magnesian limestone, the strata varying in thickness from three inches to three feet. The upper and lighter colored strata will not afford stone of sufficient thickness for the heavy courses of the basement story unless

placed upon edge.

The heavier strata, being the lower courses noticed in Green & Webb's quarries, are not, as far as color can be observed, stratified other than in thickness of three feet or more; they were not however, sufficiently worked to give data for a definite conclusion, whether or not the amount could be furnished of an uniform color and texture. We were notable to find any buildings that had been erected from the stone in these courses, and were, therefore, unable to judge of its appearance or weathering qualities.

Buildings erected from upper strata showed, when placed upon their beds, in the same stone, a marked difference in texture, giving

upon long exposure a lack of uniformity in color.

The stone from the old Capitol quarry in Johnson county, are found mainly in stratas from three to six feet in thickness; the color is gray, about as dark, though different in shade from the lower strata of the Crow Creek quarries; they are expensive to quarry, requiring drilling, both vertically and horizontally. Though in use for thirty years, the quarries have not been worked to any great extent. They, like the Anamosa stone, are said to work well in cold or freezing weather without damage from frost. There is no doubt as to their capacity to furnish the amount of stone required. In exposed places they show little change from the effects of time, and weather, somewhat darker, but uniformly so, and are not inclined to collect moss. The committee are of the opinion that they would be desirable to use on the basement of the Capitol building from their weathering qualities and their uniformity of color and texture. The cost being, in our judgment, the only objection to them.

The Magnesian limestone or Sulphur Spring stone presented by Brown and Schneider, resembles, in color and texture the stone from the old Capitol quarries so nearly that your committee could not, from any means in their possession, determine the difference. The price being the principal objection to it.

The granite of Brown and Schneider, would be preferred to any material in competition did not the price and cost of cutting place it beyond reach in a limited appropriation.

The St. Genevieve stone are a fine grained, even textured sandstone of a delicate buff color easily worked and dressed, and in such quantities that there seems but little doubt that the entire amount of stone for the building could be furnished without any material variation in color or texture.

The steps of Felix Valle's house, made of this stone, have been in use more than fifty years, and show no evidence of decay, the tool marks remaining on parts of the stone; the only objections to using it are that the color is too light for the massive effect in the basement courses, and adopting this stone would confine the superstructure to this, or a lighter stone.

Of all the stone offered in competition, excluding the Spoon river, the Anamosa is the easiest and cheapest to work; there would be no material difference in the cost of working the St. Genevieve, the old Capitol, or the Sulphur Spring stone, the Earlham being a little harder.

The prices on most of the stone are higher than was anticipated; this we judge is partly due to the fact that but a limited quantity was called for in the advertisement, we would therefore recommend that all bids be rejected, and that the board advertise for proposals including the stone for the entire superstructure above the granite base course, reserving the right to use the same, or different stone, for the basement story and superstructure above the basement.

We present with this the report of the architect for consideration. We concur in most of the suggestions and conclusions in his report.

All of which is respectfully submitted.

PETER A. DEY, R. S. FINKBINE.

#### NO. V.

Report of the Architect, giving his views of the several samples of stone submitted for the basement story of the Capitol building.

TO THE EXECUTIVE COMMITTEE OF THE BOARD OF CAPITOL COMMISSIONERS OF THE STATE OF IOWA:

Gentlemen—Your Architect respectfully submits for your consideration, his views on the different qualities of stone offered in answer to your advertisement for stone to be used in the construction of the base-

ment story of the Iowa State Capitol.

The Granite, offered by Messrs. Brown & Schneider, of St. Louis, from the Missouri quarries, is without doubt the best stone offered, and was it not for its cost ought to be preferred, on account of its durability, uniformity of texture and color, and its warm colored tint, which would set off the balance of the building to the best advantage.

The Warrensburg, Missouri, sandstone is a good stone, but its high price, besides other considerations of quality, throws it out of competi-

tion.

The Spoon River, Illinois, sandstone has a good color for ordinary buildings, has the appearance of durability to weather, but it is so soft that the rubbing of the finger is sufficient to disintegrate the particles of sand, consequently, although the stone is offered at a lower price than any other stone, your architect does not think the proposal worthy of consideration, at least, for the basement story.

The Earlham stone is a good, durable, hard limestone, but not found in sufficient quantities of an even color to permit its use. We have used many pieces in the foundations, and it would be hard to find

large pieces uniform in color.

The St. Genevieve, Missouri, sandstone is a most beautiful and durable stone, hardening to the weather, and the quarries are very extensive, but in addition to the high price asked for it, your architect believes it would be objectionable to use it in the basement story, on account of its texture, which is rather too fine for the base of such a large structure; also, of its color, which is a bright buff, too brilliant for such a position in the building, and which would oblige the Board to use the same stone for the superstructure at any price that may be asked for it, or to find a stone lighter, and brighter in color, which would be difficult if not impossible at a reasonable price among the sandstones that are known in the west.

The Sulphur Springs, Missouri, limestone is a hard and durable limestone, of a rather coarse and crystallized texture, found in large quantities, and which could be furnished of any size. Its color is well fitted for the basement of the Capitol, but the price asked for it is higher than the lowest bid for the following stone, which offers the

same advantages.

The Old Capitol quarry stone, of Johnson county, is a crystalline, coarse grained limestone, slightly colored, and, as the preceding, is as good a stone as we can expect to procure for the basement of the Capitol. Its durability being shown by long exposure to the weather in different buildings. The lower ledge worked which appears to be the

heaviest, ought to be used for the basement piers, if such stone was adopted, the upper ledges would be used for the window architraves and sills.

The great advantage of these two last named qualities of stone is, that their texture and color are such as to represent strength and durability, and to permit the use of nearly any other quality of stone for

the superstructure.

The Anamosa and Crow Creek stone, of Jones county, is a fine-grained magnesian limestone of a light buff color in the upper ledges, and a slightly darker in the lower. The quarries are extensive, can furnish any quantity of stone, and by selecting the ledges and placing the stone on edge as ashlar, the color will remain tolerably even, but in all positions where it has been used in its natural bed, it shows a streaky discoloration, following the stratification, and this is easily explained in carefully examining the stone, composed of thin layers of a very uneven texture and porosity. Then the layers appear to be well cemented together, though they permit the capping of the stone in any thickness required for ordinary use, without drilling, but they are so different in texture and will discolor so unevenly that they ought not to be used in such a work as the State Capitol.

There is under these laminated beds, at the lowest worked part of the quarries, two or more ledges, which, by all indications and the information that could be obtained, are not formed in the same manner, and appear to be in heavy ledges of three feet, more or less, quite even in texture. If so, this stone may discolor without having the streaky appearance of the upper ledges, but your architect cannot give any correct personal opinion about it. It has so far not been used in buildings, probably on account of not being worked so easily as the upper stone. In any case, the porous texture and the light color of this stone, as well as its softness, which does not permit good bush-hammer-

ing, does not recommend it for use in the basement.

In selecting the stone for the basement story of the Capitol, which is the real base of the building, your architect thinks it is important to have, if possible, a stone of a rather coarse and crystallized texture, and somewhat dark in color, so as to satisfy the eye, which requires that the more substantial looking stone, the darker and heavier material be

placed under the lighter.

It is also important for the durability of the building, that no porous stone be placed under a less porous, as it is proved by past experience that the porous stone, even durable, will disintegrate under such conditions, consequently a sandstone, or a porous limestone, would oblige us to use as porous a stone above it, which may be found objectionable hereafter, and your architect thinks the safest way is to use, when it can be found, the least porous stone possible for the lower part of the building. Besides, the dampness from the ground will not be so apt to raise largely in the upper parts of the building by capillary attraction.

For these reasons, other things being equal, there is no doubt, in my judgment, that after granite, the stone from Sulphur Springs or of the old Capitol quarry ought to be preferred, and although the difference in price is quite considerable between this last stone and the Anamosa stone, your Architect believes that for the small quantity required in the

basement, the Johnson county stone ought to be preferred.

Your Architect would also advise that a small quantity of Anamosa stone of the lower layers be bought as soon as possible, in pieces of the whole thickness of the beds, to be cut and rubbed, and to be exposed to a damp and smoky atmosphere, so as to be able to judge hereafter of the evenness of its texture and color.

All of which is respectfully submitted.

A. H. PIQUENARD, Architect of the Iowa State Capitol.

DES MOINES, IOWA, November 14, 1872.

#### NO. VI.

Condensed Report of the Overseer, for the years 1872 and 1873.

TO THE BOARD OF CAPITOL COMMISSIONERS:

Gentlemen—I herewith submit a condensed report of the work on the new Capitol building from the incoming of the present Board of Commissioners to the present time, (December 20th, 1873), condensed from the detailed reports of the executive committee and superintendent of finance for the year 1872, and my report as overseer for 1873, during which time all the walls were removed with the exception of 359 cubic yards, the entire foundation walls of the building, both interior and exterior have been constructed; the necessary piers to carry the arches have been built, the building arched over, the arches concreted up to a level with the exterior walls and covered with a heavy coat of pitch.

The southeast pavillion has been built to the top of the basement story, and the southwest pavillion walls have been carried up to within two courses of the same height, a portion of the interior walls have been partially constructed, the granite base course, with the exception of three pieces, has been dressed and a large quantity of stone, both dressed and rough on hand,—for the details I call your attention to the

annexed statement.

In accordance with the directions of Joint Resolution No. 14 of the Fourteenth General Assembly, approved March 20, 1873, and a resolution of the Commissioners, passed March 22, 1873, all inscriptions of names, dates and figures were erased from the corner-stone, and only the name "Iowa" and the date "A D., 1873," were inscribed on said stone, which was re-laid on the 29th day of September, 1873. The box containing documents, together with an additional box containing a copy of the report of the joint committee of the Fourteenth General Assembly, appointed to examine the material used, and the work done on the foundations of the new Capitol building, and a copy of the acts and resolutions of the Fourteenth General Assembly, were placed in position before re-setting said corner-stone, which brings the Legislative history of the new Capitol building down to the present time.

All of which is respectfully submitted.

R. S. FINKBINE, Overseer.

### STATEMENT

of materials purchased and work done on the new capitol building from April 17th, 1872, to December 20th, 1873.

#### MATERIAL PURCHASED.

Dimension stone.	Y'ds.	F't.	In.
Bought of Tuttle & Robertson	2,908	0	7
Bought of O. H. P. Scott	72	3	11
Bought of Royce & Laird	35	13	11
Bought of H. F. Royce	9	10	2
Total dimension stone	3,025	1	7
BLOCK RUBBLE.			
	Y'ds.	F't.	In.
Donald of Tuttle & Deboutson		24	7
Bought of Tuttle & Robertson  Bought of H. F. Royce		19	10
Total block rubble	957	17	5
GRANITE.			
		T224	Т.
		F't.	In.
Bought of David Armstrong, coping		1,604 126	0 2
Bought of David Armstrong, base course	********	941	7
Bought of Tuttle & Robertson, base course Bought of Barnum & Overman, base course			5
Bought of L. Robinson & Sons, base course		1.844	2
Bought of L. Robinson & Sons, door-sills		89	8
Total granite		7,351	0
BRICK.			
Bought of Janes & Redhead		2,000	0,000
CEMENT.			
Bought of Tuttle & Robertson  Bought of Des Moines Coal Company		bbls. bbls. 133	lbs.
Total cement	5,527 b	bls. 133	lbs.
LIME.			
Bought of Martin Tuttle		300 bus	hels
Bought of Martin Tuttle		ovo bus	LLUIS.

DRAIN TILE.
Bought of Argillo Works 320 lineal feet, 26 inch diameter. Bought of S. A. Kelsey 286\frac{3}{4} lineal feet, 6 inch diameter. Bought of S. A. Kelsey 297\frac{3}{4} lineal feet, 8 inch diameter. Bought of S. A. Kelsey 218\frac{3}{4} lineal feet, 10 inch diameter. Bought of S. A. Kelsey 135 lineal feet, 12 inch diameter. Bought of S. A. Kelsey 42 lineal feet, 15 inch diameter.
Total drain tile 1,300\frac{1}{4} lineal feet.
PITCH.
Bought of Barrett, Arnold & Co 40,600 pounds.
COAL.
Bought of Des Moines Coal Co
MISCELLANEOUS.
Lard oil       32 gallons.         Lubricating oil       22 gallons.         Tallow       116 pounds.         Iron       2,092 pounds.         Steel       1,156¼ pounds.         Nails       1,125 pounds.         Lumber       64,970 feet.
DIMENSION STONE FOR BASEMENT STORY.
From Iowa City quarry 15,296 feet 8 in.
WORK DONE.
All measurements of quantities here given, are actual cubical contents, rejecting all double measurements of angles, and all constructive, or mason's measurements, and excluding all openings.  Walls taken down
DIMENSION STONE LAID IN WALLS.
Yd's.       F't.       In.         In exterior walls       2,948       12       5         In dome walls       991       22       8         In interior footings       469       20       3         In piers and pier footings       205       23       0
In piers and pier footings       205       23       0         In interior walls       62       24       4

Total dimension stone set in foundation..

4,678

21

#### CONCRETE.

	Yd's.	F't.	In.
In wall foundations	226		0
In pier foundations	123	5	10
On brick arches : :	1,129	24	7
Total concrete	1,477	5	5
RUBBLE MASONRY.			
	Yd's.	F't.	In.
In interior walls			0
EXCAVATION AND GRADING.			
	Yd's.	F't.	In.
Excavating for pier foundations	163	0	5
Excavating for wall foundations	229	26	6
Excavating for interior drain tile	186	18	10
Excavating for exterior drain tile	753	5	1
Grading east front	1,110	3	.0
Total excavation and grading	2,442	26	10
BRICK-MASONRY IN FOUNDATION.			
		F't.	In.
Cubic feet in piers	NA WIE 2	1,616	8
Cubic feet in walls		16,750	9
Cubic feet in arches		22,763	3
	_	22,100	
Total cubic feet brick-work in foundation		41,130	. 8
Kiln count, equal to	8	22,693 b	rick.
WORK IN BASEMENT STORY.			
		F't.	In.
Granite base course set			10
Lime-stone set, (Iowa City stone)		1,430	
22. The Stolle Set, (Iowa City Stolle)		4,129	5
BRICK-WORK ON BASEMENT STORY			
		F't.	In.
Backing to exterior wells			and the same
Backing to exterior walls		11,113	5
Total cubic feet brick-work done in basement	story.	15,375	5
Kiln count, equal to	30	7,510 br	ick.
4			

#### MATERIAL ON HANDS.

MATERIAL ON HANDS.			
010	Frank !	a in	hoe
Granite rough	ieer i	0 1111	11
Granite dressed	44 7	4	
	11 1	0	ct
		1	201
Detale billy count	,797		h ala
Times to the contract of the c			
Compant	,012	pou	nas.
Dital	,060	pou	nas.
Sand estimated	,000	bus	neis.
Cool estimated	,000	pou	nas.
T law actimated	,000		
To : +:10 og inches diameter		feet	
Iron	198	pou	nus.
MACHINERY AND TOOLS.			
Cost of new tools and machinery, and repairs to same.			
Engines	. 8	31	9.41
Derricks		157/2	4.15
Truck-cars			1.92
Miscellaneous tools		31	1.49
VIINCELLAHOUUS COMAN			
			40.02
		\$1,60	36.97
Total		\$1,66	36.97
		\$1,66	36.97
Total	4		
Total	4		
Total	for t	the	years
Total	for t	the	years
Total	, for t	the 3	years 29.88 00.16
Total  RAILROAD TO CAPITOL GROUNDS.  Cost of repairs, and rent and taxes paid on right of way, 1872 and 1873, as follows:  Labor on repairs	, for t	\$1,45 40	years 29.88 00.16 30.00
Total  RAILROAD TO CAPITOL GROUNDS.  Cost of repairs, and rent and taxes paid on right of way, 1872 and 1873, as follows:  Labor on repairs	, for t	\$1,45 40	years 29.88 00.16
Total  RAILROAD TO CAPITOL GROUNDS.  Cost of repairs, and rent and taxes paid on right of way, 1872 and 1873, as follows:  Labor on repairs	, for t	\$1,45 40 58	29.88 00.16 80.00 88.88
Total  RAILROAD TO CAPITOL GROUNDS.  Cost of repairs, and rent and taxes paid on right of way, 1872 and 1873, as follows:  Labor on repairs	, for t	\$1,45 40 58	years 29.88 00.16 30.00
Total  RAILROAD TO CAPITOL GROUNDS.  Cost of repairs, and rent and taxes paid on right of way, 1872 and 1873, as follows:  Labor on repairs	, for t	\$1,45 40 58	29.88 00.16 80.00 88.88
Total  RAILROAD TO CAPITOL GROUNDS.  Cost of repairs, and rent and taxes paid on right of way, 1872 and 1873, as follows:  Labor on repairs	, for t	\$1,45 46 58 33 \$2,7	years 29.88 00.16 30.00 38.88 48.92
Total  RAILROAD TO CAPITOL GROUNDS.  Cost of repairs, and rent and taxes paid on right of way, 1872 and 1873, as follows:  Labor on repairs	for t	\$1,45 46 58 33 \$2,7	years 29.88 00.16 80.00 88.88 48.92
Total  RAILROAD TO CAPITOL GROUNDS.  Cost of repairs, and rent and taxes paid on right of way, 1872 and 1873, as follows:  Labor on repairs	for t	\$1,45 \$1,45 \$2,75	29.88 00.16 30.00 38.88 48.92
Total  RAILROAD TO CAPITOL GROUNDS.  Cost of repairs, and rent and taxes paid on right of way, 1872 and 1873, as follows:  Labor on repairs	for 1	\$1,45 \$1,45 \$2,75 to	29.88 00.16 30.00 38.88 48.92
Total  RAILROAD TO CAPITOL GROUNDS.  Cost of repairs, and rent and taxes paid on right of way, 1872 and 1873, as follows:  Labor on repairs	for 1	\$1,45 \$2,75 to to	29.88 00.16 30.00 88.88 48.92 1.75 1.75 2.00
Total	for 1	\$1,45 \$2,7 to to to to	29.88 00.16 30.00 38.88 48.92 3.75 1.75 2.00 2.75
Total  RAILROAD TO CAPITOL GROUNDS.  Cost of repairs, and rent and taxes paid on right of way, 1872 and 1873, as follows:  Labor on repairs	for 1	\$1,45 \$2,7 to to to to to	29.88 00.16 30.00 38.88 
Total  RAILROAD TO CAPITOL GROUNDS.  Cost of repairs, and rent and taxes paid on right of way, 1872 and 1873, as follows:  Labor on repairs  Material used for repairs  Rent paid on right of way  Taxes paid on right of way.  Total expenditures for two years  Wages Paid Per Day.  Wages Paid Per Day.  Water boys  Common laborers  Derrick laborers  Derrick foreman  Derrick-rigger  Carpenters	for 1	\$1,45 \$2,7 to to to to to	29.88 00.16 30.00 38.88 48.92 1.75 1.75 2.00 2.75 2.50 3.25
Total  RAILROAD TO CAPITOL GROUNDS.  Cost of repairs, and rent and taxes paid on right of way, 1872 and 1873, as follows:  Labor on repairs  Material used for repairs  Rent paid on right of way  Taxes paid on right of way.  Total expenditures for two years  Wages Paid Per Day.  Wages Paid Per Day.  Water boys  Common laborers  Derrick laborers  Derrick foreman  Derrick-rigger  Carpenters	for 1	\$1,45 \$2,7 to to to to to	29.88 00.16 30.00 88.88 48.92 1.75 1.75 2.00 2.75 2.50 3.25 3.25
Total  RAILROAD TO CAPITOL GROUNDS.  Cost of repairs, and rent and taxes paid on right of way, 1872 and 1873, as follows:  Labor on repairs	for 1	\$1,45 \$2,7 to to to to to	29.88 00.16 30.00 38.88 48.92 3.75 1.75 2.00 2.75 2.50 3.25 3.25 1.75
Total  RAILROAD TO CAPITOL GROUNDS.  Cost of repairs, and rent and taxes paid on right of way, 1872 and 1873, as follows:  Labor on repairs	for 1	\$1,45 \$2,7 to to to to	29.88 00.16 30.00 38.88 
Total  RAILROAD TO CAPITOL GROUNDS.  Cost of repairs, and rent and taxes paid on right of way, 1872 and 1873, as follows:  Labor on repairs Material used for repairs Rent paid on right of way Taxes paid on right of way.  Total expenditures for two years  WAGES PAID PER DAY.  Water boys Common laborers. Derrick laborers. Hod-carriers. Derrick foreman Derrick-rigger Carpenters. Blacksmiths. Night watchman Engineers. Teams	for 1	\$1,45 \$2,7 to to to to	29.88 00.16 30.00 38.88 48.92 1.75 1.75 2.00 2.75 2.50 3.25 3.25 1.75 2.75 3.75
Total  RAILROAD TO CAPITOL GROUNDS.  Cost of repairs, and rent and taxes paid on right of way, 1872 and 1873, as follows:  Labor on repairs	for 1	\$1,45 \$2,7 to to to to	29.88 00.16 30.00 38.88 

Stone-masons       \$ 3.00 to \$3.50         Stone-setters       4.00         Stone-cutters       3.25 to 4.00
Brick-layers
Foreman of stone-cutters and brick-layers 5.00
Torchian or stone-cutters and brick-layers
Setting apart those items which pertain to the cost of the whole superstructure, the following is a classification by stories:
Expenditures for plans \$ 3,943.11
Expenditures for cistern
Expenditures for railroad
Expenditures for machinery and tools 9,352.63
Expenditures for water-pipe and meter
T3 11 0 1
Expenditures for main sewer
Expenditures for printing and advertising
Expenditures for board of commissioners 9,143.31
Expenditures for miscellaneous
Expenditures for repairs of foundations 52,353.76
Expenditures for foundations to ground line 214,055.41
Expenditures for superstructure 69,066.39
Total expenditures to date

#### NO. VII.

Complete report of the Superintendent of Finance of the expenditures in detail, for the years 1872 and 1873.

#### TO THE BOARD OF CAPITOL COMMISSIONERS:

Gentlemen—I herewith submit reports of expenditures on the new Capitol building from its commencement to December 31st, 1873, as set forth in the accompanying exhibits, in the following order:

- A. Classified statement of expenditures in detail by the first Board of Commissioners from the commencement of the work to January 1st, 1872, and reported to the Governor.
- B. General statement of expenditures by the first Board of Commissioners from January 1st to April 17th, 1872, the expiration of their term of office and not reported to the Governor.
- C. Classified statement of expenditures in detail by the first Board of Commissioners from January 1st to April 17th, 1872.
- D. Classified statement of the aggregate expenditures in detail by the first Board of Commissioners from the commencement of the work to April 17th, 1872, the expiration of their term of office.
- E. General statement of expenditures by the present Board of Commissioners from April 17th to December 31st, 1872.
- F. Classified statement of expenditures in detail from April 17th to December 31st, 1872.

I.

J.

G. Classified statement of expenditures in detail for taking out defective stone, and rebuilding foundation in 1872.

H. Classified statement of expenditures in detail from the commencement of the work to December 31st, 1872.

General statement of expenditures from January 1st, to December 31st, 1873.

Classified statement of expenditures in detail from January 1st to December 31st, 1873.

K. Classified statement of the aggregate expenditures in detail from the commencement of the work to December 31st, 1873.

L. Consolidated classified statement of expenditures and appropriations to December 31st, 1873.

JOHN G. FOOTE, Supt. of Finance.

#### [EXHIBIT A.]

## CLASSIFIED STATEMENT

Of expenditures, in detail, to January 1st, 1872, and reported to the Governor by the first Board of Commissioners.

ON WHAT ACCOUNT.	AMOUNT.
- 2	\$ 2,351.22
Plans	11,972.36
Eltion and drainger	41,928.63
Stone	1,512.12
Clistown	2,350.00
Cond	1,143,95
C	14,642.86
Stone outting	7,159.0-
	THE REST OF THE PARTY OF THE PA
Railroad	
Tumbor and timber	
Two works	
Corporter-work	661.17
Comont	
Deand of Commissioners	3,910.40
The al	229.80
Machinery and tools	1,000.1
Hardware and nails	
Water nine and meter	101.0
Brick	
Two and stool	102 33
Printing and advertising	1,021.0
Concrete	10 mm 1 mm 2 mm 2 mm 2 mm 2 mm 2 mm 2 mm
Water	212.1
Stone-masonry	4,666.63
Stone-masonry	

#### [EXHIBIT B.]

# GENERAL STATEMENT OF EXPENDITURES

From January 1st, to April 17th, 1872, the expiration of the term of office of the first Board of Commissioners, and not yet reported to the Governor.

DATE OF VOUCHER.	NO. OF VOUCHER.	IN WHOSE FAVOR	ON WHAT ACCOUNT,	AMOUNT
1872.	1000	NE TE TEL	PM TO A STATE OF THE PARTY OF T	
Jan. 1 Jan. 1	836	M. H. King Isaac Brandt	Sand Wood for office	\$180.1
Jan. 1		Carter, Hussey & Curl	Scrap basket and box	6.0 2.0
Jan. 2	338	Des Moines Coal Co	Coal for blacksmith shop and engine,	62.7
Jan. 5	339	M. H. King	Sand	193.5
Jan. 4 Jan. 5	340	Charles Dudley	Expenses to Washington, D. C	175.1
Jan. 5	342	Edward Clark	Inspecting plans	
lan. 5			Wood for office	100,0
an. 4	344	L. P. Baker	Expressage	13.1
Jan. 4	345	Cook, Rymes & Co	Cylinder for engine	30.0
lan. 5		Charles Dudley,	Per diem and expenses Ex. Committee.	
an. 5	948	Cochrane & Piquenard Cochrane & Piquenard	Expenses preparing plans	218.5
an. 5	349	Des Moines Postoffice	Salary as architects Postage stamps	300.0 16.3
Jan. 5	350	Western U. Telegraph Co.,	Telegraphing	8,5
au. 8	1 001	O. H. F. SCOLL	roundation stone	936.1
an. 8		Board of Commissioners	Per diem and expenses	436.6
an. 6		L. Fisher O. H. P. Scott	Tallow for engines	
an. 10	255	E. G. Everett	Photographs of alex	546.2
an. 13	356	A. R. Fulton.	Photographs of plans	6.0 81.7
lan. 15	857	F. C. Mathes & Brother	Pay-roll of workmen	452.8
Ian. 17	358	Des Moines Valley R. RCo.	Freight on stone	552.0
Jan. 21	359	C., R. I. and P. R.R.	Switching 32 cars	96.0
Feb. 5 Feb. 7		A R. Fulton	Salary as secretary	100.0
Feb. 23	989	Cechrane & Piquenard Board of Commissioners,	Salary as architect	
Feb. 23	363	James Dawson	Per diem and expenses Per diem and expenses Ex. Committee	180.2 5.0
Feb. 23	364	E. G. Everett	Photographs of foundation	4.00
řeb. 22	365	Des Moines Postoffice	Postage stamps	10.0
Feb. 22	366	Isaac Brandt	Wood for once Photographing plans	11.0
Feb. 22 Feb. 22	507	Cataball r Tiabanan	Photographing plans	160.00
Feb, 23		A R Fulton	Lumber	21.60
Feb. 22	870	W. R. Ray	Sprinkler, marking pot and oil can	2.80 4.00
Feb. 23	371	McKisson & Bolton	Sprinkler, marking pot and oil can Iron and hardware	78.69
eb. 24	372	Mca isson & Bolton	Hardware	3.5
Teb. 27 Mar. 11	373	Des Moines Valley R. R	Freight on stone	48,2
Mar. 11		Western II Talograph Co	Oil and varnish	9,2
Mar. 11	376	Cochrane & Piquenard	Salary as architects	2,8 300,0
Mar. 11	377	A. R. Fulton	Salary as secretary	100.00
Mar.26	378	Iowa State Register	Advertising for brick	15.00
Mar.26	379	Keokuk Gate City	Advertising for brick	12.00
Mar.30 Mar.30		Dubuque Times	Advertising for brick	12,50
Apr. 6	389	C. R. I and P. R. P.	Annual paym't for right of way for R.R. Repairing Capitol R. R.	50.00
Apr. 6	383	Des Moines Postoffice	Postage stamps	135.77 15.82
Apr. 10	384	Cochrane & Piquenard	Salary as architects	800,00
Apr. 10	385	A. R. Fulton	Salary as secretary	100.00
Apr. 10	386	Board of Commissioners	Per diem and expenses	61.40
Apr. 16	387	Marshall Times	Advertising for brick	14.00

### [EXHIBIT C.]

# CLASSIFIED STATEMENT

Of expenditures in detail from January 1st, to April 17th, 1872, the expiration of the term of office of the first Board of Commissioners, and not reported to the Governor.

ON WHAT ACCOUNT.	AMOUNT.
Plans Excavation and drainage Stone Sand Salaries Railroad Lumber and timber Board of Commissioners Miscellaneous Machinery and tools Hardware and nails Printing and advertising	\$660.44 81.75 2,631.50 373.69 64.78 1,600.00 185.77 21.60 701.20 12.13 84.20 37.20 82.24 53.50
Total	\$6,590.0

#### [EXHIBIT D.]

#### CLASSIFIED STATEMENT

Of the aggregate expenditures in detail, made by the first Board of Commissioners, to April 17th, 1872, the expiration of their term of office.

ON WHAT ACCOUNT.	AMOUNT.
Plans	\$ 3,011.66
Excavation and drainage	12,054.11
Stone	44,560.13
Cistern	1,512.12
Sand	2,723.69
General expenses	1,208.73
Stone-cutting	14,642.86
Salaries	8,759.04
Railroad	7,614.62
Lumber and timber	1,505.95
Iron-work	336.27
Iron-workCarpenter-work	661.17
Cement	6,168.80
Board of Commissioners	4,611.66
Fuel	314.00
Machinery and tools	7,635.37
Nails and hardware	325.05
Water-pipe and meter	107.66
Brick	93.40
Iron and steel	102.22
Printing and advertising	1,381.30
Concrete	2,307.76
Water	271.19
Stone-masonry	4,666.63
Miscellaneous	12.13
Total	\$126 587 69

# [EXHIBIT E.]

# GENERAL STATEMENT OF EXPENDITURES

By the present Board of Commissioners from April 17th to December 31st, 1872.

VOUCHER, NO. OF VOUCHER, NO. O	ON WHAT ACCOUNT.	AMOUN
1879. 1	Per diem and expenses, Board Com	25,0
		81.5
pr. 10 389 Cochrane & Piquenard	W. T. A. T.	76,1
ree 18 200 Mills & Co	LECTROTES OF THE CASE TERMS   CASE	25,0000
pr. 20 391 N. W. Smith	Thomas of the page of the first war first the first of the contract of the con	357.1
THE ON ROSE HOATG OF COMMISSIONES	Clare Barrell Co. Co. Co. March 1 & F. Edge 1 Sec	4.0000000
Iny 14 398 Cochrane & Lufaction	AND A TOWNSHIP AND MANAGEMENT AND ADDRESS OF THE PARTY OF	7900 0
Iny 14 394 A. R. Fulton Sonnarell	The state of the s	
Iny 20 385 Council Bluffs Nonparell.	There divers writter the Hard S	7,000
	Advertising for brick	15.0
	The same has been a first and the same and t	3
day 24 398 Des Moines Postomee	There of the five in the first profit many, I provide the	12.
May 24 399 William L. Joy	Advertising for brick	1 200
day 24 401 A. R. Fulton	Expressage on sample of comment	47.
day 25 402 A. R. Fulton	Pay-roll of workmen	40.
Var 95 403 N. W. SHILL	The state of the s	3,000
mue 1 404 A. R. Fullon + + + + + + + + + + + + + + + +	CONTRACTOR OF STREET STREET	(24/3/36)
une 1 405 A. R. Fulton		
fune 3 406 Cochrane & Piquenard	THE COURSE OF THE PERSON OF TH	100.00
fune 8 407 A. R. Fulton fune 15 408 L. H. Bush	Paints, oil, and varnish	3,
fune 15 408 L. H. Bush	THE RESIDENCE OF THE PARTY OF T	and and
June 15 409 A. R. Fulton June 15 410 Cochrane & Piquenard	Expenses of J. C. Cochrane	104.
Inne 15 411 A. R. Fulton	Physical and laborers	
Inne 17 412 N. W. Smith	POTCHIELD OF CONTROL	
Inna 17 413 H. F. Royce	Pardiam and expenses	20000
June 17 414 Special Com. of Board	Dagdiom and expenses	11000
June 18 415 Board of Commissioners.	Transference and the transference and the second se	
June 18 416 A. R. Fulton	Combined to the Company of the Compa	200 4 5 5
July 3 418 Janes & Redhead	Delot on coultract	70,760
July 3 419 A. R. Fulton	Pay roll of workmen	193.
July 3 420 Loughran & Hillis	Repair of sugarant	
July 3 421 H. F. Getchell & Sons	Lumber to difference brick & granite.	8
Inte 3 422 G. W. Edwards ammoure	The state of the s	7.0
July 3 423 McKisson & Bolton	Advantising for arrived and arrest and arrest and arrest and arrest arre	74/303
July 3 424 Iowa State Register	Day call of work men	400
ACCURATION TO THE TRANSPORT OF THE PROPERTY OF	The second of the state of the	- m-1
Aug. 1 427 Cochrane & Piquenard		Charles Co.
Ang. 1 428 Cochrane & Piquenara	" Shiniy as medicine	116
Aug. 1 429 A. R. Fullon	The state was the same of the same state of the	7. 6.45474
Aug. 1 430 H. Robinson	The few within this little was a second	9 10 40
Aug. 1 431 Des Moines Water Co Aug. 1 432 H. F. Getchell & Sons	The second and the second seco	
	Charges on machinery for repairs	2.0
Aug. 1 434 J. K. & W. H. Gilchrist	Ties for rattroad amounts be tek and plans	
Aug. 1 435 U. S. Express Co.	Expressage on sample brick and plans	. 5
Ang. 1 436 Brooks, Lendrum& Wilso	n Tops for steam-circus or cos	24
Aug. 1 437 McDonnell & Meara	Salary as lanttor and expressman	. 10
Aug. 1 438 L. P. Baker		The second secon
	Dow diam and axpenses, Executive con-	
Ang. 1 440 R. S. Finkbine	CONTRACTOR OF THE PROPERTY OF THE PARTY OF T	
Ang. 1 442 Ham & Carver	and dates the same through ones	180
Aug. 1 448 C., R. I. & P. R. R.	. For use of focomorite	111
Aug. 1 441 Rich & Ryan	Tools hardware pails, and steel	17
Aug. 1 445 Howell & Seeberger	Per diem and expenses Sept. of Finance	e 60
Aug. 1 446 Howell & Seeberger Aug. 1 446 John G. Foote	Tools, hardware, nalls, and steel	e 6

## [EXHIBITT E]—CONTINUED.

DATE OF VOUCHER.	NO. OF VOUCHER.			
LE	CHO	IN WHOSE FAVOR.	ON WHAT ACCOUNT.	AMOUN
DA	VOU		01. 11.11.1 10.000111.	AMOUN
1872.		[Cedar Rapids.		
Aug. 1	448	Republican Printing Co.,	Advertising proposals for granite	\$12.
Aug. 3 Aug. 5	TTU	Redhead & Janes	Per diem and expenses	1 700
lug. 5	451	Redhead & Janes	Brick on contract	2 113
Aug. 6	453	A. R. Fulton, Secretary Republican Printing Co.	Pay-roll of workmen Printing orders and circulars	1 560
lug. 16	101	John G. Foote Des Mes.	Pay-roll of workmen	3,165
Sept. 2	400	American Bridge Co	Swivel and links	95
ept. 2	75.31	A. D. Fullon	Janitor and expressman	100
ept. 2	4000	W. C. CHULLISOIL, I. WI	rostage stamps	15
W 100 W 100 W	303947	Frank Pelton Cochrane & Piquenard	Surveying for foundation	Đ
ept. 3	461	Board of Commissioners	Per diem and expenses	186
ept. 3	463	Hiram Robinson C. L. Rice & Co	Repairing water-meter	10
ept. 3	464	J. K. & W. H. Gilchrist	Lumber for vault	170
ept. 5	465	Tuttle & Robertson	Foundation stone	10.709
ept. 5	467	McKisson & Bolton Janes & Redhead	Prior on contract	50 APK
ept. 5	468	Des Moines Coal Co	Coal for blacksmith shop and ongine	103
Chr. 0	T00	John G. Foole	Pay-roll of workmen Iron, files and materials	4,372
CDL. 0	114	D. S. FINKDINE	Per diem and evnences Ev Committee	177 170
C. 1. F 1 ( ) 5 F	100	ALDITHAT PARKET	LOW PLANTS PLANT OF THE PARTY O	26.7
ept. 6	474	C. H. Ward	Transportation	4
ept. 9 ept. 20	210	Des moines valley R. R.	Ereight on stone and machinery	111
et. 1			Pay-roll of workmen A. Doty, for work on plans	
et. 1	T. 6 M.	DIOURS, LEHUIUI & WIIS.	Cashings for trucks and renairs on ong	7.80
et. 1	481	Loughran & Hillis	Repairs on engine	50
et. 1	11.7 m	Diasier.	Ice for office	Θ
et. 1	100	rep b h Fifth g Co., Des M	Printing proposals for stone	11
ct. 1	485	Des Moines Valley R. R.	Tools, iron, steel and rope Freight on granite, D. Armstrong	0.45
ct. 1	21.344.1	1.0.1.110000000000	TOTALITY PROJECT PROJECT CONTROL IS COLOR	63
ct. 1	488	Tuttle & Robertson	Foundation stone	1,085
ct. 1	489	Janes & Redhead	Brick on contract	11,571 2,854
et. 1 et. 1	490	R. S. Finkbine	Ash lumber for trucks	11
et. 1	492	A. R. Fulton	Per diem and expenses Ex. Committee Salary as secretary	185. 100.
ct. 1 ct. 1	493	John G. Foote	Salary as secretary	112
ct. 1	495	David Armstrong	Granita agring	81.
et, 1	496	John G. Foote	Pay-roll of workmen	629. 5,203.
ct. 1 ct. 1	497	C. L. Rice & Co	Freight on tools and switching 5 cars Blocks, wire and rope	17.
WWG ACT	X00/1	CONTROL DE LES LO DE LES PERSONES DE LA COMPANSION DE LA	SOLORV DE OPONITOOT	17, 212, 300,
MARKET ALCOHOL	CALL	Doald Of Commissioners	Per diem and expenses	7 000
~ U. 41	13132	JUHH CT. FOOLE	Per diem and expenses Ex. Committee Pay-roll of workmen	103. 6,177.
	COUNTY.	IV. O. FIRKDING	Per diam and aynoness Ex Committee	189.
ov. 1	505	John G. Foote	Par diem and expanses Sunt Finance	100.
				104. 6,755.
lov 1	508	Iowa State Posiston	Salary as Janttor and expressman	17.
ov. 1	509	Gate City	Advertising proposals for stone	22. 22.
ov. I	510	Ham & Carver	Advertising proposals for stone	27.
ov. 1	512	George D. Hall	Advertising proposals for stone	25.
OV. 1	513	J. K. & W. H. Gilchrist	Lumber for sheds	20, 39,
lov. 1	10000	The second of the second	Lauringer for centering	170.
lov. 1	UAU	Walulon brothers	Freight on granite	294. 14.
Nov. 1	U.A. 6.	WILLIAM DICKETSON	4 DORSE DIJOROTS	2,
Nov. 5	GAO.	TRUIN LEILOIL	Surveying foundation	1,255,

### [EXHIBIT E]-CONTINUED.

DATE OF VOUCHER.	IN WHOSE FAVOR.	ON WHAT ACCOUNT.	AMOUNT
1872, Nov. 1 5 Nov. 1 5 Nov. 1 5 Nov. 1 5 Nov. 8 5 Nov. 8 5 Nov. 9 6 Nov. 9 6 Nov. 16 Nov. 16 Nov. 16 Nov. 18 Nov. 18 Nov. 18 Dec. 2 Dec. 3 Dec. 4 Dec. 5 Dec. 5 Dec. 6 Dec. 7 Dec. 7	Des Moines Coal Co.  Howeil & Seeberger  Des Moines Water Co.  Janes & Redhead  C. R. I. & P. R. R.  McKisson & Bolton  A. H. Swan, Att'y.  County Treasurer Polk Co.  Roy  Howeil & Robertson  Des Moines Valley it. R.  Nicholas & Blasher  McDonnell & Meara  McDonnell & Meara  Treasurer of Polk Co.  Janes & Redhead  Tuttle & Robertson  Les Moines Coal Co.  Janes & Redhead  Tuttle & Robertson  K. Nicholas & Blasher  McDonnell & Meara  Hoes Moines Coal Co.  Janes & Redhead  L. J. Pitman  K. S. Finkbine  H. F. Getchell & Sons  K. & W. H. Gilchrist  Howell & Seeberger  John G. Foote  R. S. Finkbine  John G. Foote	Cement and coal	3,004.7 3,443.6 100.0 98.0 14.7 8.0 56.2 641.9 8,645.7 2,079.0 257.6 206.0 106.4 256.1 43.5 31.0 854.1 827.4 14.5 23.1 1.0 35.6 20.8 14.7 14.5 10.8

### [EXHIBIT F.]

# CLASSIFIED STATEMENT

Of expenditures in detail from April 17th, to December 31st, 1872.

ON WHAT ACCOUNT.	AMOUNT.
Plans	\$ 609.35
Excavation and drainage	570.29
KUMIC	16 858 81
General expenses	114.32
Salaries	4,159.31
Stone, masonry	3,742.66
Brick, masonry	956.06
Concrete	196 95
Printing and advertising	349.38
General labor	5.60
Patterns	2.00
Stone-cutting	11,495.46
Kallroad	1,490.97
Lumber and timber	675.75
Iron-work	151.81
Carpenter-work	429,64
Cement	1 204.75
Board of Commmissioners	2,213.30
Miscellaneous	50.00
Fuel	167.16
Machinery and tools	1,290.92
Brick	99 551 0h
Nails and hardware	63 29
Nails and hardware	535.58
Iron and steel	66.80
Water	112.00
	113.08
Total	\$70,054.13

### [EXHIBIT G.]

#### CLASSIFIED STATEMENT

Of expenditures in detail for taking out and removing defective stone, and rebuilding foundations, in 1872.

ON WHAT ACCOUNT.	AMOUNT.
Removing rejected stone Foundation stone to replace those rejected Stone-cutting Salaries Stone-masonry Cement Water	9,305.39 1,122.35 5,325.70
Total	\$52,353.76

#### [EXHIBIT H.]

# CLASSIFIED STATEMENT

Of the aggregate expenditures, in detail, from the commencement of the work to December 31st, 1872.

ON WHAT ACCOUNT.	AMOUNT.
	\$ 3,621.01
Plans	
Excavation and drainage	61,418.93
Thomas .	1,512.12
Cistern	2,723.69
Sand	* non or
	12,918.35
4 4 1	8,409.29
14 m m m m m m m m m m m m m m m m m m m	000 00
	2,494.01
Ci	- was as
Distingtond advertising	F 01
C I labor	0.00
T1 12	
Stone-cutting	9,105.59
Railroad	2,181.70
T I I I I I I I I I I I I I I I I I I I	7
There would	4 000 0
A second	
The second of th	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Missollanous	401.1
77	10 10 10 10 10 10
Machinese and tools	000150
Priok	
Nails and hardware	0.10.0
	643.2
T and stool	. 169.1
Water	. 384.2
Water management of the state o	0100 041 7
Total	. \$196,641.7

### [EXHIBIT I.]

# GENERAL STATEMENT OF EXPENDITURES

From January 1st, to December 31st, 1873.

				in the
VOUCHER.	NO. OF VOUCHER.	IN WHOSE FAVOR,	ON WHAT ACCOUNT.	AMOUNT,
1873. Jan. 7	564	George D. Hall	Cast steel	ec 40
Jan. 7	909	Hiram Robinson	Iron pipe	2.50
Jan. 7 Jan. 7	900	Iowa State Register	Advertising for stone	25.00
Jan. 8	908	A. R. Fulton	Salary as secretary	100.00
Jan. 11	909	John G. Foote	Pay-roll of workmen	20:02
Jan. 11 Jan. 11	571	David Armstrong	Pay-roll of workmen	416,61 471,70
Jan. 11	072	S. A. Kobertson	Sand screen	5 00
Jan. 11 Jan. 13	573	Mills & Co	Printing letter and note headings	6.50
Feb. 4	575	A. R. Fulton	Per diem and expenses	259.05 100.00
Feb. 4	576	Rich & Ryan	Advertising for stone	95.00
Feb. 6	578	Maturin L. Fisher	Pay roll of workmen Per diem and expenses Ex. Committee	297.13
Feb. 7	579	L. P. Baker	Freight and express charges paid	113.25 2.20
Feb. 8 Feb. 27		Board of Commissioners Ed Wright	Per diem and expenses	190.15
Feb. 28	582	Tuttle & Robertson	Taxes p'd on Gaunt lots, R. R. r't of w. Granite on special contract	127.08 427.82
Mar. 1	583	Board of Commissioners	Per diem and expenses	393.15
Mar. 3 Mar. 3	584	C. C. Carpenter	Expenses to Quincy, Ill., to see quarry	9.75
Mar. 10	585	U. S. Express Co	Paid for telegraphing stone account Charges on plans from Springfield, Ill.	8.25 5.90
Mar. 10	586	H. F. Getchell & Sons	Lumber	79.10
Mar. 10	055	Prol. G. Hinrichs	Analyses of stone	75.00
Mar. 10	989	Des Moines Coal Co	Coal	61.20
Mar. 20 Mar. 20	990	John G. Foote Tuttle & Robertson	Pay-roll of workmen	1,056.65
Mar. 20	592	O. H. P. Scott	Lock stone for foundation	134.50 146.50
Mar. 20	593	Ed Wright	Salary as secretary	100.00
Mar. 22	594	Rep'n Print'g Co., Des M's	Per diem and expenses	256.10 18.72
Mar. 24	595	Richardson Brothers	Advertising for stone	25.00
Mar. 24 Mar. 31	596	R. S. Finkbine Ed Wright.	Salary as overseer	183.00
Apr. 16	598	John G. Foote	Pay-roll of workmen	100.00 433.66
Apr. 16 Apr. 16	599	J. S. Clarkson, P. M	Postage stamps Rent on right of way for R. R	15.00
Apr. 16	601	John G. Foote	Per diem and expenses Supt. Finance.	50.00 89.95
Apr. 16	602	R. S. Finkbine	Expenses to Cedar Falls for granite	23.25
May 1 May 1	604	R. S. Finkbine	Salary as architect for 5 months	1,500.00 250.00
May 1	605	Ed Wright	Salary as secretary Paid telegrams and expressage	100 00
May 1 May 2	606	Ed Wright	Paid telegrams and expressage	15 00
May 2	608	Isaac Cooper	Lumber	1.86
May 2	609	L. Fisher	Tallow for engines	7.20
May 7	OTO	O. A. Keisev	Sewer pipe	122.10
May 7	612	Tuttle & Robertson	Pay-roll of workmen.	1,795.45 1,531.40
May 7 May 19	013	John G. Foote	Per diem and expenses Supt. Finance. Foundation stone	63.80
May 20	610	John G. Foote	Pay-roll of workmen	1,877.78 3,781.70
June 2 June 2	010	Ed Wright.	Salary as secretary	109.27
June 2	012	A H Planenard	Per diem and expenses	179,95 300,00
June 2	619	Isaac Cooper	Gas-pipe and valve Water furnished for May	7,77
June 2 June 2	621	Howell & Seeherger	Water furnished for May	15.65
June 2	622	Tuttle & Robertson	Iron and hardware	2.229.77

## [EXHIBIT I]—CONTINUED.

1873.	O. OF			
1873. ine 2	NO.	IN WHOSE FAVOR.	ON WHAT ACCOUNT.	AMOUNT
		and Developmen	Nails and hardware	20.9
	623	Bolton Brothers Des Moines Coal Co	Coment and coal	1,382,7 224,0
ine 2	895	R S Finkbine	Salary as overseer	25.43.65.30
ine 2	ROB	H F. Getchell & Sons	Lumber	62.9
me 3	697	John G. Foote	4 extra heavy wheelbarrows for stone	C.PL.7+1
ine 8		J. Rockey & Wagoner C. H. Ward	Design for a right calls:	JAN 17 # 11
ine 3		John G Foote	Day roll of workmen	4,401.0
ine 14	621	S A Kelsey	Sewer-pipe Expenses to Quincy quarries, Ill	25.
ine 21	632	R. S. Finkbine	The we would got the party of the transfer of the state o	AU \$
ine 21		John G. Foote Barnum & Overman	Granite on contract—base course	000
ine 30 ily 1	635	Tuttle & Robertson	Foundation stone	
uly 1	636	S. A. Kelsey	Sewer-pipe	104.
uly 1	637	Ed Wright	Coment and coal	440000
uly l	688	Des Moines Coal Co H. F. Getchell & Sons	Turnhor	0.04
uly 2	B40	Des Moines Water Co	Water furnished for June	0586
uly 2	841	Des Moines Valley R. R		40.50.4
uly	642	R. S. Finkbine John G. Foote	Per diem and exp. F. C. visiting quarry	207
uly duly	8 64	C. R. I. & P. R. R.	Cwitching & cars	TO LOUD ON
uly	4 645	John G. Foote	. Pay foll of workmen.	42.
uly		Howell & Seeberger Edmunds & Ranson	Local opinion in writing	( ) A.V.
uly l'uly l'	7 64	Samuel E. Rankin	Wedges and rollers	300
urlar I	7 84	A. H. Piquenard	. Salary as architect for June	4.4
uly 1	8 65	Isaac Cooper	Four valves The string	
uly I				
uly 2	2 65	John G. Foote	Pay-roll of workmen	852
uly 2	2 65	4 Tuttle & Robertson	Por diam and expenses	. 372
uly 2	3 65	Board of Commissioners.	n land on comprine	. 51
Aug.	2 65	7 Des Moines Coal Co	Cement and coal	1,407
Aug.	2 65	8 Ed Wright	Salary as secretary and telegraphing. Freight on granite for July	745
Aug.	2 65	9 Des Moines valley R. R	Iron nails and hardware	. 38
Aug.				
Aug.				
Aug.	4 66	3 Howell & Seeberger	Iron, steer, and tools	. 843
Aug.				
Aug.	5 6	6 John G. Foote	Pay-roll of workmen	43
Aug.	5 6	John G. Foote	Solary as overseer	. 198
Aug.	5 6	8 R. S. FINKDING	Tarrahan	30
Aug.	5 6	O Des Moines Water Co	Water furnished for July	300
Aug.	18 6	A. H. Piquenard	Bailroad fare for hands to quarry	78
Aug.	19 6	72 C. R 1. & P. R. R	P R fare for self and hands to quarry	. 22
Aug.	20 6	74 John G. Foote	Pay-roll for work men at Des Mollies.	
Aug!	29 6	75 John G. Foote	Pay-roll for work filer at quarty anarr	v 125
Aug.		76 D. A. Shafer	Cities and the Court Court of the Court of t	64'
Aug.	174M /1	eto Tables Di Tasicola	Adv and posters. "Handslorquarry.	16
Aug.	29 6	79 Paine & Marshall	Coal for black smith at quarry	558
Aug.	29 6	80 John H. Clark 81 Shepard & Hess	Hardware and tools for quarry	734
Aug.			Day diam and expenses	** 100
Aug.	30 €	83 D. Moines Stone&Lime C	o. Balance due on final settlement	1.466
Aug.	30 (	84 Tuttle & Robertson 85 Royce & Laird	Dimension-stone for foundation	335
Aug.	30 6	86 H. F. Royce	Dimens'n and rubble stone for found	LL COM
Sept.	. 1 (	87 Des Moines Valley R. R.	Freight on granite	75
Sept	. 1 (	88 H. F. Getchell & Sons 89 Howell & Seeberger	Lumber for centering	200
Sept	1 (	90 Finkbine & Lovelace	Two derricks complete, for quarry	0 750
Sept	1	391 Wells, Timberman & Co.	Two derricks complete, for quarry Cement and coal	1.066
Sept.	. 1	392 Des Moines Coal Co 393 Barnum & Overman		tel our

## [EXHIBIT I]—CONTINUED.

DATE OF VOUCHER.	NO. OF VOUCHER.	IN WHOSE FAVOR,	ON WHAT ACCOUNT.	AMOUNT
NOD	TOO			
1873, Sept. 2	3803	Ed Wright	Salary as secretary and expressage	100,6
Sept. 2		Bolton Brothers	Steel, nafls, and tools	50.7
Sept. 3	697	John G. Foote	Pay-roll for work men at Des Molnes	2,464.0
Sept. 3		Des Moines Water Co	Water furnished for August	16.0
Sept. 3		R. S. FinkbineJohn G. Foote	Salary as overseer and exp. at quarry Per diem and exp. Sept. of Finance	
Sept. 3		C.R.I. & P.R.R., Iowa City.		
Sept. 3	702	C. R. I. & P. R. R.	Freight and switching for August	167.8
Sept. 12	703	C.R.I. & P.R.R., Iowa City.	Freight on two derricks	125,6
Sept. 12 Sept. 18	704	L. P. Baker John G. Foote	Hauling and express charges paid Pay-roll of work men at Des Moines	2,514.0
oct. 3		A. H. Piquenard	Salary as architect—material for plans,	945.8
Det. 3		Ed Wright	Salary as Sec'y, telegraphing and exp	118,8
oct. 3	708	R. S. Finkbine	Salary as overseer	269.7
Oct. 3	709	John G. Foote	Per diem and exp. Sept. of Finance	154.7 55.5
Oct. 3		Des Moines Coal Co Des Moines Valley R, R	Coal for blacksmith shop and engine Freight on granite for Sept	815.0
Oct. 4	712	C. R. I. & P. R. R	Freight and switching for Sept	
Oct. 3	713	Barrett, Arnold & Kimball	Thirty casks pitch	204.0
Oct. 4		John G. Foote	Pay-roll of workmen at Des Moines	3,583,5
Oct. 4		John G. Foote	Pay-roll of workmen at Iowa City Labor at Iowa City quarry	6,176.1 92.9
oct. 4			Granite on contract	
Oct. 4	718	Bolton Brothers	Iron and hardware	61.5
Det. 3	719	Des Moines Water Co	Water furnished for Sept	10.0
	720	Frank Pelton	Engineering	5.0 262.7
Oct. 3	721	John H Clarz	Nails and hardware for quarry Lumber for quarry	23.1
Oct. 18	723	Paine & Marshall	Coal for blacksmith shop at quarry	39.6
Oct. 18	724	L. Robinson & Sons	Granite on contract	194.5
Oct. 18	725	John G. Foote	Pay-roll of workmen at Des Moines	8,677.9
Oct. 22 Oct. 22	720	A Tr Swan Atty	Thirty casks of pitch	143.9 240.0
Oct. 24	728	Martin Tuttle	One car load brown lime	90.0
Oct. 24	729	J. S. Clarkson, P M	Postage stamps	15.0
Oct. 24	730	Board of Commissioners	Per diem and expenses	134.8
Oct. 24 Nov. 1	731	A. H. Piquenard John G. Foote	Salary as architect for October Pay-roll of workmen at Des Moines	300.0 389.0
Nov. 3	733	Des Moines Coal Co	Cement and coal	1,076.7
Nov. 8	734	Howell & Seeberger	Tools and zinc for patterns	14.8
Nov. 8	735	C. H. Ward	Oils, turpentine, and paints	28.2
Nov. 3	786	C. R. I. & P. R. R.	Nails and hardware	2.6 989.5
Nov. 8	728	Des Moines Valley R. R	Freight on granite	410.0
Nov. 3	739	Ed Wright	Salary as secretary and expressage	103.9
Nov. 3		John G. Foote	Per dlem and exp. Supt. of Finance	96.9
Nov. 3		R. S. Finkbine	Salary as overseer Stove and pipe for quarry office	230.5 9.7
Nov. 3		Sickles & Whedon	Ames' shovels for quarry	6.8
Nov. 3	744	Shepard & Hess	Iron and hardware for quarry	85.1
Nov. 3	745	Des Moines Water Co	Water furnished for October	12.1
Nov. 4		Barnum & Overman	Pay-roll of workmen at Des Moines	225.6 3,802.2
Nov. 5 Nov. 5		John G. Foote	Pay-roll of workmen at Iowa City	6,140.5
Nov. 18		John G. Foote	Pay-roll of workmen at Iowa City	162.0
Nov. 18	750	John G. Foote	Pay-roll of workmen at Iowa City	550.9
Nov. 19		H. F. Getchell & Sons		38.9 2.0
Nov. 19 Nov. 19	759	A. Dickey Loughran & Hillis	Tweer irons	5.0
Nov. 19	754	Jacob Rockey	Repairing heavy wagon	20.7
Nov. 19	755	Skinner & Brother	Rub-stones for cutters	2.5
Nov. 19	756	Wm. Franklin	Repairing road to quarry	13.1 13.0
Nov. 19 Nov. 19	750	G. J. Smith	Brick furnished quarry	
Nov. 19	759	Northup & Gilmore	Repairing heavy wagon	20.5
Nov. 19	760	John G. Foote	Pay-roll of workmen at Des Moines	3,747.8
Dec. 4	761	John G. Foote	Pay-roll of workmen at Iowa City	2,724.7
Dec. 4 Dec. 4		John G. Foote C R. I. & P. R. R	Pay-roll of workmen at Des Moines Freight on stone, and switching	445.8 640.9
Dec. 4		Des Moines Valley R. R	Freight on granite	85.0
Dec. 4	765	L. Robinson & Sons	Balance due on granite	401.6
Dec. 5	77636	H. F. Getchell & Sons	Lumber	110.0

#### [EXHIBIT I]-CONTINUED.

VOUCHER,		IN WHOSE FAVOR.	ON WHAT ACCOUNT.	AMOUNT.	
Dec. 5 Dec. 5 Dec. 5 Dec. 5 Dec. 5 Dec. 16 Dec. 16	769 770 771 772 773 774 775 776 777 778 779 780	H. Robinson & Co Bolton Brothers Ed Wright, R. S. Finkbine A. H. Piquenard R. S. Finkbine John H. Clark John G. Foote Des Moines Coal Co. L. Fisher Richardson Brothers	Advertising, iron beams and brick Oils and argand chimneys Valve, etc Glass, nails and zinc Salary as secretary and expenses Salary as overseer Salary as architect Salary as overseer and expenses Lumber and wood at quarry Per diem and expenses Supt. Finance. Fuel 40 pounds tallow Advertising (Davenport Democrat) Per diem and expenses	9.8 100 6 235.8 300.0 36.2 8.8 118.3 29.3 3.2	

\$125,830,37

## [EXHIBIT J.]

## CLASSIFIED STATEMENT

Of expenditures in detail from January 1st to December 31st, 1873.

ON WHAT ACCOUNT.	AMOUNT.
Plans	322.10
Excavation and drainage	2,980.59
Stone	
General expenses	52.06
Salaries	8,585,07
Stone-masonry	6,301.92
Brick-masonry	6,879,17
Concrete	1.895.67
Printing and advertising	133.72
General labor	44.99
Patterns	72.86
Water	
Rubble-masonry	4.765.97
Stone-cutting	25,129,56
Railroad	1,072.18
Lumber and timber	757.46
Carpenter-work	1,848.05
Cement	6,244.07
Board of Commmissioners	2,318.35
Fuel	476.12
Machinery and tools	426.34
Nails and hardware	69.98
Water-pipe and meter	4.22
Iron and steel	83.74
Stone setting, basement story	863 35
Brick-masonry, basement story	2,323.51
Iowa City quarry	24,080.77
	24,000,77
Total expenditures for the year 1873	\$125,830.37

## [EXHIBIT K.]

## CLASSIFIED STATEMENT

Of the aggregate expenditures in detail, from the commencement of the work, to December 31st, 1873.

ON WHAT ACCOUNT.	AMOUNT.
	\$3,943,11
Plans	15,604.99
Excavation and drainage	89,426.72
O Francis Control of the Control of	1,512.12
F 54 10 4 10 10 10 10 10 10 10 10 10 10 10 10 10	2,723.69
Cl.,	1,375.11
Carried avantage	21,503 42
C1 = 1 = 1 = 2 = 2 = 2 = 2 = 2 = 2 = 2 =	14,711.21
CL	7,835.23
	4,389.68
F1	1,864.40
The state of the s	50.59
Conough labor	74.86
Pattarns	475.03
777 4	4,765.97
75 7 7 7 7	51,267.88
Stone-cutting	10,177.77
Railroad	2,939.16
Total and timber	488.08
The case was a serious	2,938.86
Cornantor-work	13,617.62
/1	15 57 7 15 17 17 15 12 12 12 12 12 12 12 12 12 12 12 12 12
Roard of Commissioners	9,143.33
Miscallaneous	957.28
Fuel	
	9,352.63 458.33
Nails and hardware	
TITLE I AND ADDRESS OF THE PARTY OF THE PART	647.46
Rrick	22,645.00
Twom and stool	252.86
ACCOUNT TO BE A STATE OF THE ST	COUNTRACTOR
Brick-masonry, basement story	2,323.5
Iowa City quarry	24,080.7
Removing and replacing rejected material	52,353.70

#### [EXHIBIT L.]

# CONSOLIDATED STATEMENT OF EXPENDITURES AND APPROPRIATIONS.

Classified statement of expenditures on the new Capitol building from the com-

Ist. A classified statement of the work to January 1st, 1872, and reported to the Governor.

2d. A classified statement of the expenditures by the first Board of Commissioners from the commencement of the work to January 1st, 1872, and reported to the Governor.

2d. A classified statement of the expenditures by the first Board from January 2d to

April 17th, 1872, and not reported.

3d. A classified statement of the expenditures by the present Board from April 18th, to December 31st, 1872, including expenditures, removing and replacing rejected material, as directed by Chapter 35, General Laws, 1872.

4th. A classified statement of the expenditures by the present Board from January

1st to December 31st, 1873.

5th. A classified statement of the expenditures in the aggregate from the commencement of the work to December 31st, 1873.

CLASSIFICATION OF ACCOUNTS.	1 Expenditures to Jan. 1, 1872, and reported.	2 Expendit's from Jan. 2 to Apr.I7, 1872, and not re- ported.	3 Expendit's from Apr. 18 to Dec. 31, 1872.	4 Expendit's from Jan. 1 to Dec. 31, 1873.	5 Aggregate ex- penditures from commencement to December 31, 1873.
Plans.  Excavation and drainage.  Stone.  Cistern.  Sand.  General expenses.  Salaries.  Stone-masonry  Brick-masonry  Concrete.  Printing and advertising.  General labor.  Patterns.  Water.  Rubble masonry  Stone-cutting.  Railroad.  Lumber and timber.  Iron-work.  Carpenter-work.  Carpenter-work.  Cement.  Board of Commissioners.  Miscellaneous.  Fuel.  Machinery and tools.  Nails and hardware.  Water-pipe and meter.  Brick.  Iron and steel.  Stone-setting, basement story.  Brick-masonry, basement story.  Iowa City quarry.  *Removing and replacing rej'd mater'l	41,928.63 1,512.12 2,350.00 1,143.95 7,159.04 4,666.63 2,807.76 1,327,80 	81.75 2,631.50 373.69 64.78 1,600.00  53.50  185.77 21.60  701.20 12.13 84.20 37.20 82.24	\$609.35 570,29 16,858.80 	2,980,59 28,007.79 52,06 8,585,07 6,301,92 6,879,17 1,895,67 133,72 44,99 72,86 90,76 4,765,97 25,129,56 1,072,18 757,46 1,848,05 6,244,07 2,318,35 476,12 426,34 69,98 4,22 83,74 863,35 2,323,51	21,503,42 14,711,21 7,835,22 4,389,68 1,864,40 50,59 74,86 475,03 4,765,97 51,267,88 10,177,77 2,939,16 488,08 2,938,86 13,617,62 9,143,31 62,13 957,28 9,352,63 458,32 647,46 22,645,00 252,86
Appropriation made by Chapter 110, La	\$119,997.62				\$374,825.88 \$150,000.00
Appropriation for the year 1872, made be General Assembly  Appropriation for the year 1873, made be General Assembly	y Chapter by Chapter	35, Gener 35, Gene	ral Laws F	ourteenth	100,000,00
Total appropriation to December 31 Total expenditures classified as shown	st, 1873 above to I	ecember	31st, 1873		\$375,000.00 374,825.88
Balance of appropriations undrawn De	cember 31s				
*Don dotall date to the state of	20	Action the state of	4	1 11 14 1101 1	

<sup>\*</sup>For detailed statement, see report of Committee, page 14, and Exhibit "G," page 35.

#### NO. VIII.

Report of the Architect for the years 1872 and 1873.

TO THE HONORABLE BOARD OF NEW STATE CAPITOL COMMISSIONERS OF IOWA.

Gentlemen:—I respectfully submit my report of the general progress of the work on the State Capitol for the last two years, thus including such part of the year 1872 in which Messrs. Cochrane and Piquenard were your Architects.

The report of the overseer of the work will give you all the details necessary to the perfect understanding of the cost of the different parts of the work, and the time of labor as well as the quanty of each material that has been used in each and every part of the building.

One of the first acts of your Board has been to award the contract for 2,000,000 of bricks on proposals made on the advertisement of your predecessors. Messrs. Janes & Redhead, the lowest bidders, were the successful contractors, and have fulfilled their contract in a satisfactory manner.

You contracted with Mr. David Armstrong to furnish the granite of the lower base of the building at the price of \$1.47½ per cubic foot. Mr. Armstrong was already the contractor for the granite coping that he continued to furnish all along the year 1872, the last car arriving only the fourth day of November. This contractor has not been able to fulfil his second contract, and with his consent and the consent of his sureties, you contracted with Messrs. Barnum & Overman, of Cedar Falls, to furnish the balance of said contract at the price of \$1.75 per cubic foot, the first contractor sustaining the loss of the difference in price.

Messrs. Barnum & Overman have fulfilled their contract—part of the granite delivered being from boulders and part from the Saux Rapids, Minnesota, granite quarry.

All of this granite has already been cut, except three pieces which will be completed this winter, before needed in the building.

In compliance with the resolutions of the General Assembly, your Board ordered the removal of such parts of the foundation which could not be considered perfectly safe to remain. A larger quantity than first expected had to be replaced, as after the experience of the preceeding year, your Board properly thought that it was better to remove all the stone coming from the Rock Creek quarry, but five good pieces, which would have cost too much to remove and which are placed where they could not injure the building, even if ever they did decay which is not to be supposed.

Your Board having decided to use in the foundation the stone from the Winterset quarries, proved by past experience as well as by scientific investigation, to be good and durable, the work on the cellar walls has been pushed with vigor and the last month of October has seen the cellar fully completed, including the heavy foundation of the dome, the rubble stone walls replacing brick walls first intended for the walls of the corriders, the sewerage, the brick piers, and the brick arched ceilings of said cellar properly concreted in cement and pitched over to keep it dry. The total expense of the same has been (exclusive of the cost of repairs) \$218,099.87, including 20 per cent. of the cost of railroad and machinery, or \$214,055.41 without these items.

Besides this work, the repairs have forced the removal and replacing of 2,352 cubic yards of dimension stone, 1.729 yards of which had to

be altogether replaced, the whole cost being \$52,353.76.

Addition by granite coping.....

The estimate of the cost of the work of the cellar was as follows:

Excavation	\$ 6,500.00	
Concrete work	24,650.00	
Heavy masonry	145,440.00	
Brick-work, (part of this has been replaced		
by masonry)	35,542.00	
Sewerage, (actual cost)	1,855.00	
Concreting of arches, etc	3,500.00	
Add to this:		\$217,487.00
Difference between rubble and brick	\$ 2,583.75	

5,312.75

\$222,799.75

2,729.00

Before giving the price of the work per cubic yard for the stone masonry and per thousand for the brick masonry, it is proper to remark that no comparison of the price can be made with the price of work of

We made our measurement by exact cubic contents and by exact number of bricks used, (20 to a cubic foot)- when the lowest constructive measurement ever allowed in buildings give 21 bricks to one foot. Measure two sides of a brick pier for the face, allow two-thirds of the height of arches for the thickness of the same, and measure the angles in both walls. In Iowa as in many parts of the west the measurement is more liberal yet, it allows 22½ bricks to a cubic foot, does not deduct any openings and takes the heaviest part of the wall for the thickness of the whole. It is principally in arches that these constructive measurements raise the number of bricks. Same differences exist in stone masonry, so that we find in rubble masonry instead of 948 yards that we have found it would have measured 1,102 yards, and it would diminish the cost from \$14.15 per yard to \$12.09, the whole cost of same being \$14,422.77.

The difference in measurement of bricks is as follows: We find kiln account 1132 thousand, costing \$21.17 per thousand delivered and laid in cement mortar, when a fair measurement would have made it 2286 thousand, reducing the cost to \$10.46½, and the Iowa way of computing would have augmented it to 2787 thousand, at only \$8.33½.

The difference in dimension stone-masonry is but slight, being only in the skew of the piers of the dome and the arches. This work cost us \$25.61 per yard.

Your Board accepted the proposal of Messrs. Munson & Turner, of Quincy, Illinois, to furnish stone for the superstructure from their Mill-ville quarries at the price of \$18.90 per cubic yard; a very favorable

price to the State, principally as the stone is most beautiful in texture and color. But after a long delay accorded these parties, on account of the difficulty they experienced in preparing their quarry, to fulfill their contract, they did not send us such stone that your Board or myself could accept, the pieces sent (four car-loads) having dark veins, some of them appearing even to be open seams, which would be a blemish to their appearance and might become dangerous, in some cases, if used. With my advice that it would be better to use a darker and rather coarse grained stone for the outside basement wall, the rough-pointed finish of the same being well fitted for such stone, and in consideration of the facility with which good stone could be used above the basement without bad effect of color, your Board decided to give Munson & Turner further time to develop their quarry, and to use for the basement the stone from Iowa City, that past experience of over thirty years has proved to be sound and good, and you decided to employ men yourselves to quarry the same, so as to be certain to have it in time.

It is yet impossible to tell precisely the cost of this stone per cubic yard, most of the expense already incurred being for machinery, tools, buildings for men, and for stripping a large surface for work in winter; all such expense will have to be subdivided on the total amount of stone delivered after deducting the value of the machinery and buildings

remaining.

There has already been delivered over 15,000 cubic feet of this stone, most of it cut and part set in the building, and the quarry is so well prepared that no delay is expected in the easy delivery of all quantities required.

The expense for all work above the cellar, not including salaries, has

been \$67,125.92, divided as follows:

been dor, 120,000,	*** *** **
Granite and cutting	.\$16,718,58
Granice and cutting	31 480 17
Iowa City stone and cutting	. 01,100,11
	. 863.35
Setting	17 179 49
Brick and brick-work	. 17,110.40
Direk and brick work.	890.39
Carpenter work and lumber on hand	. 000.00
The state of the s	The second of the second

Your Board terminated their labors this year in awarding the contract for iron beams (nearly 200,000 pounds) for the first floor to the Union Foundry Works of Chicago, at the low price of 5 9-10 cents per pound, and for 1,000,000 of brick to Francis Geneser, of Des Moines, at the rate of \$10.45 per thousand, 75 cents less than the preceding contract

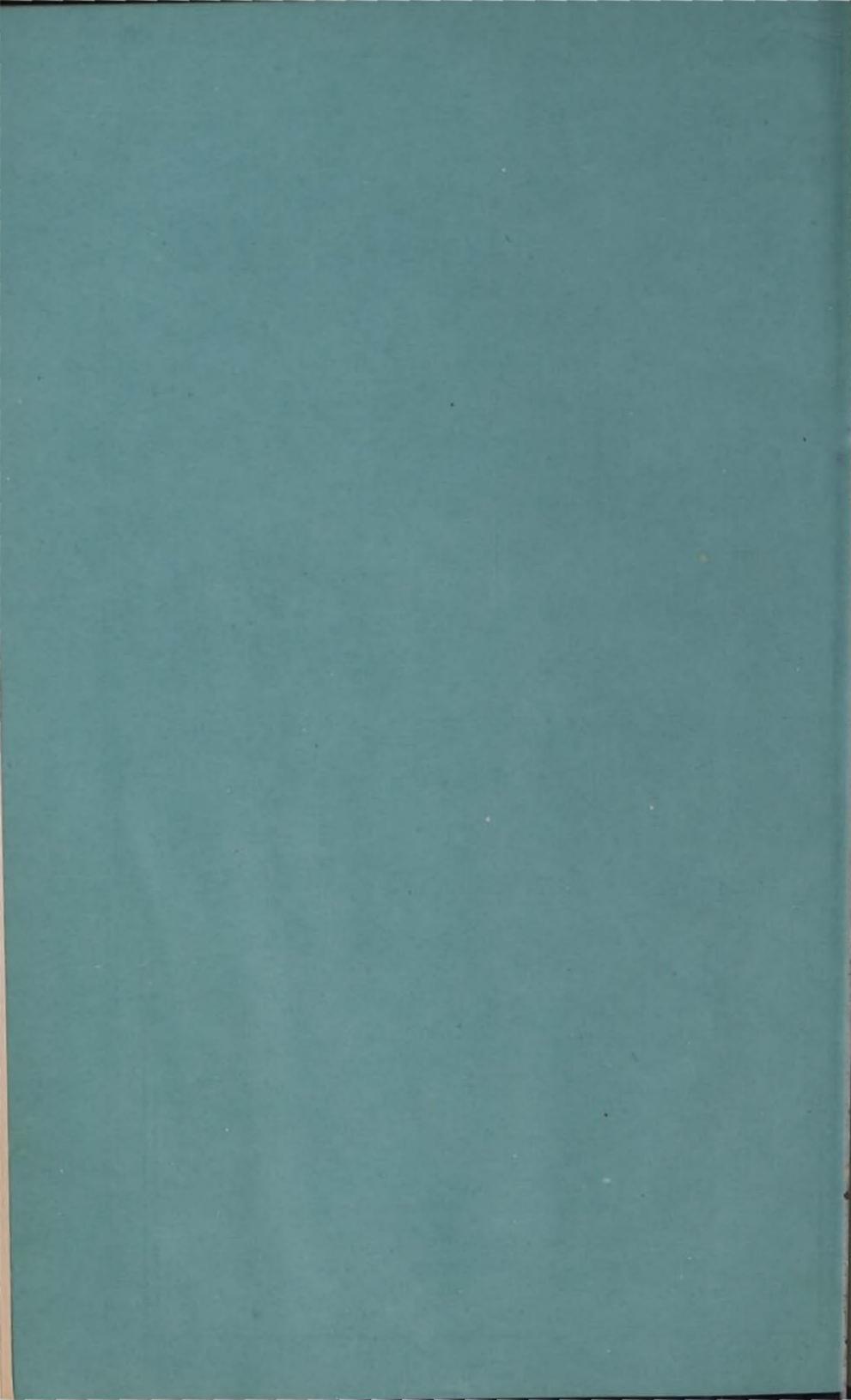
Toward the time the repairs of the foundation walls were in progress Mr. J. C. Cochrane tendered his resignation, for the reason that the pressure of his business in Chicago would not give him the time to properly attend to his duties on the building. His resignation was duly accepted by your Board, and I was appointed sole architect. Since then I had to prepare the necessary plans and drawings for the basement story, with the diagrams of the outside walls of the same, the framing plan and working drawings of the iron work for the first floor, and prepare the specifications of said stone, iron and brick work for the use of the contractors and of your Board, besides attending to the general superintendence of the work.

In relation to the prosecution of the work on the building, I think I may with perfect propriety, acknowledge the wisdom of your selection

in appointing Mr. R. S. Finkbine, one of your members, as overseer of the work; his past experience and well known ability as a builder, having been of the greatest service to myself in the execution of the plans, and has been, with the help of your Superintendent of finance and your Secretary, the principal reason that the work has been done at a lower rate than I could have expected in judging from the price paid contractors after open competition on other buildings of the same class. The quality of the work done under his direction, shows for itself, and can certainly be compared favorably with any other in the country.

I consider it part of my duty, as architect of the building, to recommend your board to call the attention of the next General Assembly, through the Governor, to the fact that it would be to the best interest of the State to have a sufficient appropriation to push the work with more force and vigor. The general expense will be the same per year, if we do work to the amount of \$300,000 instead of \$125,000, and with the present appropriation it will take ten more years to complete the building, which is certainly five years more than necessary. These five years of extra expense could easily be saved to the State, and work is also done at a lower price when done in large quantities. Respectfully submitted,

A. H. PIQUENARD, Architect.



## THIRD BIENNIAL REPORT

OF THE

## BOARD

OF

# CAPITOL COMMISSIONERS

TO THE

## Governor of Iowa.

NOVEMBER 30, 1875.

DES MOINES: R. P. CLARKSON, STATE PRINTER, 1876.

## BOARD OF COMMISSIONERS.

GOV. C. C. CARPENTER President, ex-officio.
GOV. S. J. KIRKWOOD President, ex-officio, after Jan. 13, 1876.
MATURIN L. FISHERFarmersburg.
JOHN G. FOOTEBurlington.
PETER A. DEYIowa City.
R. S. FINKBINEIowa City.
ED WRIGHT, Secretary Des Moines.
A. H. PIQUENARD, ArchitectSpringfield, Ill.
R. S. FINKBINE Overseer of Construction.
JOHN G. FOOTESuperintendent of Finance.
ED WRIGHT Assistant Overseer of Construction

## REPORT OF BOARD OF COMMISSIONERS.

To His Excellency, Cyrus C. Carpenter, Governor of Iowa;

The Commissioners appointed by chapter thirty-five of the acts of the Fourteenth General Assembly, and charged with the execution of the provisions of law in respect to the erection of the Capitol, respectfully submit this, their biennial report:

In the former report of the Commissioners it was stated that Messrs. Munson & Turner, of Quincy, Illinois, had failed to furnish stone for the superstructure of the New Capitol either in sufficient quantity, or of a quality in accordance with the requirements of their contract, and that the Commissioners through their executive committee had "organ-"ized a force and procured the necessary machinery and proceeded to "quarry the stone" for the basement story from the old "capitol quarry" near Iowa City. Since that time all the stone for the basement story has been thus procured, a complete statement of which will be found in the report of the executive committee on the "Iowa City quarry operations" herewith submitted.

It was the object of the Commissioners in granting an extension to Munson & Turner, and in procuring elsewhere the stone for the basement story, to give to these contractors time to open up and further develop their quarry with the view of definitely ascertaining whether it would afford stone sufficient in quantity and equal in quality to that which they had contracted to furnish.

At their meeting in March, 1874, the Commissioners determined to examine the quarry of Munson & Turner, which they did in April. The result of the examination was to satisfy the Commissioners that the quarry would afford but a small amount of stone equal in quality to that required in the contract, and that if the quality were good, the stone could not be procured of the required dimensions, nor in sufficient quantities.

Influenced by these considerations, the Commissioners determined

to advertise anew for the stone necessary to complete the superstructure above the basement story. The Commissioners were not unmindful of the difficulties attending the selection of a quarry which would furnish stone in sufficient quantities, and of the dimensions required, and that would be of an even texture, have a uniform and pleasing color, and be durable in character; and in order to accomplish this, determined, before advertising again for proposals to furnish stone, "that no bid will be entertained from a quarry that has not been sufficiently worked to determine beyond a question that it will furnish "all the stone required up to specifications, in quality, quantity, and "every other particular, or from parties who have not reputation for "skill, experience, and ability sufficient to guarantee the fulfillment of "their obligations."

The advertisement for furnishing stone was made on the 12th day of May, and the proposals received in pursuance thereof were opened on the fifteenth of June. They were nine in number, four for limestone, and five for sandstone, and varying in price from ninety-two cents,

to one dollar and fifty-five cents per cubic foot.

Before making an award, the Commissioners visited such of the quarries as in their judgment were entitled to consideration from the quality

of the samples submitted, and the price proposed.

After making an examination of the quarries, and of buildings in which stone from the various quarries was used, and considering the report of the architect on the comparative cost of the stone represented by the proposals, and the cost of the stone-cutting, the Commissioners awarded the contract for furnishing the stone for the body of the building to the St. Genevieve Sandstone and Granite Company of St. Louis, from their quarry near St. Genevieve, Missouri, at one dollar and thirteen cents per cubic foot, and the contract for furnishing stone for the trimmings to Messrs. J. A. Gaines & Co., from the Carroll county quarries near Miami Station, Carroll county, Missouri, at ninety-five cents per cubic foot.

The character and quality of the St. Genevieve sandstone have been

fully described in the former report of the Commissioners.

The Carroll county stone is a fine-grained, even textured blue sandstone, not stratified, and has been used in building for the past thirtyfive years. The Carroll County Company has furnished something over thirty-four thousand cubic feet, and has yet to furnish, this season, about one thousand cubic feet of the amount required of them to complete the office story of the building. The St. Genevieve Company has furnished a small amount over fortyfive thousand cubic feet, and has yet to furnish about two thousand cubic feet, of the amount required of them this year.

After the Commissioners had visited the quarry of the Quincy company before referred to, and before re-advertising for stone, they requested Messrs. Munson & Turner to say whether they desired to be released from their contract to furnish stone, which they declined, and made a claim for damages sustained by them, assuming that after the refusal of the Commissioners to accept the stone furnished by them, and their failure to furnish other and better stone, the action of the Commissioners in procuring the stone for the basement story elsewhere released them from the obligations of their contract, and that their consenting to the cancellation of the contract would cut off any claim for damages which they might have.

Subsequently (on the 19th of May, 1875.) at their request, the commissioners canceled the contract and surrendered their bonds, after which they were paid at the contract price for all the stone furnished under their contract, amounting to three hundred and four dollars and fourteen cents.

The considerations which influenced the commissioners to cancel the contract with Munson & Turner, were that a mistake was made in awarding it to them, from the fact that their quarry though presenting an apparently good face, was practically undeveloped and it was imprudent for the commissioners to accept, and hazardous for the contractors to propose, from such a quarry; especially so, when taken in connection with the other fact, that the price at which the stone was offered was, in the opinion of the commissioners about the cost of quarrying, even if the quarry had proved as good as the contractors hoped it might.

The contractors claimed (and it was apparent to the commissioners that it was true) that they had sunk in their costly experiment from fifteen to twenty thousand dollars, and it was evident to the commissioners that no further expenditure of money would get from the quarry the stone of a quality, and of the dimensions, required in the Capitol building.

At the time the contract was let to Munson & Turner, the stone, which from the quality of the specimens submitted, were in direct competition, and between which the commissioners were compelled to choose, were: the Quincy stone at 75 cents per cubic foot, and the St. Genevieve stone at \$1.30 for the stone for the basement story, and

\$1.35 per cubic foot for the stone for the superstructure. The production of stone from the Quincy quarry, as has been stated, was impossible. The difference in cost between the acceptance of the original bid from the St. Genevieve Company, and the contracts since made with this company and the Carroll county company, together with the cost of the stone from the Iowa City quarries for the basement story, may be briefly stated as follows.

### ORIGINAL BID OF THE ST. GENEVIEVE COMPANY.

44,308 cubic feet at \$1.30	\$ 57,600.40 294,057.00
Total	\$351,657.40
CONTRACTS AS MADE.	
114,500 feet St. Genevieve at \$1.13	30,104.00
Total	\$294,410.30
Net saving	

The Commissioners, after advertising as required by law, received proposals, and awarded at their meeting in December, 1873, the contract for furnishing iron beams for one floor of the capitol building, to the Union Foundry Company of Chicago, at 5 9-10th cents per pound; and at the same meeting awarded to Francis Geneser, of Des Moines, the contract for furnishing one million of brick, at \$10.45 per thousand; both of which contracts have been filled.

After due advertisement, the Commissioners awarded, at their meeting in April, 1874, a contract for furnishing two millions of brick to James N. Close, of Des Moines, at \$9.75 per thousand, said brick to be delivered as required, before November first, 1875; Mr. Close sublet most of his contract to other parties, and there is yet lacking to fulfill it one hundred and eighty-nine thousand brick.

On the 22d of October, 1875, the Commissioners awarded a contract for furnishing two millions of brick to S. A. Robertson, of Des Moines, at \$10.35 per thousand, and at the same time awarded a contract to Francis Geneser, of Des Moines, to furnish two millions of brick at \$10.45 per thousand, four hundred thousand of which are to be delivered on or before June 1st, 1876, and from brick already burned.

In their former report the Commissioners called your attention to changes in the plans and specifications, which they were compelled to make in order to bring the cost of the building within the requirements of the law fixing the limit of cost of the building at \$1,500,000. They now repeat that these changes ought not to be made, especially the change from stone to cast iron in the capitals, and from stone to galvanized iron in the cornice. The progress of the work on the building is such that unless authority is now given to restore these last mentioned items to the original design, the remedy will be too late. These changes will add to the cost of the building eighty-five thousand dollars.

Since the date of the last report of the commissioners, the basement story has been built, the iron beams for the office-story floor have been framed and put in place, the corridors arched over, and the greater portion of the office story put up. In addition thereto nearly all the

stone to complete this story is on the ground and cut.

During the coming two years the building should be placed under roof, and to accomplish this a greater annual expenditure will be required. In a building of the character of the capitol, the interior finish should be mainly of hard wood, which requires time to season, and should be procured as soon as possible. There is a large amount of iron work, particularly in the framing of the roof, which requires time to prepare, and should be provided before it is needed to put in place. The same is true of most of the material needed in a building of this kind. It cannot be had in the market, but must be prepared and manufactured for future use. A supply of stone should be procured in the summer season sufficient to keep the workmen employed in the winter. When a force of skilled workmen is organized and kept in steady employment, work can be done in a more satisfactory manner, and at a less cost, than where the workmen are thrown out of employment in the early fall, and a new force is organized in the spring.

To place the building under roof and provide the lumber for the interior finish will require (if done within the next two years), in addition to the amount now provided for by annual appropriations, three hundred and fifty thousand dollars. For the detailed estimates for which your attention is directed to the report of the architect herewith sub-

mitted.

Your attention is directed to a proposed change in the law providing for the disbursements of money on the capitol pay-rolls, suggested by the superintendent of finance, the working of, and the reasons for which are fully set forth in his report herewith submitted.

The commissioners call your attention to the following enumerated papers, which are herewith transmitted:

- No. 1. Report of the executive committee on Iowa City quarry operations.
- No. 2. Report of the visiting committee on the Quincy quarry of Munson & Turner.
- No. 3. Report of the architect on the comparative cost of stone (proposed for) and the cost of cutting the same.
- No. 4. Condensed report of the overseer of construction of the work for the years 1874 and 1875.
- No. 5. Complete report of the superintendent of finance, of the expenditures in detail for the years 1874 and 1875.
  - No. 6. Report of the architect for the years 1874 and 1875.

JOHN G. FOOTE,
MATURIN L. FISHER,
PETER A. DEY,
R. S. FINKBINE.

#### NUMBER ONE.

# REPORT OF THE EXECUTIVE COMMITTEE ON IOWA CITY QUARRY.

### To the Board of Capitol Commissioners:

The executive committee in pursuance of the following, adopted by your board July 22, 1873: "Resolved, that the executive committee be directed to select and make arrangements to work some quarry that will furnish stone suitable for the basement story, and also be directed to organize a sufficient force and procure the necessary machinery to enable them to furnish stone for said basement, at the earliest time practicable," hereby report that, on July 24 following the adoption of the above cited resolution, they negotiated a contract with the Penn Quarry Company to work the quarries owned and leased by said quarry company in Johnson county, known as the "old capitol quarries." Said contract was made in writing, and signed by the proper officers of the company, and by the president and secretary of your board.

The terms of the contract were that the board of commissioners should have the right to enter upon the lands of the company and take out for use in the capitol building twelve hundred cubic yards of stone, free of cost for royalty, except such royalty as said company had to pay N. Zeller, Esq., the owner of a portion of the quarry lands, provided the commissioners quarried stone from the lands held by the company under lease from said Zeller. We have paid a royalty of twenty-five cents per cubic yard to said Zeller for all stone quarried after the first day of July, 1874, amounting to the sum of ninety-eight

dollars and fifty cents.

After work had progressed for some time at the quarry your board determined to use one additional course of stone on the building from the same quarry, this increased the amount of stone to sixteen hundred and forty-one yards, and on this excess of four hundred and forty-one yards we have paid to the quarry company a royalty of twenty-five cents per cubic yard, amounting to one hundred and ten dollars, and twenty-five cents, making the total royalty paid for quarry right two hundred and eight dollars and seventy-five cents.

Immediately after making the contract for the use of the quarry we transferred from the capitol building two hand power derricks and

such other tools as could be spared from the work on the building to the quarry, purchased four hand power derricks and the necessary quarry tools to prosecute the work; we purchased also the necessary lumber, etc., and built a smith shop and boarding shanty to accommodate the men at work in the quarry and commenced quarrying stone with Mr. Thomas A. Lister an experienced quarryman in immediate charge, with such general supervision as members of your committee could give to the work. We opened the quarry in two places, one on the land owned and the other on that leased by the quarry company, but soon found it expedient to quit work on the land owned by the company on account of its not furnishing stone of sufficient thickness for our work.

We experienced great difficulty towards the close of the work in getting stone of the larger dimension required, as all the bills for the small stone had been filled, and we were obliged to quarry exclusively for

large sized stone thereby greatly increasing the expense.

The work was prosecuted with a greater or less force of men until February 16, 1875, at which time a sufficient quantity of stone for the basement story with the additional course "G," before referred to, the portico and interior piers, skew backs and bond stone had been quarried amounting in all to forty-four thousand three hundred and eight and five twelfths cubic feet or 1,641 yards one foot five inches cutting measure.

The total amount expended in working the quarry, including the cost of machinery, tools and buildings, the repairs to machinery and tools, the royalty paid on stone, together with the per diem and expenses of the superintendent of finance in making the payments at the quarry, and of Mr. Finkbine, overseer of construction, whose whole compensation was charged to the quarry account for all the time spent

thereat, amounts to the sum of \$68,321.62.

At the close of the work we transferred to the capitol building the tools and machinery taken to the quarry, together with two of the derricks purchased for the quarry, (which were needed at the building), with such other tools as we could not readily dispose of. We sold at auction the shops and boarding shanty and a portion of the quarry tools, and a portion at private sale. The amount received for the sales above named was \$660.95; the value of tools and machinery sent to the building is \$789.37, making the net expenditure at the quarry \$66,871.30, being one dollar and fifty cents per cubic foot for the stone. We append an itemized account of the expenditures, classified, together with an account of the sale of tools and machinery.

MATURIN L. FISHER, R. S. FINKBINE, PETER A. DEY.

Executive Committee.

Des Moines, April 22, 1875.

Lumber, Timber, Nails, and Hardware for Boarding House, Smith Shop and Office.

29,072 feet of lumber	589.27 41.00 1.75 37.40 5.00 13.00 19.38 25.38 125.20 15.75
Hauling tools and material	125.20 15.75 45.75 44.06
\$	960.94

## Tools and Machinery.

01 1 1 11	420.00
2 hand power derricks\$	280.00
2 hand power derricks	15.00
1 bellows. (smith)	10.08
1 vise	24.16
1 anvil	6.84
1 grindstone	3.68
1 grab chain	1.60
1 axe and handle	3.00
1 tuyere iron	56.00
4 double 14-inch blocks	12.60
1 double 12-inch block	7.00
1 single 14-inch block	6.30
1 single 12-inch block	2.25
3 augers	2.20
1 brace and bits	2.25
1 hand saw	1.25
(Trought or lengto	.15
1 punch	2.45
7 iron squares	58.33
45 shovels	43.75
33 picks	13.80
1)	9.05
5 mattocks	79.75
29 barrows	7.96
4 sledges	170.18
29 crowbars	72.80
30 drills	2.25
wrongh	9.85
15 files	0,00
\$	1,324.53
	CANCEL STREET

#### Iron Purchased.

13½ lbs. at 12 cents\$	1.62
263 1bs. at 11 cents	29.01
11½ lbs. at 10 cents	1.13
2½ lbs. at 8 cents	.20
141 lbs. at 73 cents	11.00
141 lbs. at 7½ cents	10.57
5,897 lbs. at 7 cents	412.79
16½ lbs. at 6½ cents	10.50
58 lbs. at 6 cents	3.48
199½ lbs. at 5½ cents	10.98
74 lbs. at 5\(\frac{1}{4}\) cents	3.89
426 lbs. at 5 cents	21.29
145 lbs. at 44 cents	6.89
391 lbs. at 44 cents	17.57
84 lbs. at 4\(\) cents	3.57
8,009 lbs\$	544.49
8,009 lbs	011.10
Steel Purchased.	
3 lbs. at 25 cents\$	.75
104 lbs, at 24 cents	24.96
342 lbs. at 22 cents	74.24
45 lbs. at 21 cents	9.48
13 lbs. at 16 cents	2.08
	2111 10
507 lbs	\$111 48
Rope Purchased.	
163 lbs. at 21 cents	34.23
517 lbs. at 20½ cents	105.99
220 lbs. at 20 cents	44.00
266 lbs. at 19 cents	50.54
75 lbs. at 18 cents	13.50
	\$248.26
1,241 lbs	( LIOILO
Repairs on Tools.	
	89.80
Repairs to truck wagon	13.12
Repairs to derricks	19.19
Bolts and washers	.90
Dolls and washers	
\$	123.01
200 12	
Miscellaneous Expenses.	
Telegraphing\$	4.37
Advertising	7.25
Express charges	6.35
Expense of Smith (Derrick)	23.70
Railroad fare of men to quarry	64.25
	105.00
\$	105.92

## Miscellaneous Supplies.

Danas inh and annalana	0.10
Paper, ink and envelopes	3.10
Postage stamps	13.30
19 kegs powder	100.88
1,534 ft. fuse	12.70
Oil, cans and brushes	13.95
14 pails and dippers	4.15
1\( \doz. \text{ brooms}	3.25
1 barrel	1.75
1 box	.85
Lampblack	1.70
Wood for office	4.50
Twine	,55
400½ bushels Blossburg coal	256.55
1,251 pick and hammer handles	216.73
Copper wire	1.90
e Dalo UI Icau	.00
8	637.71
	001111
Superintendent of Finance.	
Don diam	005.00
Per diem\$ Expenses	285.00 187.65
Dapenses	107.00
	450.05
\$	472.65
Overseer of Construction.	
Per diem\$	456.76
Expenses	
	202101
	010.00
\$	610.83
Railroad Freight.	
On tools and machinery\$	325.76
On stone	9 216 28
On stone	0,210.20
\$	9,542.04
Hauling stone to railroad\$	7,752.16
Labor at Quarry, - Superintendent and Foreman.	
559 days, at \$5.00\$	2,795.00
129 days, at 3.50	451.47
79½ days, at 3.00	237.75
7671\$	3,484.22

## Blacksmith and Helper.

389½ days, at \$3.25\$	1,265.87
691 days, at 3.00	207.75
2754 days, at 2.00	551,50
28 days, at 2.25	63.00
7621\$	2,088.12
Drillers and Scabblers.	
845 9-10 days, at \$2.50\$	2.114.67
	3,780.42
1,680 2-10 days, at 2.25 5,448 3-20 days, at 2.00	10,896.30
5,2694 days, at 1.75	9,219.60
1498 days at 169	240.97
246 days, at 1.50	368.99
	100
13,683}\$	20,020.00
Carpenters.	
	7.00
2 days, at \$3.50\$	60.50
22 days, at 2.75	68.75
27½ days, at 2.50	2.25
1753 days, at 2.00	351.50
62½ days, at 1.75	109.37
	500.07
290¾ days\$	599.37
Teams in Quarry.	
* *	4.00
1 day\$ 321\days, at \$3.00\$	963.75
4 days, at 2.50	10.00
13 days, at 1.50	2.63
	000.00
328 days\$	980.38
Laborers.	
2,930 3-20 days, at \$1.75\$	5,127.03
3.409 12-20 days, at 1.50	0,110.00
29 days, at 1.00	29.00
9	0.269.69
6,3684 days\$	10,200.00
Tool and water boys.	
	2020
55 days at \$1.50\$	82.50
1581 days at 1 95	190,00
3964 days at 1.00	396.50
46½ days at .75	34.87 2.50
5 days at .50	2.00
6611	714.45
UUA2 TITTITUTE TELEVISIONE TEL	THE PERSONS

### Labor, at loading derrick.

249 71	days at	2.25			$197.50 \\ 560.25 \\ 142.00 \\ 2.62$
400}			•••••••••••••••••••••••••••••••••••••••	.\$	902.37
			$Rig_{\downarrow}ers.$		

$\frac{4}{1\frac{3}{4}}$ 2 2-10	days at	3.00 2.00 1.75	 12 00 3.50 3.80
7 19-20			\$ 19.30

## Recapitulation of labor.

Foreman Blacksmiths Drillers and scabblers Carpenters Teams Laborers Water and tool boys At loading derrick Riggers	$ \begin{array}{r} 290\frac{3}{4} \\ 328 \\ 6,368\frac{3}{4} \\ 661\frac{1}{2} \\ 400\frac{1}{2} \end{array} $	days days days days days days days days	\$ 3,484.22 2,088.12 26,620.95 599.37 980.38 10,269.69 714.45 902.37 19.30
	23,2253	days	\$ 45,678.85

### Recapitulation of cost.

Lumber and timber	41.00 286.61 44.06	\$ 960.94 1,324.53 544.49 111.48 248.26 637.71 123.01 105.92 472.65 610.83 9,542.04 7,752.16 45,678.85 208.75
Total		\$ 68,321.62

3

#### Account of sales of buildings and tools.

To Joseph Gregg, 4 crow-bars, at \$3.00\$ 1200	
1 crow-bar	
6 drills, at \$2.50 15.00	
1 hammer 5.00	
4 drills, at \$0.75 3.00	
2 hammers, at 1.00 2.00	
4 shovels, at .50 2.00	
1 hammer 1 00	
1 hammer 2.00	
2 picks 2.00	
THE RESERVED AND ADDRESS OF THE PROPERTY OF TH	53.60
- Control Printers	10.05
Lumber to Peter Hart\$	5 00
Lumber to Jerry Bressingham	1.00
Wheelbarrow to B. Mason	
Wheelbarrow to M. Doyle	.50
Lumber to Samuel Horne	2.50
Stove to Henry Theolus	5.00
At auction, 1 sash	.70
2 barrows	1.00
Fuse	.35
2 drills	3.50
1 crow-bar	3.00
1 mattock	.50
2 barrows	1.10
1 grindstone	1.50
Lot of lumber	2.25
Smith-shop	46.00
One section of boarding shanty	20.00
One section of boarding shanty	40.00
One section of boarding shanty	17.25
One section of boarding shanty	25.00
One section of boarding shanty	39.00
Two tables	2.25
One lot of benches	1.70
One section of shanty	9.50
One lot broken wheelbarrows	1.45
One shovel	.35
One lot scrap iron	5.50
One hand-saw	2.00
One lot of lumber	5.00
To Penn Quarry Co., 2 hand-power derricks	280.00
Time of men putting up same	36.20
One sash sold	.70
One wheelbarrow sold	1.50
Stone spawls sold at building	36.10
Total sales\$	660.95

## Machinery and Tools Bought for Quarry and Transferred to Capitol Building.

2 hand power derricks.  Railroad freight from quarry.  1 grab chain.  1 smiths' bellows.  1 smiths' vise.  1 smiths' anvil.  3 smiths' tongs.  4 cold chisels.  29 drills.  11 crowbars.  2 sledges.  18 shovels.  23 picks.  45 lbs. of steel.  285 lbs. of iron,.  Miscellaneous tools.  3 lots rope.  6 pieces of timber.	420,00 50,00 3,68 15,00 10,08 24,16 9,00 1,00 58,00 55,92 3,98 23,25 34,50 9,45 19,95 25,00 20,00 6,40
Total	789.37
Total amount expended at quarry	3,321 <b>62</b> 1,450.32
Total net expenditure at quarry\$66	3,871.30

#### NUMBER TWO.

# REPORT OF THE COMMITTEE ON MUNSON & TURNER'S QUARRY.

## To the Board of Capitol Commissioners:

The committee appointed at the meeting of March 20th to visit the quarries of Munson & Turner for the purpose of examining and determining as to the probability of their being able to fulfill their contract to furnish stone for the superstructure of the new capitol building,

would report that they visited the quarry on the 21st of April; that the development of the quarry was little more than had been shown at previous visits of individual members of this board; that so far as worked there is no improvement in the quality of the stone; that the seams or veins in the stone are as prominent as they have been, and that the objection to the use of the stone for the superstructure is fully as great as it was for the basement story.

The committee do not believe that the quarry can furnish stone free from these objectionable features, no course as yet having been found without them, and it is questionable whether the expenditure of any amount of money would furnish stone as called for in the specifica-

tions.

C. C. CARPENTER, R. S. FINKBINE, PETER A. DEY, JOHN G. FOOTE.

#### MINORITY REPORT.

The undersigned finding himself unable to concur in the report of his colleagues in relation to the contract of Munson & Turner, to furnish the stone for the construction of the new state capitol of Iowa,

respectfully submits the reasons for his dissenting opinion.

The undersigned apprehends that there is a marked distinction between a seam and a vein in a stone quarry; a seam is an open crevice or fissure which entirely unfits a stone for use in a building; any stone with a seam in it ought to be rejected, and it is understood that the contractors do not propose to offer any such for the acceptance of the Commissioners. A vein is a crevice or fissure filled up and made solid by the infusion of some other stone, generally of a different chemical composition and frequently of a different color from the main body of the stone which encloses it, and does not diminish the strength or durability of the stone.

In case of the Quincy stone, it has been proved by actual experiment that the black veins which intersect it, do not impair its strength or increase its liability to fracture, and the results of the experiment are confirmed by the experience of cutters employed in cutting the stone. It seems to the undersigned that the only tenable objection to the Quincy stone is the black veins which intersect it, and in conformity with what appears to be the taste of his colleagues, would prefer if a sufficiency of such stone could be procured without an enormous cost to build the capitol of pure white statuary marble, but he is aware that according to the taste of many, that the dark veins of this stone interspersed throughout the walls would not impair their beauty, but on the contrary, would give an agreeable diversity to their color.

The Quincy stone is a crystalized carbonate of lime; very hard, susceptible, of a high polish, and belonging to the metamorphic class of rocks. This class abounds in veins; in the renowned Carrara quarry it is difficult to find a block of sufficient size free from veins for statuary purposes.

Marble, with black veins, and veins of other colors, is extensively

1875]

used for funeral monuments as well as in architecture. From the information the undersigned has been able to obtain, he is disposed to believe that there are very few marble buildings in Europe or America, in ancient or modern times, free from veins.

If the commissioners determine that they will use no other stone, except such stone as is free from veins, they will be obliged to reject the whole class of metamorphic rocks. A specimen of the Quincy stone was submitted to Professor Hinrichs, of the State University, for his examination; in his report he says: "The stone may be fairly "called a coarse grained marble. I consider it the best limestone "which I have seen from any part of the northwest; it is also one of "the most beautiful building stones and will retain its light color in-"definitely."

The undersigned concurs in this opinion and adopts it as his own. The undersigned regrets that he is unable to say that the development of the quarry has demonstrated that stone enough to build the capitol can be supplied from the quarry, but still he feels some degree of confidence that a sufficiency can be found there. It is therefore the opinion of the undersigned, that Munson & Turner should be required to execute their contract and deliver the stone according to its provisions.

MATURIN L. FISHER.

#### NUMBER THREE.

REPORT OF THE ARCHITECT ON THE COMPARATIVE COST OF SANDSTONE AND LIMESTONE, INCLUDING
. THE CUTTING.

To the Iowa State Capitol Commissioners:

Gentlemen: In answer to the resolutions of your board, I beg leave to report the following estimate of the relative value of the limestone and sandstone offered in the proposals received the 15th day of last June, with the difference of cost of cutting. I think it to be unnecessary to report particularly on the stone from the old capitol quarry of Iowa, as it is not sufficiently fine for the upper structure. The same may be said of the Thunder Creek stone, which has also the disadvan tage of having the stone in too thin layers for our purposes. Leaving aside the conflicting reports as to the durability of the oolite limestone

of Orford, the difference of color and the doubt as to the capacity of the quarry to furnish a sufficient quantity for our building, rank it among the qualities of stone not acceptable for the building. All the other proposals include stone which in beauty or durability may figure in any building, and the quarries are such that any quantity may be obtained from them of an even color in any reasonable time, and for all of them the only matters for consideration are the color and the price, both of the material and of the cutting.

The value of the material is as follows; admitting 225,000 cubic

feet of stone.

Sandstones—	
Carroll county, Mo	. \$213,750
Amherst, blue, Ohio	
St. Genevieve, Mo	. 254,250
Amherst, buff, Ohio	
Berea, Ohio	. 270,000
Buena Vista, Ohio	. 292,250
Limestone—	
Lemont, Ill	. 241,875

The difference of cutting the different sandstones is very slight, the Amherst and Berea being the cheapest to cut, and the St. Genevieve the most costly, the difference being, from what I can learn from parties who have worked them, about \$7,000 for our work, the Buena Vista and Carroll county being about half way between the St. Genevieve and the Ohio stone.

The limestone will cost considerably more to cut, and I cannot estimate the extra value at less than \$60,000 for our work, from which it would be fair to deduct a little on account of its hardness and easiness to handle for setting without danger of breaking the sharp corners and edges. I would estimate the value of cutting the different sandstones as varying from \$147,000 to \$155,000 and of the limestone at \$215,000.

Your Board will themselves judge of the color of the stone as fitted to our building, but I may say that, as has been already informally talked about in the Board meetings, I think that a proper division of two different colored stones—say buff and blue—would be an advantage instead of a detriment, provided each of the stones be of a well defined color and very even.

All of which is respectfully submitted.

A. H PIQUENARD, Architect Iowa State Capitol.

#### NUMBER FOUR.

## CONDENSED REPORT OF THE OVERSEER OF CONSTRUC-TION, FOR THE YEARS 1874 AND 1875.

### To the Capitol Commissioners:

Gentlemen: -I herewith submit my report of the materials purchased and received and of the work done on the new capitol building in the years 1874 and 1875, condensed from my annual reports. During the above named time the basement story has been built, the iron beams for the office floor have been put in place, the corridors have been arched over and concreted up to the floor-line, the greater portion of the exterior and interior walls of the office story have been built, the pilasters and dome columns have been cut and set, and most of the stone to complete the office story are on hand and cut. I purchased at various times as directed by the commissioners, during 1874, the iron columns for the basement story, the castings for the plates and separators for the main floor-beams, the stone for the pilasters and piers in the basement story, the lime used in stone-setting, one ten-ton scale, the necessary lumber for scaffolding, centering, and miscellaneous purposes, the coal for the shops, office and engines, and such miscellaneous supplies as were needed in the progress of the work.

During the year 1875, I purchased, in pursuance of the same authority, the stone for the pilasters and columns in the main corridors of the office story, and two new engines—one a double engine to work two derricks for unloading and handling stone, the other a double-cylinder engine to work a derrick on the building for setting stone. I bought two lots of brick, one of S. A. Robertson, the other of Francis Geneser, of 100,000 each, together with the necessary sand, lime, lumber, coal, and miscellaneous supplies needed in the progress of the work. There has been built one new buggy-derrick for stone setting, and one new boom-derrick for handling stone, and one hand-power boom-derrick has been changed to a steam derrick. Three steps have also been built to raise the setting derricks high enough to set the office-story.

The organization of the working force on the capitol building, under the direction of the overseer of construction and his assistant, who by direction of the commissioners, have the general charge and supervision of the work, is as follows:

There are two general foremen, one of whom, Mr. James R. Crawshaw, has charge of the iron and wood work, centering, and patterns;

the other, Mr. N. W. Smith, has charge of the general labor, derricks, all derrick work, stone masonry, and concreting. The brick-work is under the supervision of Mr. John C. Lefler. All work done under the above named foremen is by the day. The stone cutting is done by the superficial foot, at a price, in accordance with the work done, ranging from \$1.50 to \$0.07 per square foot. The workman is furnished with a ticket for each stone, on which is an isometrical drawing of the stone as it will be when cut, with all necessary written directions, the exact size of each dimension, and number of pattern, where a pattern is to be used. This work is under the charge of Messrs. William and Thomas Brunton.

I take pleasure in stating to the commissioners that the character of the work done, under the direction of the above named gentlemen, is ample evidence of their skill and ability in their departments. Statements are hereto attached showing the amount and kinds of material received, the amount and kinds of work done, and the cost of tools and machinery purchased.

Respectfully submitted,

R. S. FINKBINE, Overseer of Construction.

#### STATEMENT.

Materials purchased and work done on the new capitol building from December 20, 1873, to November 30, 1875:

#### Materials Purchased.—Stone.

	FT.	IN.
Iowa City quarry		1000
E. Walker, Lemont	3,936	
J. B. Webb, Anamosa	453	
M. Heisey, Anamosa	1,200	
Barnum & Overman, granite	46	
L. Robinson & Son, granite	147	8
Carroll County sandstone	34,563	
St. Geneveive sandstone	45,564	8
Total	114,924	3
Brick.		
Francis Geneser	1,002,7	25
Jas. N. Close	261,3	
S. A. Robertson, (Close contract)	100,0	
J. C. Taylor, (Close contract)	1,448,8	
Francis Geneser, (purchase)	100,0	
S. A. Robertson, (purchase)	100,0	100
Total	3,012,8	59
Cement.		

Des Moines Coal Company, 7,970 bbls......21,122,276 pounds.

#### Sand.

Scott & Bartlett 78,427 bus	hels.
Lime.	
S. A. Robertson	
Total	hels.
Water.	
Des Moines Water Company 649,818 gal	lons.
Cast Iron.	
Cital Livini	
Waldron Brothers 21,166 por	inds.
Wrought Iron.	
In floor booms	
In floor-beams       196,772 pour         In Angle irons       2,380 pour         In bolts and rivets       1,109 pour         In bar and rod       5,889½ pour	inds.
Total206,150½ pou	nds.
Cast Steel	nds.
Nails	nds.
Sheet zinc for patterns	inds.
Lumber and timber139,566 feet	
Coal	hels.
Five loads of slack	
Oil.	
For derricks	
Total	ons.
Tallow	nds.
Car Repairs.	
	25.45 21.90
Total\$ 24	47.35

## Engine Repairs.

	0.15
Valve\$	2.15
Valve-rod	2.85
Clab walnes	6.30
Gauge-cocks	2.65
Oil-cups	13.05
Steam-gauge	7.10
Hoisting spools	39.80
Smoke-stack	5.00
Rubber packing	16.50
Steam-chest repairs	5.70
Machine-work	16.70
Pipe	.45
Cotton-waste	10.50
Cotton-waste	
Tatal \$	128.75
Total\$	120.70
D Donnisho	
Repairs to Derricks.	
Paints\$	32.05
Paints	76.01
Iron	126.07
Rope	21.60
Bolts and guy-rods	44.20
Friction sheaves	11.20
Total\$	299.94
New Tools and Machinery.	
	15.30
1 smith's vise\$	15.30
1 smith's vise\$	10.50
1 smith's vise\$  1 sand-screen Pulley-blocks	10.50 16.79
1 smith's vise\$ 1 sand-screen Pulley-blocks	10.50 16.79 170.83
1 smith's vise\$  1 sand-screen Pulley-blocks Rope Hose couplings and water-pipe	10.50 16.79 170.83 155.68
1 smith's vise\$  1 sand-screen Pulley-blocks Rope Hose couplings and water-pipe	10.50 16.79 170.83 155.68 43.66
1 smith's vise\$  1 sand-screen Pulley-blocks Rope Hose couplings and water-pipe	10.50 16.79 170.83 155.68 43.66 200.00
1 smith's vise\$  1 sand-screen Pulley-blocks Rope Hose couplings and water-pipe 452 pounds cable-chain 1 nortable forge	10.50 16.79 170.83 155.68 43.66 200.00 56.43
1 smith's vise	10.50 16.79 170.83 155.68 43.66 200.00 56.43 41.65
1 smith's vise	10.50 16.79 170.83 155.68 43.66 200.00 56.43 41.65 2,000.00
1 smith's vise	10.50 $16.79$ $170.83$ $155.68$ $43.66$ $200.00$ $56.43$ $41.65$ $2,000.00$ $1,250.00$
1 smith's vise	10.50 $16.79$ $170.83$ $155.68$ $43.66$ $200.00$ $56.43$ $41.65$ $2,000.00$ $1,250.00$ $116.00$
1 smith's vise	10.50 $16.79$ $170.83$ $155.68$ $43.66$ $200.00$ $56.43$ $41.65$ $2,000.00$ $1,250.00$ $116.00$ $207.40$
1 smith's vise	10.50 $16.79$ $170.83$ $155.68$ $43.66$ $200.00$ $56.43$ $41.65$ $2,000.00$ $1,250.00$ $116.00$ $207.40$ $59.15$
1 smith's vise	10.50 $16.79$ $170.83$ $155.68$ $43.66$ $200.00$ $56.43$ $41.65$ $2,000.00$ $1,250.00$ $116.00$ $207.40$ $59.15$ $94.50$
1 smith's vise	10.50 $16.79$ $170.83$ $155.68$ $43.66$ $200.00$ $56.43$ $41.65$ $2,000.00$ $1,250.00$ $116.00$ $207.40$ $59.15$ $94.50$ $96.75$
1 smith's vise	10.50 $16.79$ $170.83$ $155.68$ $43.66$ $200.00$ $56.43$ $41.65$ $2,000.00$ $1,250.00$ $116.00$ $207.40$ $59.15$ $94.50$ $96.75$ $5.00$
1 smith's vise	10.50 $16.79$ $170.83$ $155.68$ $43.66$ $200.00$ $56.43$ $41.65$ $2,000.00$ $1,250.00$ $116.00$ $207.40$ $59.15$ $94.50$ $96.75$ $5.00$ $21.00$
1 smith's vise	10.50 $16.79$ $170.83$ $155.68$ $43.66$ $200.00$ $56.43$ $41.65$ $2,000.00$ $1,250.00$ $116.00$ $207.40$ $59.15$ $94.50$ $96.75$ $5.00$ $21.00$ $141.28$
1 smith's vise	10.50 $16.79$ $170.83$ $155.68$ $43.66$ $200.00$ $56.43$ $41.65$ $2,000.00$ $1,250.00$ $116.00$ $207.40$ $59.15$ $94.50$ $96.75$ $5.00$ $21.00$ $141.28$ $365.49$
1 smith's vise	10.50 $16.79$ $170.83$ $155.68$ $43.66$ $200.00$ $56.43$ $41.65$ $2,000.00$ $1,250.00$ $116.00$ $207.40$ $59.15$ $94.50$ $96.75$ $5.00$ $21.00$ $141.28$ $365.49$ $428.60$
1 smith's vise	10.50 $16.79$ $170.83$ $155.68$ $43.66$ $200.00$ $56.43$ $41.65$ $2,000.00$ $1,250.00$ $116.00$ $207.40$ $59.15$ $94.50$ $96.75$ $5.00$ $21.00$ $141.28$ $365.49$
1 smith's vise	10.50 $16.79$ $170.83$ $155.68$ $43.66$ $200.00$ $56.43$ $41.65$ $2,000.00$ $1,250.00$ $116.00$ $207.40$ $59.15$ $94.50$ $96.75$ $5.00$ $21.00$ $141.28$ $365.49$ $428.60$
1 smith's vise	10.50 16.79 170.83 155.68 43.66 200.00 56.43 41.65 2,000.00 1,250.00 116.00 207.40 59.15 94.50 96.75 5.00 21.00 141.28 365.49 428.60 287.42

### Cost of New Steam Buggy Derrick.

320 ft. steel wire rope\$	176.73
1,025 lbs. Galvanized iron wire rope	143.50
Freight on iron and steele wire rope	10.05
Brooks, Wilson & Stein, iron work	308.30
Bolton Bros., iron	114.42
Lumber for mast and boom	112.50
19 wire rone contate	
12 wire rope sockets	27.00
Labor, building derrick	68.25
Total cost\$	960.75
Cost of New Steam Boom Derrick.	
Cose of Tree Steam Done Derrick.	
Lumber	00 70
Lumber\$	83.78
Iron	26.33
Iron and iron work	160.00
Steel wire rope	99.83
Garvanized from wife rope	163.68
12 wire rope sockets	27.00
Iron work	16.94
Labor, building derrick	37.57
Total\$	615.13
Cost of changing Hund-power Boom Derrick to Steam Derrick (the iron we castings, and steel wire for which were on hand.)  Cost of new boom\$	14.33
Labor	50.94
	00.01
Total\$	65.27
Cost of Step to set Derrick on.	
Lumber\$	39.92
Iron	3.59
Iron work	4.93
Labor	29.37
Total each\$	77.81
Total cach	11.01
3 of the above, total cost\$	233.43
Railroad Materials and Repairs.	
Taxes on right of way ground\$	332.74
Rental on right of way ground	580.00
350 the enilese	23.52
350 lbs. spikes	
7,240 lbs. of T rail	296.02
Railroad ties	19.00
Iron for bridge over Court Avenue	87.52
Lumber	215.11
Labor, repairs to road and bridge	911.62
Less old ties sold	2,465.53 5.40
Total expense of railroad\$	2,460.13

# Cost of Shop for Stone Cutting.

Cost of Shop for Stolle Culturg.
Lumber\$ 466.19
Nails and hardware 24.65
Labor 144.01
Total\$ 634.85
Materials used.
Lime for stone setting
Sand
Cement used.
In stone masonry
In concrete work
Total 7,882 barrels
Water 649,818 gallons.
Coal used.
In office
In shops
0.0107.1 1.1
Total coal 8,6167 bushels.
For engines, five loads of slack.
Lumber used.
Railroad 8,930 feet.
Scaffolding
Centering 25,094 feet.
Derricks 9,308 feet.
Stone-cutters, bankers
Tatterns, gauges, urawing boards, deciment
Stone-cutters' shops
Blacksmith shops
Office for foreman of cutters
Cars and car repairs
Total
Cast iron used.
In columns, plates and separators 21,166 pounds.

# Wrought iron used.

In angle irons       2,38         In bolts and rivets       1,10         In new derricks       1,73         In old derricks       26         In tools and machinery       42         In railroad bridge       1,09         For miscellaneous purposes       2,56	9 pounds
Total	3 pounds.
The framing of the iron floor beams and the setting of the	ne beams,
plates, and columns cost 45 - cents per 100 pounds.	
Nails used	2903 lbs.
Sheet zinc used for patterns	687½ lbs.
Brick Laid,	
In backing to exterior walls	ft. in. 95,323 1 108,999 1 5,285 3 5,549 0
Total cubic feet	215,156 5
Brick (ki/n count.)	
In walls In cylindrical arches In groined arches	3,677,657 95,136 99,882
Total bricks laid	3,872,675
Concrete on orches14,34	9 ft. 4 in.
Dimension Stone set.—Basement Story.	
Granite base and sills  Dome and corridor piers  Interior piers  Bond stone  Arches and corbels  Portico, buttress, and piers  Exterior walls	ft. in. 4,315 6 2,320 4 281 10 1,359 2 202 6 6,020 3 30,174 7 44,674 2
Total basement story	11,014 2

#### Office Story.

Office worg.	ft.	in
In walls and portico	58,148 31	1
Stone truss Pilasters and columns	2,248	10
Granite sills	84 1,291	1000
Total office story	61,804	1
Total stone laid in 1874 and 1875106,47	8 ft. 3	in.

#### CLASSIFICATION BY STORIES.

Setting apart those items which pertain to the cost of the whole building.

The following is a classification by stories.

Items of Expenditure which pertain to the cost of the whole building.

Expenditures for castern	
Expenditures for printing and advertising 2,048.15 Expenditures for board of commissioners 12,317.37 General and miscellaneous expenditures 1,642.35 Expenditures for repairs on foundation 52,353.76 Expenditures for foundation to ground line	\$107,352.41 214,055.41 210,803.28
Expenditures for basement story	217,449.56 339.34 ———— \$750,000.00

#### TABLE No. 1,

Consolidated statement, showing the number of days labor performed on the Capitol building from January 1 to December 31, 1874, by men and teams. Also, the kind of labor performed and wages paid, but not including stone-cutters that were paid by the superficial foot for cutting.

	Foremen of stone-cut- ters and brick masons.	Superintendent of car- penter and iron work, rivetors and survey'rs	Stone-setters, stone-cut- ters and brick masons,	Stone-cutters, brick masons and carpenters,	General foreman of la- borers and superinten- dent of derricks.	Blacksmiths and car- penters,	Team and driver.	General foreman of laborers and superintendent of derricks, engineers & brick-masons.	Brick masons, riggers, & carpenters.	Cart, horse and driver.	Foremen of derricks, foremen of concrete, & blacksmith's helper.	Carpenters, sand-sifters, brick and mortar car- riers, drillers and iron drillers.	Derrick laborers & car- penters helpers, labor- on railroad, etc.	Common laborers and rubbers.	Water boys.	Total days from Jan. 1, to Dec. 31, 1874.
	\$5.00 pr d'y	\$4.00 pr d'y	83 75 pr day	\$3.50 pr d'y	\$3.25 pr d'y	\$3.00 pr d y	\$3.00 pr d'y	\$2,75 pr day	\$2.50 pr d'y	\$2.50 pr d'y	\$2.00 pr d'y	\$1.75 pr day	\$1.65 pr day	\$1,50 pr day	\$0.75 pr d'y	
Stone cutting-foreman and	364.00							***********								518.18
Stone cutting-handling and							.30	500000		1 1000000			1,474.55			4 007 0
1001 Sharpening	1		7-3									102,20	1,314.00	097.00	203.65	4,097.6
Rubbing stone	***************************************			*********	********			1 00			***************************************			47.50		47.5
Extra handling stone Limestone setting	***************************************	*****	214 95		*************	2.00	*********	1.60 170.65	.80 46.25		7.20		36.40		100	48.4
Brick work on basement	186,00		1.537.60	153.25			**********	66.25			274.65	381.50 2,261 60	715.75 2.00	179,30 428,25		2,254 3
Brick work on foundation	**********	**********			**********			***********		120,00	***********	2,00		5.00	293.00	5,503.9 9.0
10018 and machinery			*********	.50	*********	19 10	+++++++++++	**********		**********		7.20	.50	2.00	THE PERSON NAMED IN	45.0
Carpenter work		131.50	**********	24.50	***************************************		**********		187.50		28.25	30.20	35.45	15.00	.25	502.4
Patiern making	***************************************	47.50			************	9.50			1.00	*********	********	******				58.0
Wrought iron work	**********	58.50		3,00	***************************************	2 50	**********	8.75	41.25		42,50	147,30	59.80	50.50	14.00	431.3
Concrete	*********	********		***********	**********	***********	*********	*******	13,00		8 30	2.00	28,90	57,30	1.50	113.5
General labor		1.00		*********	**********	*********	40	***********	4,00 2,50		10.25	33,75	6.00	312.25	15.50	408.5
Foreman of laborers & der'ks				********	236.00	**********	········	104.00	2.00		1.00	5.00	5.60	8.00	*********	24.50
Watchman									***************************************	A STATE OF THE PARTY OF THE PAR		17,00	12.00	**********	**********	340 00 29.00
Total days labor for 1874	550.00	239.00	1,998.80	188.65	236.00	273.70	.70	562.10	574.15	478.75	839.85	3,642.15	2.378.95	1,800.75	667.65	14,431,20

#### TABLE

Consolidated statement, showing the number of days labor per-30, 1875, by men and teams. Also the kind of labor performed the superficial foot for cutting.

		20.5	444	(1000		2 1	2.75 1	- W
	stone-cutters.	brick-masons it foreman of s,	lent of n work	work and reman of ndent of	stone-cut-	stone-cut-	of der- ns and	stone-cutters
	tone-	rick-	superintendent er work, fron wo tterns.	endent of stone- work, hon-work i general foreman superintendent	sto isers.	111 11	chief of masons	stone-
	s Jo	of testant	super er wo terns	perinten enter-wo and ge and s	sons,	wiser	iths, orick-	
	Foreman	Foremen of by and assistant stone-cutters,	General superintendent of carpenter work, Iron work and patterns.	General superintendent of stone-set- ters, carpenter-work, hon-work and patterns, and general foremen of laborers, and superintendent of derricks,	Brick-Masons, st ters and lewisers	Brick-masons, ters, lewisers setters.	Blacksmiths, cricks, brick-riewisers.	Blacksmiths, sto brick-masons,
	\$6.00	85.00	\$4.50	84.00	\$3.75	\$3.50	\$3.25	\$3.0
	per day.	per day.	per day	per day.	per day.	per day.	per day.	per
tone cutting,-foreman and	153,50	832,75			80.25	75.80	********	118.
tone cutting,-handling and tool sharpening		*****		6.50		********	155.75	105.
Subbing stone	*******	***************************************	*** ****	**** *		*******	*******	3.
Extra handling stone	********	**********		988 80	**********	10.00	*********	51.
andstone setting	********	***********		45 Ch 40 Ch	**********		33474444	282411
rick-masonry, lst story	********	162 50 24.50		5.50	1,748.35 118.25	99.25	14.00	155.
rick-masonry, basement		**********	143 25 50	50,00				*****
Vrought iron workools and macuinery		**********	34.25	16.50	1.75		56 75	25.
attern making	*** *****	********	4.50			********	********	*****
allroad repairs	********	*********	8.50	************		*********	********	*****
oncreting	*******	*******	*******	************	***********	********	**********	
Vater pipe and meter eneral labor	********	**********	*********				********	****
oreman of laborers and der- ricks				132.00	,		152.00	
Vatehman	********	*********		***********	************	********	********	*****
rick inspectorplitting stone, charged to	*******	***************************************	********	1	94.00	********	********	*****
contractorewising sandstone	********	**********	*********	***************************************	24,00 147,80	27.98	89 90	17.
Total days labor for 1875	153,56	519.75	191,00	533,60	2,120,40	235.03	468,40	484.
Total days labor for 1874 & 1875	153.50	1,069,75	191.00	772,60	4,119.20	423.68	704.40	758.

NO. II.

formed on the Capitol building from January 1, to November and wages paid, but not including stone cutters that were paid by

Teams and drivers.	Engineers.	Derrick foremen, engineers carpenters and riggers.	Cart horse and driver.	Derrick foremen, engineers, foremen of rubbers and carpenters.	Derrick foremen, foremen of rubbers, brick & mortar carriers, and carpenters.	Carpenters.	Drillers, blacksmith's hel'pr brick and mortar carriers, w'man & brick inspector.	Derrick laborers, brick in- spector, cement handling and rubbers,	Common laborers.	Water boys.	Total days from Jan. 1, to Nov. 30, 1875.
\$3.00 per	\$2.75 per	\$2,50 per	\$2.50 per	\$2,25	\$2,00	\$1.90	\$1.75	\$1.65	\$1.50	¥0.75	
per day.	per day.	day.	day.	per day.	per day.	per day.	per day.	per day.	per day.	per day.	
							1	1	1	1	-
			*********		***********	*******	***********	***********	>******		760,30
******	81,95	496,40	*******	312.05 87.75 4.00 108.70	414,20 119,30 31,30 253,10		412.25 1.75	2,768,15 3,318.75 306,45 2,527,25 124,50 71,35	1.00	359.85	5,113.60
7.00 3.25 5.50	9.70	00.75	9,000	87.75	119.30	*******		3,318.75	*******	24.50	3,552.05 393.50
2.00	3.60	38.15 613,80 6.75	7.4 05	4.00	31.30	*******	000 75	806.45	*********		393,50
5.50	11.85 26.15	810.00	14,25 1,75 401,30	108.70	203.10	* 0.00	363,15 73,75 1,673,25 193,80	2,527.25	1110000	42.50	4.267.45
0,00	20.10		401 30	******	2,603.75	*******	1 879 95	71 95	5.25 455.85	1.00 342.02	344,90 7,782,52
		11.25 105.15 1.50 120.90	24.25	*********		********	193.50	11,00	30.50	43.90	1,682,52
*******	********	105.15	200000	42.50	147.85	10,25	100,00	42 05	90.00	40,00	455.45
******	********	1,50			1.00		**********	2.25	********	***************************************	542.05
1,50	2,40	120,90	*******	8,40	50,10	3.00	2.00	43,05 2,25 14,50	**********		5.25 387.80 23.00 382.85
*******	********	50	*******			*******	************			***********	28.00
3 75	********	28.80	********	22,00	36.75 75	*******	15.00	260.05	8.00		382.85
*******	********	50 28.80 6.50	8.00	3.25	75	******	40.50	260.05 110.00	********	*******	169.00
*******	********	*******	******	*********	************	*******		7,20	*******	**********	7.20
********	13.80	49.40	*******	***************************************	22.25	*******	**********	304.45	1.00	**********	390,90
*******			********	***************************************		*******	************		********	***********	284.00
******	*********	***********	*******	**********	*********		378.00	************	********	*******	378.00
******	********		********		***************************************		88,40	31,25	********		119.65
*******					***********		4.00				28.00
	********		*** ******	********	**********	*******		***************************************	********		282.78
21.00	139.75	1,479.10	449.55	588.65	3,722.10	13,25	3,245.85	9,889,20	501.60	813.77	25,570.25
21.70	701.85	2,053,25	928,30	588.65	4,561.95	13,25	6,888.00	12.268.15	2302.35	1.481.42	40,001,45

Consolidated Statement showing the number of superficial feet of stone-cutting done in the year 1874, and in the year 1875, to November 30th; the prices paid per foot for cutting, and the total amount paid for cutting by the foot, for each year, of the several kinds of stone; also the aggregate amount paid for cutting done by the foot.

INE :	GRANIT	E-CUTTING.	LIMESTONE	E-CUITING.	SANDSTONI		TOTAL SUPER-	Tt'lam't
ICE R.F.	1874.	1875.	1874.	1875.	1874.	1875.		cut'g by
PER	FEET. IN. SEC	FEET, IN. SEC	FEET, IN. SEC	FEET, IN. SEC	FEET, IN. SEC	FEET, IN. SEC	FEET. IN. SEC	the foot.
\$1.50 1.30 1.25 1.20 1.05 1.00 .90 .80 .70 .75 .65 .63 .63 .43 .42 .40 .35 .34 .36 .25 .21 .21 .21 .21 .21 .21 .21 .21 .21 .21	643 3	0 118 7 0	283 0 0 0 0 14 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1,565 9 1 1,404 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9 4 6 305 7 2 346 10 8 229 1 10 649 6 1 385 6 1,057 8 3,559 8 964 11 2 301 10 7 3,494 0 4,779 11 3,972 9 6 1,403 3 5 23,435 6	31 11 6 438 6 4 737 2 2 680 11 1 680 11 1 2 2,127 8 11,046 7 2 8,685 1 2 3,615 8 3 23,860 6 7 4,343 9 1 1 9,771 7 8 41,927 5 3 39,250 5 1 4,899 9 8 156,968 10	283 0 0 0 0 158 148 4 7 7 7 4 4 1 1 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$ 561,38 367,90 198,34 178,05 781,30 1,928,54 985,47 26,85 637,01 886,58 190,03 1,284,01 2,283,68 6,953,19 4,562,35 8,203,20 766,86 976,71 1,436,87 99,97 8,287,27 1,678,18 54,14 65 87 1,373,60 6,738,88 2,379,27 7,235,55 4,650,86 490,37

#### TABLE NO. IV.

Classified Statement showing the amount paid for the several classes of work charged to stone cutting, from Jan. 1, 1874, to Nov. 30, 1875. Also a Classified Statement of the number of cubic feet cut.

	GRANITE CUT-		LIME STO		SAND STO		amt.
	1874.	1875.	1874.	1875.	1874.	1875.	Total amt.
mount paid cutters for cutting by the foot—See Table No. III.  mount paid cutters for work by the day—for days, See Table Nos. I and II  mount allowed extra for checks, false joints, miters, and lewis holes  mount paid for cutting lewis holes by the day—See Table No. II.  mount paid foremen of cutters, by the day—See Table Nos. I and II.  mount paid for handling and tool sharpening by the day—See Table Nos. I & II.  mount allowed extra for bad stone and accidents  mount paid for marking tools and materials, rubstones, etc.  Total amount paid for cutting during 1874 and 1875	21,12 20,25 45,91	23.50	\$21,767.82 582.73 603.05 1,337.75 5,799.68 210.73 20.29 \$30,322.05	256,68 123,45 416,08 1,155,58	157,67 482,25 1,491,98 29,67 3,50	\$34,011.79 511.48 1,220.01 995.73 2,168.67 8,218.93 121.98 7,00	\$66,419. 1,372. 2,147. 995. 4,404. 16,742. 362. 30.
				,	10 1,000,40	817,285.62	892,474
ubic feet of Granite and Sandstone cut	Feet. Inches.	Feet. Inches.	Feet. Inches.	Feet. Inches.	Feet. Inches.	Feet. Inches.	Total Feet,

Note.—The cost of handling, and foreman for granite in the above table is charged to lime stone, as no division of time was made.

#### NUMBER FIVE.

# To the Board of Capitol Commissioners:

Gentlemen—I herewith present a report and exhibits of expenditures for the new capitol building, in detail, for the years 1874 and 1875, and in the aggregate, from the commencement of the work to November 30th, 1875, showing the disbursement of \$750,000.00, being the full amount thus far appropriated. The next annual appropriation of \$125,000.00 will become due January 1st, 1876.

In the year 1874, we received \$394.30 for damages for non-fulfillment of granite contract, and for sales of old machinery and spawls, as shown in exhibit C, which was disbursed as shown in the footings

of exhibit B.

In the year 1875 we received \$339.34 for sales of machinery, spawls, etc., as shown in exhibit E, which we have retained for purposes that

will be explained.

For convenience and system the board adopted the rule of monthly payments for labor and material purchased. About the first of each month a pay-roll is made, containing the names of all the operatives employed upon the capitol building during the preceding month, and the amount due each, which is signed individually,—upon which the Auditor's warrant upon the state treasury is issued for the aggregate amount.

For the prompt and just payment of labor or services that may cease, or be discharged during the interim between pay days, we have experienced great difficulty and inconvenience in getting the necessary money—as the law defining the powers and privileges of the board does not provide for any money to be in our possession. For this purpose, it was thought advisable to retain the money received from sales as a relief from our difficulties. The relief, however, has proved only partial and unsatisfactory, and will be more so in the future, as the kind and qual-

ity of labor increases in value.

To remedy the difficulties, and effect the desired change, I would suggest, that the legislature be requested, at its coming session, to pass a special law, authorizing the State Treasurer to pay the certificates of the overseer, issued for labor or service performed upon the new capitol building, during the interim between the pay rolls, and also declaring that said certificates shall be included and redeemed in the Auditor's warrant issued for the succeeding pay roll. Should this be effected, then the money, as received for sales, could be permanently disbursed.

The accompanying exhibits are in the following order:

A. Classified statement of the aggregate expenditures, in detail, from the commencement of the work to December 31, 1873.

B. General statement of expenditures from January 1, to Decem-

ber 31, 1874.

- C. General statement of cash received in 1874, and to what class credited.
- D. Classified statement of expenditures in detail from January 1st, to December 31st, 1874.
- E. General statement of expenditures from January 1st, to November 30th, 1875.
- F. General statement of cash received in 1875, and to what class credited.
- G. Classified statement of expenditures in detail, from January 1st, to November 30th, 1875.
- H. Classified statement of the aggregate expenditures from the commencement of the work to November 30th, 1875.

I. Consolidated classified statement of expenditures and apportion-

ments to November 30th, 1875.

In our mode of classification, some of the material purchased has been entered directly to the class in which it was used—for instance, iron purchased for repairs, or for making new machinery has been entered directly to machinery and tools—and steel purchased for making stone cutting tools has been entered to stone cutting—and lumber purchased for machinery and tools, or for the railroad has been entered to each class—also, the wages of the general foreman and watchman, has been entered to salaries. Material purchased to be used in different classes, is classed by its own name.

All of which is respectfully submitted.

JOHN G. FOOTE, Superintendent of Finance.

## (EXHIBIT "A.")

### CLASSIFIED STATEMENT

Of the approprie expenditures in detail from the commencement of the work to December 31st, 1873.

ON WHAT ACCOUNT.	AMOUNT.
Tans	8 3,943.1
reavation and drainage	
lone	89,426.7
Safern	1,512.1
	2,723,6
Expenses and miscellaneous	1,437.9
alaries	21,503.4
tepairs, removing foundation	
tone masonry	14,711.2
trick masoury	7,835.2
oncrete	4,289.6
rinting and advertising	1,564.4
ieneral labor	30.5
atterns	74.8
Vater	475.0
tubble masonry	4,765.9
owa City quarry	24,080.7
Irick masonry in basement	,2,323.5
tone setting	863,3
andstone cutting	51,267.8
Cailroad	10,177.7
amber and timber	2,939.1
Vrought iron work	488.0
arpenter work	2,938.8
ement	13,617.6
Board of commissioners	9,143.3
40	957.25
Ischinery and tools	9,352.6
fails and hardware	458.33
Vater pipe and meter	647.46
rick and the second sec	22,645.00
ron and steel	252.80

# [EXHIBIT "B."]

# GENERAL STATEMENT OF EXPENDITURES

from January 1st to December 31st, 1874.

Date of	Number of Voucher.	IN WHOSE FAVOR.	ON WHAT ACCOUNT.	Amount,
10 10 10 10 10 10 13 Feb. 4 5 5 5 5 6 6 Mar. 5 5 6 6 7 19 19 19 20 Apr. 3 3 3 3 3 3 3 3.	783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 826 821 821 821 821 822 823 824 825 826 826 827	John G Foote	Hardware account for quarry	8,009.97 16.90 20. 0 2,25 17.50 13.00 8.75 34.20 101.40 184.00 300.00 135.45 64.95 15.00 99.12 625.00 80.00 48.95 125.57 250.00 300.00 2,092.04 82.15 3,361.97 113.85 150.42 72.07 177.93 263.25 176.83 64.85 2,363.07 575.00 31.19 68,25 10,000.00 1,312.73 300.00 2,11.15 66.70 59.50 2,25 63.23 9.53 101.65 33.16 260.55 19.63
3	83	3 Koser & Clark	Pay roll, Iowa City quarry	8 228 86

# EXHIBIT "B."-CONTINUED.

Date of Voucher.	Number of Voucher.	IN WHOSE FAVOR.	ON WHAT ACCOUNT.	Amount.
1874.	998	John G. Foote	Per diem and expenses, supt of finance	8 67.8
1874. Apr. 4. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6.	836 837 838 839 841 842 843 844 845 846 847 848 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 868 869 870 871 872 873 874 875 876 876 876 876 876 877 878 879 879 879 879 879 879 879 879	M. W. Comstock	Visiting quarries and examining buildings Per diem and expenses Blossburg coal for quarry Services at quarry Hardware, iron and powder. Advertising for bricks. Norway iron Water Advertising for bricks. Advertising and printing Lumber account Hardware, nails, and tools Coll Manilla rope. Salary as overseer. Salary as secretary, and expenses. Pay roll, lowa City Pay roll, bes Moines. Cement and coal Per diem and expenses superintendent of finance Freight on stone. Per diem and expenses. Engineering Iron beams, and angle irons. Tools, nails, and iron Brick on contract Advertising Couplings and nipples Water Lumber Pay roll, Iowa City Rope and iron for quarry Blacksmith coal Salary as secretary and expenses. Cement and fuel Pay roll, Des Moines. Per diem and expenses superintendent of finance Freights Salary as architect, and plans Lemont stone Pay roll, Des Moines Pay roll, Des Moines Pay roll, Dos Moines Pay roll, Dos Moines Pay roll, Dos Moines Pay roll, Iowa City	\$ 67.3 157.3 50.0 25.4 177.4 1,130.8 614.3 497.3 147.9 33.8 45.0 80.1 12.0 25.2 7.0 21.7 66.1 20.2 8.4 179.0 130.6 4,217.5 641.8 60.2 5,298.9 641.8 60.2 531.5 175.0 8.0 8.0 175.0 8.0 175.0 8.0 175.0 8.0 175.0 8.0 175.0 8.0 175.0 8.0 175.0 8.0 175.0 8.0 175.0 8.0 8.0 175.0 8.0 8.0 175.0 8.0 8.0 175.0 8.0 8.0 175.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8
2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2	884 885 886 887 888 889 890 891 892 893 894 895	John G. Foote	Pay roll, Iowa City	2,083,48 59,40 250,00 1,780,74 620,40 248,37 10,00 25,11 7,24 97,00 10,89 6,00 12,50 13,50

# EXHIBIT "B,"—CONTINUED.

Date of Voucher,	Number of Voucher.	WHOSE FAVOR.	ON WHAT ACCOUNT.	Amount.
2. 2. 7.	900 Des Me 901 Gitber	oines Water Co t, Hubbard & Co.	Tracing cloth and wall paper	17 10 5
7 8 9	903 C., R. 904 H. F. (	I. and P. R. R Setchell and Sons d of Comm'rs	Salary as secretary, exp. to Anamosa Freight bills Lumber and timber Per diem and exp. board meeting	149 675 88 339
9. 9. 10. Aug. 6.	906 A. H. 1 907 Waldr 908 Des M	Piquenard on Bro's oines Coal Co	Per diem and exp. visiting quarries Salary as architect and exp. to quarries Cast iron on contract and shop work	579 897 180 1,008
6. 6. 6.	910 Martin 911 Sheph 912 Franc	n Heisey ard and Hess is Geneser	Anamosa stone  Rope and powder for quarry  Brick on contract	16 600 24 2,691
6. 6. 6.	914 C. J. H 915 J. K. & 916 Bolton	lammer k W. H. Gilcrest l Bro's	Salary as secretary and office expenses Hauting from depot Lumber	127 8 53 11
6. 6. 6.	919 C. H. 920 Hiran	Ward Robinson	Water for July Two W. P. Blocks	18 14 42 4 185
ug. 7.	923 J. D. S 924 J. N. C	Seeberger Close	Salary as overseer and exp. to quarry Lumber	23 25 178
7.	927 John 928 John	G. Foote B. Webb	Pay roll, Iowa City	1,778. 81. 107. 300.
8, 10, 10, 10,	930 John 931 J. C. T 932 Watso 933 Union	aylor on Coal & Mi'ng Co Foundry Works.	Pay roll, Des Moines	7,853, ,745, 41, 545,
2 i. ep. 4. 4.	934 C., R. 935 Franc 936 J. N. C 937 John	I. & P. Railroad is Geneser lose G. Foote	Brick on contract	3,752, 443, 1,765,
4. 4.	939 Shepa 940 Marsh 941 Des M	al Talbot oines Water Co	Salary as overseer, expenses to quarry Iron and hardware for quarry Railroad ties Water for August	16.
4.	943 H. F. 944 A. H. 945 Bolton	Getchell & Sons Piquenard n Bros	Lumber	68 300 15
4. 4. 4. 5.	947 Watso 948 Ed W	right	Engine coal	37, 174, 13,
5. 7. 7.	952 Brook 953 John 954 John	s, Wilson & Stein G. Foote	Cement and lime	5,838 26 35 39
7. 8. 9. 12.	955 C., R. 956 Franc 957 Daws 958 Board	I. & P. Railroad is Geneser on & Gerry	Brick on contract, final settlement  Re cutting files	1,613 28 182
12	959 C., R. 960 W. F. 961 Ed W	I. & P. Railroad Hackneyright	Freight on Carroll county stone	292, 75, 131 1,864 654

## EXHIBIT "B."-CONTINUED.

Ľ.				
Date of Voucher	Number of Voucher,	IN WHOSE FAVOR,	ON WHAT ACCOUNT.	Amount.
1874.	001	C P I & D Patternd	Freight bills	794.58
. 5	965	Eugene Paine	Blossburg coal at quarry	15.00
5	966	shepard and Hess	Hardware for quarry	11.82
5		J. D. Seeberger	Hose and couplings	8.90 9.90
5 5	969	H. F. Getcheil and Sons	Lumber	77.40
5.,	970	Kimbark Bros, and Co	Machine bolts	4,79 15,85
5 6		J. S. Clarkson, P. M	Nails, hardware, and steel	18 34
6	978	A. H. Piquenard	Salary as architect	225.00
6	974	John B. Webb	Anamosa stone	, 118.88
6		R. S. Finkbine	Salary as overseer and expenses to	240.00
6		John G. Foote	Per diem and expenses superintendent of finance	69.00
7		Des Moines Coal Co	Cement and fuel	879.71 5,042.49
Nov. 4.	2000-00			128,85
Nov. 4	980	R. S. Finsbine	Iowa City pay roli	2,013,35
5	981	R. S. Finkbine	Salary as overseer and expenses to	257.95
5	982	Carroll Co. Sandstone Co	Dimension stone on contract	1,745.04
5	983	C., R. I. and P. Rallroad St.Genevieve Sandstone	Freight bills for October	2,448.63
	0.50	Company	Dimension stone on contract	1,980 92
5	985	A. H. Swan, attorney	Rental on railroad right-of-way	240,00 71,96
5		Shepard and Hess	Coil Manilia ropeRope and powder for quarry	29.66
6	988	J. N. Close	Brick on contract	85,65
6		Des Moines Coal Co	Cement and coal	1,095.95
17. 18.	991	A. H. Piquenard	Salary as architect	300.00
18.	992	C. A. Ryden	Carrying express and mail one year	18.25 10.83
18. 18.		Koser and Clark	Cast plates and separator	2.00
18	995	J. D. Seeberger	Cable chain and wire	25.84
18.	996	Bolton Bros	Haraware account for October Roll tracing cloth	24,25 11,00
18. 18.	A STATE OF THE REAL PROPERTY.	Des Moines Water Co	Water for October	13,37
18.	The second of the	Watson Coal and Min		60 36
10	1000	ing Co	Coal Lumber and timber	69.98
10	1001	John G. Foote	Fer diem and expenses Finance Com	71 35
10	1005	S.A. Robertson	Cement and lime	109.89 23.00
10	1004	Brooks Wilson & Stein	Work on wheels and avies	22,23
19	1003	Frank Moran	From injuries received in May 18/4	150.00 157,25
20,	1006	Board of Commissioners	Per diem and expenses	9,630,47
Tion 0	1008	Ed Wright	Salary as secretary, for November	125,00
9	12008	Hed Wright	Pay roll, lowa City quarry	1,558.92 250,00
15	1011	St. Genevieves S. & G.Co	Stone on contract	1,207.53
5	1015	C R I & P. Railroad	Freights on stone	707.00 542.53
77:	11012	Rurroll Co. Sandstone Co	Stone on contract	18.00
15	1013	Stohn G Foote	Per diem and expenses, supt. of finance Repairing valve and tuyere iron	61.15 4.10
1875.			The same of the sa	18,90
1071		R.S. Finkbine		434.51
Dec. 22	101	8 H. F. Getchell & Sons 9 J. C. Taylor	Lumber and timber for stone sheds	464.10
91	100	Rolton Bros	Tools, zinc, stoves and hardware	140.91
550	TOU	I MaDonnall & Moore	Shop work on iron beams	41.33

## EXHIBIT "B."-CONTINUED.

Date of Voucher.	Number of Voucher,	IN WHOSE FAVOR.	ON WHAT ACCOUNT.	Amount,
1875. Jan. 2 5 5 5 5 6 6 6	1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1040 1041 1042 1043 1044	Ed Wright Scott & Bartlett F. D. Booth L. Fisher Skinner & Brother Skinner & Brother Carter, Hussey & Curl.,, Hiram kobinson Des Moines Coal Co C. H. Ward Iowa City Quarry Co John G. Foote A. H. Piquenard D. C. Overman L. Robinson & Sons John G. Foote C., R. I. & P. Railroad Carroll Co. Sandstone Co R. S. Finkbine John G. Foote St. Genevieve S.S. & G.Co J. N. Close	Salary as secretary and expenses in Dec Sand on contract	130.15 258.75 3.00 4.20 2.00 12.80 3.40 30.15 63.03 50.81 123.55 600.00 13.95 139.71 6,544.50 701.00 587.51 217.10 30.25 315.19 396.00
in e	xhib	it C	were paid with cash received as shown assified as shown in exhibit D	\$164,918.60 394.34 \$164.594.96

# [EXHIBIT "C."]

### GENERAL STATEMENT

Of Cash Received in 1874, and to what Class Credited.

CASH RECEIVED.	ON WHAT ACCOUNT.	Amount.
For damages in full of sureties of D. / Armstrong for non-fulfillment of granite contract For 2d hand steel wire and sand screen Wheel barrow and spawls For blacksmith work For spawls For spawls	Credited to stone	83 C0 16,50 1.00

### [EXAIBIT "B."]

### CLASSIFIED STATEMENT

Of expenditures in detail from January 1st, to Dec. 31st, 1874.

ON WHAT ACCOUNT.	Amount
lans	- 20
ime stone	2,919.
and	696.
xpenses	105.
alaries	9,895.
rick-masonry	17.
oncrete	646.
rinting and advertising	154,
eneral Labor	46,
atterns	303,
Vater	85.
owa City quarry	40,125.
rick work, basement	13,677
tone setting	4,526
tone cutting	30.851
ailroad	939,
umber and timber	1,021
Vrought iron work	12,810
arpenter work	1,419
ement	6,264 2,290
oard of commissioners	511
uel	1,004
fachinery and tools	76.
ails and hardware	3.
Vater pipe and meter	14,232
rick	38.
ron and steel	754
ast iron work	156.
arroll county sandstone	5,985.
t. Genevieve sandstone	4,703
and-stone cutting	7,880
and-stone cutting	71.
ccidents	173.
xtra handling stone	85
	\$164,524.

# [EXHIBIT "E."]

# GENERAL STATEMENT

Of Expenditures from January 1st, to November 30th, 1875.

er.	_				
Date of Voucher	Number of Voucher.	IN WHOSE FAVOR.	ON WHAT ACCOUNT.		Amount.
1875.					
Feb. 10	1047	St. Genevieve S. S. and	Partial pay roll, Des Moines		1,195.8 465.9
10	1049	G. Company	Sandstone on contract		48.6 326,7
10 10	$1050 \\ 1051$	J. K. and W. H. Gilcrest H. F. Getchell and Sons	Lumber		12.6 27.5
		Watson Coal and Min-			55.
10	1053	Ed Wright	Salary as secretary and expenses		135.9
11	1055	John G. Foote	Sandstone on contract		543,3 2,514.3
11	1056 1057	A. H. Piquenard John G. Foote	Salary as architect Per diem and expenses superintendent		300.
			of finance		58.
	1-		Per diem and expenses		326. 79.
12	1060	Treasurer of Polk Co	Taxes on Gaunt lots. Railroad right-of-		135.
17	1061	Ed Wright	Pay roll, Iowa City		3,192.
9	1063	Shepard and Hess	Lumber for quarryIron and powder		7. 36.
9	$\frac{1064}{1065}$	Smith and Gilmore William Marshall	Repairs on wagon		8. 12.
10	1066	R. S. Finkbine	Salary as overseer		230. 126.
10	11068	A. H. Piquenard	Salary as architect Lumber and timber		300. 57.
10.	1070	Hiram Robinson	Globe valve and pipe for engine		4.
	1072	Watson Coal and Min-	Freights on stone and machinery		150,
10	1073	John G. Foote	Per diem and expenses superintendent		21.
10	1074	John G. Foote	Pay roll, Des Moines		49. 985.
11	1075	Scott and Bartlett	Sand Brick on contract		203. 550.
23	11077	Ed Wright	Salary as secretary and stone jacks		333. 50.
Apr. 14	1079	R. S. Finkbine	Right-of-way rental as per contract Salary as overseer		250.
20	1080	Watson Coal and Min- ing Company	Fuel		25.
*26.1	11114	Litter to the state of the stat	1111 01108 2010 10080		300. 21.
20	1088	Bolton Bros	Lemont stone		83. 196.
20	1085	H E Getchell and Sons	Lumber and timber Dimension stone on contract	1	469. 941.
431	11097	O D I and P Railroad	Eretont pills	1	735.
21	1088	John G. Foote	Pay roll—Des Moines		37. 2,584.
2.1	11000	Roard of Commissionr's	Per diem and expenses Partial payment on engine contract	1	288. 1,500.

# EXHIBIT "E."-CONTINUED.

Date of Voucher.	Number of Voucher.	IN WHOSE FAVOR.	ON WHAT ACCOUNT.	Amount.
1875. May 5	1000	Ed Wright	Pay roll of workmen	3,728.
6.	1093	James Wagoner	Repairing wagon	52,
6	1094	Des Moines Water Co	Water from November 14, 1874	200
6.,	1095	A. H. Piquenard	Salary as architect	300, 225,
		Ed Wright	Salary as secretary and expenses	125.
6	1098	H. F. Getchell & Sons	Lumber and timber	71.
6	1099	Brooks, Wilson & Stein	Iron work for derricks	423
6	1100	Bolton Bros	Iron, steel and hardware	176. 17.
6	1101	Carr. Il Co Sandstone Co	Hose coupling and water pipe fixtures Dimension stone on contract	1,865
6	1103	Des Moines Coal Co	Fuel and Cement	203,
8-	1104	James N. Close	Brick on contract	40.
10	1105	C., R. I. & P. Rallroad	Freight on stone	2,409 3,134.
17	1107	C I Hammer	Freight and drayage on oil & machin'y	22.
17	1108	J. C. Canon & Co	Three bbls machine oil	82.
18.	1109	John G. Foote	Per diem and expenses, supt. of finance	26. 129.
20	11110	Gilbert Hubbard & Co	Per diem and expenses	516
21	1112	C. C. Winchell & Co	Part payment on engine	1,242
Inna 1	11113	C. R. L & P. Railroad	Freight bills	4,427.
1	1114	John G. Foote	Per diem and expenses, supt. of nnance	24. 304,
1	1116	Munson & Turner	Stone	18
1	1117	A. Robertson	Bolts, sockets, etc	97.
1	1118	S. A. Robertson	Lime	24.
1.,	1119	H. Robinson	Hose, nipples and valves	12. 9.
1.0	1121	Ed Wright	Salary as secretary and expenses	127.
1	1122	A. H. Piquenard	Salary as architect	300.
1	1123	R. S. Finkblne	Salary as overseer	237. 2,645.
2	1124	C R I & P Railroad	Stone on contractFreight on stone	50,
3	1127	Des Moines Coal Co	Cement and fuel	498.
3.	1127	Bolton Bros	Iron and hardware	114. 45.
3	1128	C. H Ward	Paints and oil	8,716.
Tune 4	1130	St. Genevieve S. S. & G.		9,10
		Company	Stone on contract	4,465.
4	1131	H. F. Getchell and Sons	Lumber and timber	197.
14.,	1102	St. Geneveive S. S. & G. Company	Dimension stone on contract	1,544.
25	1133	A. H. Piquenard	Salary as architect	300.
26.	1134	J. C. Taylor	Brick on contract	277.
29	1135	Carroll county sand- stone Company	Dimension stone on contract	1,793.
29	1136	St. Geneveive S. S. & G.		
	112000	Company	Dimension stone on contract	1,778.9
29	1137	John G. Foote	Per diem and exp. supt. of finance Salary as overseer	250.0
20	1139	Ed Wright	Salary as secretary and expenses	126.
29	1140	E. Walker	Lemont stone for corridor	698.3
29	11141	J D Seeberger	Iron and steel rope	254.
29	1143	W. C Street	Drain pipe	6.0
29	1144	C. J. Hammer	Drayage and teaming	6.2
29	1145	Hiram Robinson	Pipe, nipples, elbows and fitting	92.8
29	1146	Bolton Bro's	Iron, hardware, nails and tools Lumber and timber	393.
29	1148	C, R. I. and P. R. R	Freight bills	3,562.
29	1149	John G. Foote	Pay roll	12,423.5
29	1150	Redhead & Wellslager Alex Robertson	Drawing and tracing paper Bo ts, sockets, lewises, and elevises	72,4
7,71,2	11/01	TATES INOUGIUSUH A TOTAL	THE DELL COLUMN TO THE PROPERTY OF THE PARTY	11.9

# EXHIBIT "C."—CONTINUED.

Date of Voucher.	IN WHOSE FAVOR.	ON WHAT ACCOUNT.	Amount.
2. 1155 2. 1156 7. 1157 7. 1158 29. 1160 31. 1161 31. 1163 31. 1163 31. 1163 31. 1166 31. 1166 31. 1167 Aug. 3. 1168 3. 1170 3. 1171 3. 1172 3. 1173 3. 1174 4. 1176 4. 1177 4. 1178 4. 1176 4. 1177 4. 1186 5. 1186 7. 1186 20. 1186 20. 1186 20. 1186 20. 1187 31. 1196 31. 119	Brooks, Wilson & Stein, S. A. Robertson J. S. Clarkson, P. M C. C. Winchell and Co	Lumber and timber	314.1 30.6 44.8 300.0 250.0 107.3 10.7 6.2 4.7 128.0 882.7 7.7 1,786.3 2,129.1 48.4 7.0 81.0 21.8 158.8 26.5 23.8 287.4 64.9 88.1 1,364.0 51.3 1,209.2 17,252.5 1,253.0 260.8 1,991.5 108.3 217.4 131.8 200.0 230.0 300.0 77.5 82.3 145.6 152.6 3,095.7 1,47.8 2,108.0 230.0 300.0 77.5 82.3 145.6 152.6 1,91.5 108.3 145.6 152.6 1,91.5 108.3 1,009.2 1,253.0

## EXHIBT "E."—CONTINUED.

Date of Voucher.	Number of Voucher.	IN WHOSE FAVOR	ON WHAT ACCOUNT.	Amount.
1875. Sep. 28	1220	S. D. Kimbark	Railroad iron and spikes	\$ 66.80
28	1221	C. J. Hammer	Freight paid, and drayage	4,30
28	1223	R. S. Finkbine Bolton Bros Watson Coal and Min-	Salary as overseer in September	250,00 66,42
Oct. 2	1995	Des Moines Water Co	Coal for engines	68,64 31.21
2	1226	Des Moines Coal Co	Cement and Blossburg coal	1,758.20
4.,	1227	C., R. I. and P. Railroad	Freight bills	2,186 28
6	1228	James N. Close	Stone on contract	513.33 191.02
9	1230	J. C. Taylor	Brick on contract	1,617.77
21	1231	John P. Irish	Advertising brick wanted	8.00 5.00
22	2233		Per diem and expenses	168.01
20.	1201	G. Company	Stone, est. No. 117	7,422,25
25	1235	J. C. Taylor	Brick, est. No. 118	889.36 155.00
		Ed WrightIowa State Register	Salary as secretary and expenses	13 00
4	1238	A. H. Piquenard	Salary as architect	300.00
4.,	1240	R. S. Finkbine	Oak lumber	230.09 18.60
4	1949	ing Company	Coal furnished	114.30 18.25
4	1243	C. A. Ryden Hiram Robinson	Valves, steam gauge and nipple	14.90
4	1244	H. F. Getchell and Sons	Lumber and timber	233,00 30,15
4	1246	Des Moines Coal Co	Olls and brushes.	1,880.00
4	1247	Des Moines Water Co	Per diem and expenses as superintend-	23,63 49,85
5	1249	Francis Geneser	Brick, estimate No. 119	323.86
5	1250	S. A. Robertson	Brick, estimate No. 120, and lime	520.47
5	1251 1252	Bolton Bros	Iron, tools, nails, hardware, and zinc Freight bills on stone	126.70 3,242.25
5.,	1253	Carroll Co Sandstone Co	Stone, estimate No. 121	1,241.38
5.,	1254	John G. Foote	Pay roll of workmen	13,422.60 63.20
9	1256	J. C. Taylor St. Genevieve S. S. and	Brick on contract	851.15
20	1050	G. Company Des Moines Water Co	Stone on contract	1,590.84 17.32
30	1259	Blasher and Bringolf	Ice for office and shops for season	9.00
30	1261	Carter, Hussey & Curl A. H. Swan, Attorney John G. Foote	Rental on right-of-way for railroad Per diem and expenses as superintend-	7.25 240.00
50			ent of finance	49 45 150,00
30	1264	Ed Wright	Salary as secretary for November Salary as overseer	250 00
30,	1265	A. H. Piquenard	Salary as architect	300.00
Dec. 1	1266	Bolton Bros	Valves, couplings, pipe, etc	11.54 15.01
1	$\frac{1268}{1269}$	C., R. I. and P. Railroad	Freight bills for November	3,772.75 1,355.64
	10000	G. Company	Stone on contract	56 93
2	1271	Fransis Geneser	Brick, final estimate	406 14 2,215.20
2	1278	James N. Close	Brick on contract of J. N. Close	279.89
2	1274	H. F. Getchell and Sons	Lumber and timber	101.60 7,536.55
3	1276	Des Moines Coal Co	Cement and coal	359.70

Total expenditures for 1875; Classified as shown in Exhibit "G." \$210,649.86

# [EXHIBIT "F."] GENERAL STATEMENT

Of Cash received in 1875, and to what Class credited.

CASH RECEIVED AS FOLLOWS.

ARTICLES SOLD.	TO WHOM CREDITED.	Amount
For spawls sold For two derricks and spawls sold For pitch sold For old castings sold For sand For tree tops For old lumber	Credited to railroad	161,26 68,11 2,56 5,46 6,83
	On hand	\$339.3

# [EXHIBIT "G."] CLASSIFIED STATEMENT

Of Expenditures in detail from January 1st to November 30th, 1875.

ON WHAT ACCOUNT.	Amount
lans	\$ 30.
veryation and drainage	0.
tone	3,100,
and	002.
xpenses	99.
alarles	9,671.
rick-masonry\$63 13	
onerele	297.
rinting and advertising	20.00
eneral labor	
atterns	
Vater	20000000
(ALEF	
uarry	
rick-masonry, basement	
imestone cutting	339.
ash	
imestone cutting	
allroad	
umber and timber	2,054. 11.
Vrought iron-work	1 500
arpenter work	1,589.
ement / / / / / / / / / / / / / / / / / / /	1,401.
Soard of commissioners,	883.
'uel	792.
Agehinery and tools	8,450.
Vails and hardware	109.
Voter-nine meter	80.
rick	10,000.
ron and steel	51.
ast iron work	
Ime	178.
arroll county sandstone	23,770.
te. Geneveive standstone	41,011
andstone cutting	17,280,
Rubbing sandstone	5,953.
Accidents	
Extra handling stone	712.
Brick-masonry, 1st story	18,445.
Sandstone setting	7 11 1 Sept 11 11 11 11 11 11 11 11 11 11 11 11 11
andstone setting	
	\$210,712.
Brick-masonry material sold	63,

### [EXHIBIT "H."

### CLASSIFIED STATEMENT

Of the aggregate expenditures from the commencement of the work to November 30th, 1875.

ON WHAT ACCOUNT.	Amount.
Plans	4,023.71
Excavation and drainage	15,610.99
Stone	96,801.86
Cistern	1,512 12
Sand	4,083.04 1,642.35
Expenses and miscellaneous	41,069.97
Salaries	52,853.76
Repairs, foundation	14,711,21
Stone masonry	7,789.80
Concrete	5,333 36
Printing and advertising	2,048,15
General labor	807,21
Patterns	699,52
Water	738,67
Rubble masonry	4.765.97
Iowa City quarry	66,871,30
Brick masonry, basement	17,100.37
Stone setting	6,149.37
Cash	339,31
Stone-cutting	88,576,64
Railroad	12,637,90 6,015,15
Lumber and timber	13,310,16
Wrought Iron-work	5,947.16
Carpenter-work	27,373,31
Board of Commissioners	12,317.37
Fuel	2,261.63
Machinery and tools	18,807.33
Nails and hardware	643.91
Water-pipe and meter	787.44
Brick	50,446,61
Iron and steel	342,31
Cast iron work	754.77
Lime	334.86
Carroll county stone	29,755.85 46,215,19
St. Genevelve stone	55,166.02
Sandstone cutting	6,025.08
Rubbing stone	178.50
Extra handling stone	797.56
Brick-masonry, 1st story	18,445,60
Stone-setting, 1st story	8,462,58
Total expenditures to November 30th, 1875	

# [EXHIBIT "I."]

# CONSOLIDATED CLASSIFIED STATEMENT

Of expenditures and appropriations to November 30th, 1875.

CLASSIFICATION OF ACCOUNTS	Classified statement of the aggregate expenditures in detail from the commencement of the work to Dec. 31st, 1873.	Classified statement of expenditures in detail from January 1st to December 31st, 1874.	Classified statement of expenditures in detail from January 1st to November 30th, 1875.	Classified statement of the aggregate expenditures in detail from the commencement of the work to Nov. 30th, 1875.
Plans  Excavation and drainage  Stone  Cistern  Sand  Expenses  Miscellaneous expenses  Salaries  Repairs, foundation	15 604.99 89,426.72 1,512.12 2,723.69 1,375.11 62,13 21,503.42 52,353.76	2,919.08 696.69 105.99 9,895.35	6,00 4,456,06 	15,610,99 96,801,86 1,512,12 4,083,04 
Stone-masonry Brick-masonry Concrete Printing and advertising General labor Patterns Water Rubble-ma only	7,835.23 4,389.68 1,864.40 50.59 74.86 475.03 4,765.97	17.70 646.30 154.25 46.93 303.51 85.18	-(63,13) 297,38 29,50 709,69 321,15 178,46	14,711.21 7,789.80 5,333.36 2,048.15 807.21 699.52 738.67 4,765.97
Iowa City quarry Brick-masonry, basement Stone-set'ing Cash Stone-cutting Railroad Lumber and timber Wrought iron-work	24,080.77 2,323.51 863.35 51,267.88 10.177.77 2,939.16 488.08	40,125.72 13,677,46 4,526,98 30,851,10 939.63 1,021,86 12,810.36	1,099,40 759,04 389,34 6,457,66 1,520,50	17,100,37 6,149,37 339,34 88,576,64 12,637,90 6,015,15
Carpenter-work Cement Board of Commissioners Fuel Machinery and tools Nails and hardware Water pipe and meter Brick	13,617,62 9,143 31 957 28 9,352 63 458.32 647,46 22,645,00	6,264.09 2,290.76 511.56 1,004.56 76.33 3.40 14,232.80	7,491.60 883.30 792.79 8,450.14 109.26 86.58 13,568.81	27,373.31 12,317.37 2,261.63 18,807.33 643,91 737.44 50,446.61
Iron and steel		754.27 156.55 5,985.37 4,703.99 7,880.40 71.25	50 178.31 23,770.48 41,511.20 47,285.62 5,953.83	754.77 334.86 29,755.85 46,215.19 55,166,02 6,025.08 173.50
Extra handling stone	\$ 374,825.88	\$ 164,524.26	8,462 58 \$ 210,712.99 63.13	18,445.60 8,462.58 \$ 750,000.00
Made by chapter 110, Laws of the Thirtee Made by chapter 35, General Laws of the The Made by chapter 35, General Laws of the Fo Made by chapter 35, General Laws of the Fo Made by chapter 48, Local Laws of the Fift Made by chapter 35, General Laws of the Fift Made by chapter 48, Local Laws of the Fift Made by chapter 48, Local Laws of the Fift Total appripriations to December 318 Aggregate expenditure classified as shown in	IATIONS. enth General description of the control of	ral Assemblen'l, Asser Ben'l, Asser Ben'l, Asser Ben'l, Asser Ben'l Asser Ben'l Asser Beral Asser	oly n'ly for 187 n'ly for 187 n'ly for 187 nbly for 187 nbly for 187 nbly for 187	\$150,000.00 2 100,000.00 3 125,000.00 4 125,000.00 4 75,000.00 5 125,000.00 5 50,000.00

#### NUMBER SIX.

### REPORT OF THE ARCHITECT.

To the Honorable Board of New Capitol Commissioners, Des Moines, Iowa:

Gentlemen:—Please find herewith the report of your architect on the progress of the work on the new capitol for the last two years, and on the quality of labor and materials used, with such suggestions for the further prosecution of the said work as he believes to be advisable.

You will find in the report of the overseer of construction, Mr. R. S. Finkbine, a detail of the quantity and value of all the work performed and material bought, which I will not repeat. You will find, by a comparison of the cost of such work, done as we do it in the capitol, with the cost of the same quality of work done in other public buildings, either contracted or done by day labor, under the general government system, sufficient ground to be satisfied that we have taken the best system as regards cost as well as the quality of the work.

We have laid all our brickwork in cement mortar at a greater cost than lime mortar, but the plainest examination shows the superiority of such work. This mortar is in itself stronger than the bricks, and with care taken to have all joints, either vertical or horizontal, well and carefully filled with said mortar, the whole work is nearly as if made of one block. There was a necessity for the use of cement mortar instead of lime on account of its quick setting qualities which prevents any settlement in the brick backing to the interior walls, as by the construction of heavy stone masonry with bond courses at proper places, we could not allow the use of such a material as lime mortar, requiring months before setting, as it would endanger the safety of the bond stone, which would have to carry the upper weight without proper support underneath; the settling of the brick masonry lowering the rear support, when the face stone remain the same.

We have saved quite a large amount of iron in the floor already put in place, as the basement being principally used for store room, no objection could be made to iron columns, supporting the principal girders, and thus diminishing their weight. We could not, with the proper distribution of the rooms of the next story, do the same without destroying their convenience and general appearance so that the iron floors of the upper stories will cost more than the floor already laid,

but less, however, than the first estimate for the same.

The brickwork of the dome piers is subdivided at convenient heights by bond stone, spreading the weight over the whole pier, where the construction makes it uneven.

We have as much as possible done the work so as to distribute the weights equally on the foundations, and to prevent the unequal settlement of the different parts, so unhappily frequent in large buildings.

Since my last biennial report, the basement story has been completed

at a cost of:

For stone, cutting and setting	\$144,215.60
For brick and laying	
For iron floor	15,015.38
For concreting	869.03

Total..... \$210,803.58

The main story is completed except a part of the north side for which all stone, but about 3,000 feet is on the ground and mostly cut; we have also more than 3,000 feet of stone for the next story on the ground.

The stone work in the west and east corridors is made of the Magnesian lime stone, of Lemont, Illinois, as it will have in many places heavy weights to carry when the dome will be constructed, and that stone is of a crushing strength nearly double to that of the Ste. Genevieve sandstone. This stone costs us some what more, for stone and cutting, than the sandstone of the exterior, but is worth the whole

cost by its special qualities of resistance to compression.

When your board found the impossibility of obtaining from the quarries of Messrs. Munson & Turner, stone in sufficient quantity, of the dimensions and quality required for the building, you decided to advertise anew for stone for the superstructure, and after visiting with your architect the different quarries represented in the proposals offered, your board have contracted all the stone required for the outside facing of the building with two different parties, one furnishing the light buff colored Ste. Genevieve sandstone, for the plain work of the building, at the price of one dollar and thirteen cents a cubic foot, and the other furnishing the light blue Carroll county sandstone, for the trimmings and moulded part at the price of ninety-five cents per cubic foot. Both of these prices are low considering the heavy freight necessary to bring stone from such a distance, and considerably cheaper than the lowest bid of acceptable stone given the preceding year, if we except Munson & Turner's proposal.

The Ste. Genevieve sandstone is a close, fine grained stone, the cement binding the sand being nearly pure silica; it is very strong for a sandstone, a little hard to cut, in fact I consider it the strongest and most durable sandstone I have ever seen used, and it is of a very uniform

and pleasing color.

The Carroll county, Missouri, sandstone is also a very fine grained stone, the cement binding the sand being a carbonate of lime, it is not so strong as the St. Genevieve, but it is much easier to cut and in using it for mouldings, carving and other ornamental work, we have saved a large percentage in the cutting.

The stone of both these quarries have been proven by long actual experience to stand very well all the influences of the weather, the Carroll county stone being second only to the Ste. Genevieve stone.

The effect of the contrast between stone of different color in the building, in the manner we are doing it, is, I believe very pleasing in appearance and increases considerably the general effect of the design. You can judge of the truth of this remark by the work already set; the upper part will certainly appear better yet than the lower story.

It has also been a fortunate resolution to have the stone taken from two different quarries, on account of unforeseen high water, damage to railroads, etc., so that some times one or the other of these quarries have been, without any fault or neglect of the contractors, unable to furnish the stone at such time as was required for the stone-cutters, and it would often have delayed considerably our work if the stone had been taken from one quarry alone, or had both quarries been near one another so that the same causes of delay would have occurred at the same time.

In speaking of stone, permit me to call your earnest attention to the fact that in the estimate made to conform to the requirement of the law limiting the cost of the building to the sum of one and a half million of dollars, the corinthian caps over the stone columns had to be made of cast iron and the cornice of galvanized iron, all painted in imitation of stone. At the same time that such work may be advisable in ordinary buildings, made to bear a certain interest to their owners, and destined in the near future by the natural increase of value of the ground, to be replaced by other and better buildings, I may be permitted to say that for a building built to last centuries, it is a bad and at the end costly experiment. Besides the sham they represent, which ought not to exist in the construction of a public building, especially the most important and costly built by the great state of Iowa, and destined to represent to future generations the degree of culture, intelligence, wealth, and public spirit of our times, these materials are destined to decay and will require in a certain time to be removed and replaced. As they belong to the constructive part of the building, it will be next to impossible to replace them by stone, so that it will force the same error to be continued by every generation.

The iron, cast or galvanived, will, if not carefully painted and repainted every few years, certainly rust and the rust will run on the stone underneath and discolor it in such a way that it may be impossible to repair it. It will require special care not only to have said painting done in time, but also great care to have it well done, as a small part left exposed would be sufficient to discolor a large surface. Besides in regard to a public building where a special law has to be passed to make an appropriation for such repairs, the time intervening between the mesting of two legislative assemblies may be sufficient to spoil a large amount of cut stone work. Members of your Board may remember that twenty years ago much iron for sills and caps for doors and windows was used in private buildings, and though cheaper than stone, because of these reasons the practice has been totally abandoned

in our time.

The cost of such Corinthian caps and cornice, if made of stone, will be \$85,000, including stone, cutting and setting, and I believe no money

cution.

can be better applied to make the building substantial in fact as well as in appearance.

I call more especially your attention at this time, on account of the necessity of having the change, if made at all, ordered by the legislature meeting this winter, as it will be too late at the meeting of the

It would be advisable, and even necessary for the good of the building, to have the same placed under roof in the next two years. It seems unnecessary to give many reasons for the same. The best of work needs protection from the weather, and ought not to be left many years exposed to the action of the winter. It is a matter of economy in construction, in the payment of annual salaries, as also in the cheapness of work done in large quantities; and I consider that the legislature will see the necessity of the use of the new capitol instead of the old building, and will from this cause alone find sufficient reason to

push the work with all possible dispatch.

Before giving the cost of placing the building under roof, I will also call your attention to the necessity of having all the hard wood lumber for the inside finish on the grounds and drying. I know that none of it will be required for use for two years, and the most of it for three years, but it is next to impossible to find in the market the quantity of dry lumber required, and its value is double that of green lumber, hence it is necessary, both on account of economy and certainty to have it when required, to buy it a long time in advance. We bought most of the hard wood lumber for the state house of Illinois, three years in advance, and we found by actual experience, that no money could have been more judiciously expended by reason of economy and of the good work performed.

The iron work for the roof has to be ordered a long time before wanted, as it is quite complicated and slow in execution, as are many other items which require much labor, hence the necessity of having provision made for the same a long time in advance, so that no unnecessary delay can occur in the completion of the work, which in certain cases may force us to discharge our hands, and replace them afterwards to the great detriment of the work and to an increased cost in its exe-

I propose, with your approbation, to have the roof covered with sheet zinc, such as I used for the Illinois state-house roof. I consider this roofing material as good as copper, (many in Europe consider it equal to bronze), and its cost is only half. It requires no painting, as it practically paints itself by its oxidation, which protects the zinc underneath and which cannot be taken off except by acids. The only difficulty is to prevent the effect of expansion and contraction which is greater than in any other metal, but which has been well overcome in Illinois where it was done under my direction. In a few years, when the workmen of this country shall have learned how to use it, I have no doubt that it will be the roofing material of all good buildings. It has to be used quite heavy, no less than one pound and a quarter per foot for ordinary buildings, and one and a half pounds, or more, is advisable for public buildings.

It is used on the continent of Europe for all kinds of buildings, public or private, with perfect success, and I have used it in different small

buildings in this country and on the state house of Illinois, and it has proved just as good and lasting as in Europe, and more durable in the last named building, than any other roof, as in the construction of the dome there has not been any working day without from four to five men all the time on said roof, and for months before, it was often used as a common passage for all the workmen, and for carrying material, without any perceptible effect. I can say, also, that it is the best looking roof of all, as may be seen in the state house of Illinois, where all the sheets are twelve feet long and two feet wide.

I estimate the value of the work necessary to place the building un-

der roof at \$600,000.00, divided as follows:

Stone for inside and outside	\$158,500.00
Cutting of same, except cornice and caps	
Cutting of cornice and caps	
Setting of stone	
Brick work	71,500.00
Iron colums and plates—cast	4,700.00
Wrought iron of second story and gallery	43,500.00
Wrought iron framing of roof and ceiling	41,000.00
	31,700.00
Roofing and sheeting	16,000.00
Hard wood lumber	3,500.00
Carpenter's work	
Rough lumber	4,000.00
Patterns for stone carving and iron casting	1,500.00
General labor	1,500.00
Fuel	1,800.00
Salaries, railroad track, stationery, and miscellaneous expense Contingencies and materials to be prepared for the following	26,000.00
year's work	28,150 00

\$600,000.00

All of which is respectfully submitted.

A. H. PIQUENARD, Architect Iowa State Capitol.

DES MOINES, IOWA, December 16, 1875.

