

FOURTH BIENNIAL REPORT

OF THE

BOARD

OF

CAPITOL COMMISSIONERS

TO THE

Governor of Iowa.

NOVEMBER 30, 1877.

DES MOINES:
B. P. CLARKSON, STATE PRINTER.
1877.

BOARD OF COMMISSIONERS.

GOV J. G. NEWBOLD.....President, *ex-officio*.
GOV. J. H. GEAR.....President, *ex-officio*, after Jan. 17, 1878.
MATURIN L. FISHER.....Farmersburg.
JOHN G. FOOTE.....Burlington.
PETER E. DEY.....Iowa City.
R. S. FINKBINE.....Iowa City.
ED WRIGHT, SecretaryDes Moines.

BELL & HACKNEY, Architects, Springfield, Ill., and Des Moines, Ia.
R. S. FINKBINE.....Overseer of Construction.
JOHN G. FOOTE.....Superintendent of Finance.
ED WRIGHT.....Assistant Overseer of Construction.

REPORT OF BOARD OF COMMISSIONERS.

TO HIS EXCELLENCY, JOSHUA G. NEWBOLD, *Governor of the State of Iowa:*

The commissioners appointed to superintend the erection of the new Capitol building think it advisable in submitting their biennial report to give a brief history of the work from the beginning, instead of confining themselves to the progress of the building from the date of their last report to the present time.

The first board of commissioners submitted four sets of plans of a Capitol building to Mr. Edward Clark, architect of the National Capitol building, for his inspection and criticism.

Mr. Clark suggested modifications of all the plans referred to him, and in reference to the plans known as the "Palladian," designed by Messrs. Cochrane & Piquenard, recommended that it be modified "by abolishing the attic stories and domes at the four corners and omitting the great dome for the present," with other changes in detail in order to lessen the cost.

The commissioners caused one of the plans, that of Messrs. Cochrane & Piquenard, to be modified in accordance with most of the suggestions of Mr. Clark, omitting only those that were a matter of specification as to the material to be used, and again referred them to Mr. Clark for his further inspection and suggestion. Mr. Clark made the following recommendations as to alterations in the modified plans:

1st. "That a large sum might be saved, and in my opinion the appearance of the building improved by reducing the height of the basement story, and abolishing the floor between the basement and cellar, making of them one story, instead of two as shown on the section.

2d. The panel and the acroteria in the pediment might be omitted. The finish of the walls of the porticos in the rear of the columns might be less elaborate, and the attached columns of the arcades be omitted, leaving plain piers.

3d. The foliated caps of the columns might be made of iron."

Mr. Clark adds, "These suggestions are made mainly to keep the cost within the sum fixed by law."

Without taking action on the latter recommendations of Mr. Clark, or formally adopting the plans, as prepared and modified by Messrs. Cochrane & Piquenard, the commissioners began and prosecuted the work on the building during the season of 1871, in accordance with said modified plan.

When the present Board of Commissioners took charge of the work, they were directed by law as follows: "To cause the present foundations, 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."

The law further provided that the Commissioners "shall direct all their action with a view to the completion of the building for the sum of one million five hundred thousand dollars." The Commissioners, in obedience to the law, caused a revision to be made of the estimates of their architects, and were satisfied that the building could not be completed in accordance with the plans as modified *by leaving off the domes* for the sum named in the law.

They considered the question of reducing the building in size, in order to decrease the cost, and deemed it not advisable, as it would be necessary to abandon all that had been done, and compel them to prepare and adopt new plans. They considered the recommendations of Mr. Edward Clark to the first Board of Commissioners, and rejected the first, that of reducing the building in height some nine feet, and they now point to the completed portion of the exterior for a demonstration of the correctness of their decision.

They adopted the others, with the exception of the change in the arcade columns, and altered their specifications accordingly; but these changes, in their judgment, *did not sufficiently reduce the cost*; and they directed their architects to further vary the specifications in the following particulars, to accomplish the desired object: "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 staircase, 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."

After making these changes, the Commissioners adopted the plans and specifications, and have worked from them.

At the session of 1876, the General Assembly directed the Commissioners to restore the original specifications so far as the change affected the capitals of the columns and pilasters and the cornice, which, so far as the walls are completed, are, and the balance will be, of stone.

During the progress of the work some changes, both as to the kind of material and the character of the construction of portions of the work, were, in the judgment of the Commissioners, advisable, as it was their aim to have both material and workmanship of the best quality. This has been attained in some instances at an increased cost over what was originally contemplated. The Commissioners are confident that in the light of the disasters which have recently overtaken some of the public buildings of the country, their course in these particulars was the only proper one to pursue.

It was almost impossible to procure limestone of sufficient size, and of the proper texture and color, for the columns around the interior of the dome, on the level of the House and Senate floors. Accordingly they have been made of polished granite at an increased cost of \$4,630.20.

The original specifications for the roof provided for an iron frame-work, and a covering of wood-sheathing and galvanized iron. The roof of the Patent Office at Washington, that was destroyed by fire during the past summer, was of similar construction, except that copper was used on wood-sheathing. The Commissioners desired to cover the Capitol building with a roof that should be durable, and as near as possible fire-proof, whether attacked from the exterior or from within. To attain this end it was important that wood be entirely omitted from the construction. The roof which the Commissioners have provided consists of an iron frame-work and rafters, on which is laid a sheathing of porous terra cotta; the covering of slate is bedded in Portland cement, and nailed to the terra cotta. This roof being heavier, involved stronger construction, and will increase the cost for the whole roof in round numbers \$10,500.00.

The building, as originally planned by Messrs. Cochrane & Piquenard, was designed to be finished with a turret or small dome, on each of the four pavilions, and a main dome in the center. In the modified plans, as suggested by Mr. Edward Clark, these were left off, and the pavilions were to be finished with balustrades and flat roof.

The walls of the main dome were to be carried up to the level of the ridge-line of the roof, and covered with a skylight. These are the plans as adopted by the Commissioners. The original plans provided

for a dome to be constructed of iron above the level of the ridge-line. In the judgment of the Commissioners iron is not the best material for out-door construction, from its tendency to corrode, and its liability to expand and contract with every change of temperature. They therefore deemed it best to construct that part of the work which they had in charge sufficiently strong to bear a dome built of stone, should it be thought desirable to build one, and use that material. To do this it was found necessary to increase the size and strength of the dome supports at four points, beginning at the foundation line, and continuing up to the level of the ceiling of the Senate. This has resulted in an increase of cost, amounting to \$8,392.41.

The Commissioners desire to say, that, in making the changes in the specifications, they have done so, only from the necessity of reducing the cost, and the changes which were made thereby were such as could be afterwards restored, with advantage to the building. They would respectfully recommend that they be given authority to restore all, as they have already been directed, to change the most important, that which affected the constructive part of the building.

The progress of the work on the building is such, that the Commissioners now ask to be directed whether the modified plans, which they have adopted, shall be carried out, and the building be finished without the turrets and main dome, or whether these shall be constructed. We estimate the cost of the great dome and turrets at \$461,190.24.

If it is intended to complete the building without the main dome, the small domes on the pavilions should also be omitted. In that case there only remains to place the balustrades and slate roofs on the south pavilions, to complete the entire exterior of that part of the building south of the main dome. If it is intended to erect the main dome, but at some future time, the small domes, as they involve but little additional cost, should be built as the work progresses. If it is intended to build both large and small domes as the work progresses, then all can be carried on together.

The Commissioners desire to say that the carrying on of the entire work is a question of cost, rather than of time, as the construction of the dome need not delay the finishing of the interior of the building. The Commissioners have caused careful drawings, and estimates of the cost of the construction of the turrets and dome, to be made for the information of the General Assembly, which they believe to be as accurate as an estimate of such unusual work can be made. The estimates are submitted in the architects report.

Since the date of the last report of the Commissioners, contracts have been made, after advertising as provided by law, with Emanuel Haugh, of Indianapolis, Indiana, for all the wrought and cast iron work for the roof of the Capitol building at five cents per pound for the wrought and two and one-fourth cents per pound for the cast iron, all delivered on the Capitol grounds. A contract was made with Frederick Haas, of Rock Island, Ill., for all the copper work of the roof, consisting of gutters, valleys, conductors and flashings at forty-three cents per pound put in place on the building. The slate for the roof covering was contracted for with the Huron Bay Slate Company, of Marquette, Michigan, at \$7.75 per square, delivered on the Capitol grounds. A contract was made with the Iowa Terra Cotta and Fire Clay Company, of Eldora, Iowa, to furnish all the porous terra cotta for the roof at seventeen and a half-cents per square foot delivered on the Capitol grounds.

On the nineteenth of November, 1876, Mr. A. H. Piquenard, Architect of the Capitol building, died at his residence in Springfield, Ill. At the next meeting of the Commissioners in December following, they elected to Mr. Piquenard's place Messrs. Bell and Hackney, who were to assume the duties of Architects on January first of the present year. Mr. Bell had been engaged as Mr. Piquenard's assistant on the Illinois Capitol from its commencement. Mr. Hackney had been similarly employed on the Iowa Capitol building.

During the past two years, and since the date of the last report of the Commissioners, the walls of the first or office story have been completed, the wing south of the main dome has been built the entire height, and placed under roof, with the exception of the corner pavilions. The balance of the exterior walls have been built to the level of the window-sills of the gallery story, the columns and piers supporting the dome have been set through the office and hall stories, the arches turned over them and the dome walls carried up to the level of the Senate ceiling. The iron beams, girders, and trusses forming the hall and gallery stories have been put in place. The hard wood for the interior finish of the building has been procured, and is stuck up on the ground. There is a large amount of material of different kinds on hand, for a detailed statement of which your attention is called to the report of the overseer of construction.

So soon as the building is placed under roof, the heating apparatus should be provided and put in place, in order that the walls may be dried and the finishing carried on at all seasons of the year. The

boiler-house should be located off of the capitol grounds to prevent the smoke and soot from discoloring the building. The Commissioners ask that authority be given to purchase a lot for this purpose across the street from the capitol square, as the boiler-house should be erected and the heating apparatus put in within the coming two years.

The Commissioners take this occasion to repeat that an appropriation large enough to prosecute the work with all the hands that can be kept advantageously employed is the best economy, and say that at no time since the completion of the foundation has this been possible, for want of sufficient appropriation.

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

1st. The condensed report of the overseer of construction of the work on the capitol building for the years 1876 and 1877.

2d. Report of the Superintendent of Finance of the expenditures in detail for the years 1876 and 1877, and of the classified expenditures from the commencement of work on the building.

3d. Report of the Architects for the years 1876 and 1877.

4th. Report of the Architects on the cost of constructing main dome and turrets.

MATURIN L. FISHER.

JOHN G. FOOTE.

PETER A. DEY.

ROBT. S. FINKBINE.

NUMBER ONE.

CONSOLIDATED REPORT OF OVERSEER OF CONSTRUCTION FOR THE YEARS 1876-7.

To the Capitol Commissioners—

GENTLEMEN:—I herewith submit my report of the materials purchased and delivered on contracts, and of the work done on the new capitol building in the years 1876 and 1877, condensed from my annual reports.

During the above named time the walls of the first or office story have been completed, the south wing has been built the entire height, the arcade balustrades set, the roof put on with the exception of the two pavilions; the balance of the walls have been carried up to the level of the window sills of the upper or gallery story; the dome piers and columns have been set, the circular arches turned, and the walls carried up to the level of the Senate ceiling.

I purchased, as directed by the Commissioners, at various times during the year 1876, the sand needed for the ensuing season's work, at two and one-fourth cents per bushel, delivered; the cast iron plates for the beams of the second and gallery floors, at two and three-fourth cents per pound, delivered; the stone for the portico floors of Jas. Cash, at Lemont, Ill., at the following prices, delivered on the cars at Joliet, Ill.:

Stone to dress 6 inches thick, at 24 cents per square foot.

Stone to dress 8 inches thick, at 40 cents per square foot.

Stone to dress 10 inches thick, at 45 cents per square foot.

Stone to dress 14 inches thick, at 55 cents per square foot.

Stone to dress 16 inches thick, at 64 cents per square foot.

I purchased of L. Robinson, of Sauk Rapids, Minnesota, the granite for the bases and caps of the pedestals to the rotunda column, at 80 cents per cubic foot on cars at quarry, which cost \$1.75 per cubic foot delivered at capitol.

I purchased of P. W. Schneider, of St. Louis, at different times

shown by my reports, the granite dies, bases and shafts for the rotunda columns. This work Mr. Schneider furnished on the cars in St. Louis, of red granite, polished, at \$5.00 per cubic foot for the columns and dies, and \$6.00 for the bases.

I purchased of Edwin Walker, of Lemont, Illinois, a portion of the limestone for the pilasters of the second and gallery stories, at 80 cents per cubic foot for the smaller, and 90 cents for the larger sizes, delivered on cars at Joliet.

I purchase of the Illinois Stone Company, of Chicago, the balance of the limestone for the pilasters, columns and capitals for interior work of second and gallery stories, at 72 cents per cubic foot, on cars at Joliet.

I bought of J. Y. Maccomb, of Chicago, a brick hoisting machine, costing \$400.00 on cars.

During the year 1877 the following purchases were made:

Sand for the season's work, at 2½ cents per bushel.

The iron ceiling beams for the east wing, the pavilions and south portico, of Union Foundry Works, Chicago, at \$3.65 per pound, delivered.

The iron tie rods for arches of portico, of Brooks & Co., Des Moines, at \$75.55.

The iron tie rods for dome work, of Union Foundry Company, Chicago, at \$408 93.

Portland cement for roof, of Conrad Youngerman, Des Moines, at \$4.70 per barrel, delivered.

The terra cotta balusters, of Chicago Terra Cotta Company, Chicago, at \$3.75 each.

I purchased of Edwin Walker, of Lemont, Illinois, a portion of the stone for dome work, including the larger sizes wanted, at 80 and 90 cents per cubic foot, on the cars, and a portion of the Illinois Stone Company, at 72 cents, and a part at 60 cents; the bond stone I bought of Worthy & Brother, of Chicago, at 30 61-100c. per cubic foot, on cars.

The miscellaneous purchases will be set forth in detail.

There has been no change in the organization of the working force on the building since the date of my last report.

Statements are attached, showing the amount and kind of material received, and work done during the years 1876 and 1877, and from the commencement of the work. Also, statement showing the amount and kinds of material on hand.

R. S. FINKBINE,
Overseer of Construction.

STATEMENT

Of material received for the Capitol building during the years 1876-7:

<i>Dimension Stone.</i>			
	ft.	in.	ft. in.
Limestone from Illinois Stone Co.....	3,831	11	
Limestone from Edwin Walker	3,872	6	
Limestone from James Cash	3,633	3	
Limestone from John Worthy & Bro.....	1,337	9—	12,675 5
Sandstone from Carroll County Sandstone Co.....	47,552	9	
Sandstone from Ste. Genevieve Sandstone and Granite Co.....	55,439	3—	102,992 0
Granite from L. Robinson & Son	287	8	
Granite from P. W. Schneider	1,607	8—	1,895 4

Total dimension stone received..... 117,562 9

Brick received.

From J. C. Taylor.....	71,617
From J. N. Close	119,163
From S. A. Robertson	2,000,250
From Francis Geneser.....	1,579,637

Total number brick received.....3,770,667

Cast Iron—Pounds.

From Samuel Green.....	39,482
From Emanuel Haugh	9,747

Total pounds cast iron..... 49,229

Wrought Iron Work—Pounds.

From Union Foundry Works	817,513
From Emanuel Haugh	279,839
From Bolton Brothers	448
From Brooks, Wilson & Stein	798
From McDonnell & Meara.....	153½

Total pounds wrought iron work received.....1,098,751½

Pine Lumber and Timber Received—Feet.

From H. F. Getchell & Sons.....	238,336
From J. K. & W. H. Gilcrest	48,673
From Chicago Lumber Co.....	38,013

Total feet pine lumber and timber..... 325,022

Hardwood Lumber Received—Feet.

From J. K. Gilcrest, Oak	55,665
From J. K. Gilcrest, Black Walnut.....	25,028
From J. K. Gilcrest, Yellow Pine flooring.....	120,643
From Harbach & Jackson, Black Walnut.....	55,368
From Harbach & Jackson, White Walnut	32,794
From Harbach & Jackson, Cherry.....	30,119
From Chicago Lumber Co., Yellow Pine.....	40,399
From Chicago Lumber Co., Ash flooring	50,999
From James C. Trotter, Chestnut.....	30,958
Total feet hardwood lumber received.....	441,973

Lime Received—Bushels.

From Des Moines Coal Co.....	5,919½
From S. A. Robertson.....	36
Total bushels lime received.....	5,955½

Sand Received—Bushels.

From Scott & Bartlett.....	16,251
From Christ Huseh.....	6,336
From G. W. Logan.....	5,157
From Patrick Sullivan.....	5,062
From P. E. Bartlett.....	5,285
From James Hartman.....	5,317
Total bushels sand received.....	43,408

Cement, Utica—Pounds.

From Des Moines Coal Co.....	1,325,296
From S. A. Robertson.....	2,650
Total.....	1,327,946

Portland Cement—Barrels.

From Conrad Youngerman.....	116
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Plaster Paris—Barrels.

From Martin Tuttle.....	2
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Water—Gallons.

From Des Moines Water Co.....	863,217
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Coal Received—Pounds.

From Des Moines Coal Co.....	1,051,440
From C. R. I. & P. R. R. Co.....	22,200
Total pounds coal received.....	1,073,640

Coke Received—Bushels.

From Capital City Gas Light Co.....	650½
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Paints and Oils.

White lead—pounds.....	99
Mineral Paint—pounds.....	45
Red lead—pounds.....	1,100
Turpentine—gallons.....	13
Japan dryer—gallons.....	6½
Asphaltum—gallons.....	6
Linseed oil—gallons.....	144

Miscellaneous.

Sheet lead—pounds.....	2,742
Sheet copper—pounds.....	7,996
Roofing slate—pieces 10x20 inches.....	29,189
Porous Terra Cotta, for roofing—sup. feet.....	16,072
Wood for office—cords.....	2½
Iron, bar and rod—pounds.....	7,676½
Steel, for tools—pounds.....	480
Nails—pounds.....	5,386
Sheet Zinc, for patterns—pounds.....	1,741½

Terra Cotta Work.

Balusters—number of.....	130
Chimney tops.....	4

Engine Expenses.

Cotton waste, pounds.....	57½
Engine oil, gallons.....	95
Tallow, pounds.....	870

Hoisting rope and fixtures.

Steel wire hoisting rope—feet.....	2,125
Galvanized iron wire guy rope—feet.....	1,000
Manilla rope—pounds.....	3,569
Wire rope sockets—number of.....	24

Cost of Railroad to Capitol Grounds.

For taxes on right of way, as per contract.....	277.68
For rent on right of way, as per contract.....	340.00
For repairs on track.....	966.23

Total\$1,583.91

Cost of tools and machinery, and repairs to same.....	\$5,731.66
Cost of patterns and models, including labor.....	2,553.56

STATEMENT

Of work done on the Capitol building during the years 1876-7.

Dimension Stone cut and set.

	feet.	in.
In office story, walls and porticoes	21,820	11
column footings	189	11
corridor columns	1,664	5
bond stone	453	0
portico flagging	3,554	4
Total in office story	27,682	7
In second story, walls.....	50,442	11
interior.....	6,685	5
bond stone	1,825	1
Total in second story.....	58,953	5
In third story, walls	15,324	8
cornice and balustrade	16,183	10
portico columns	3,570	0
bond stone	3,237	1
stylobate wall.....	243	11
Total in third story.....	38,559	6
Total dimension stone cut and set.....	125,195	6

Wrought Iron Work put in place—Pounds.

Wrought iron in beams, posts, girders and trusses.....	1,001,555½
Cast iron wall plates.....	47,719
Total wrought and cast iron set	1,049,274½

Roofing—Squares.

Terra Cotta and slate.....	135
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Copper Work—Pounds.

In gutters, valleys, and flashings.....	7,996
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Brick Masonry.

Number of brick laid in office story.....	788,382
Number of brick laid in second story.....	1,616,316
Number of brick laid in third story.....	1,315,018
Total brick laid, kiln count.....	3,719,716

Statement of Material used, Exclusive of Stone, Brick and Iron.

Lime in stone setting, bushels.....	913
Lime in brick masonry, bushels.....	5,043½
Total bushels lime used.....	5,956½
Water, gallons.....	863,217
Coal in blacksmithing, bushels.....	557½
Coal in engines, shops and offices, bushels.....	12,863½
Total bushels coal.....	13,421
Coke in engines, bushels	650½

Lumber Used.

Lumber in templets and straight edges, feet.....	5,206
Lumber in machinery and tools, feet.....	3,822
Lumber in derrick cribs, feet	7,973
Lumber in scaffolding, feet.....	205,245
Lumber in centering, feet.....	37,478
Lumber in tool-house and sheds, feet.....	9,634
Lumber in piling and covering hardwood lumber, feet.....	32,695
Lumber for general purposes	22,969

Total lumber used..... 325,022

Cement in brick masonry, pounds.....	1,153,609
Cement in concrete, pounds.....	220,401
Cement in roofing, pounds.....	23,404

Total pounds cement used

Sand used, bushels.....	64,718
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Portland cement in masonry, barrels.....	28
Portland cement in roofing and guttering, barrels.....	72

Total barrels Portland cement used..... 100

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STATEMENT

Of the Amount of Material Received for Building from Commencement, Excluding the Stone Rejected from Walls.

	yds.	ft.	in.
Stone for concrete.....	1,620		
Rubble stone.....	975	17	5

Dimension Stone.

	ft.	in.
1871 —Limestone.....	42,876	8
Granite.....	1,046	5
1872-3—Limestone.....	81,676	7
Granite.....	7,351	
1874-5—Limestone.....	34,602	1
Sandstone.....	80,138	4
Granite.....	194	10
1876-7—Limestone.....	12,675	5
Sandstone.....	102,992	
Granite.....	1,895	4
Total limestone.....	171,830	9
Total sandstone.....	183,130	4
Total granite.....	10,487	7
Total stone.....	365,448	8
Less loss on Iowa City stone.....	980	2
Total.....	364,468	6

Brick—Kiln count.

1871.....	43,000
1872-3.....	2,000,000
1874-5.....	3,012,859
1876-7.....	3,770,667
Total.....	8,826,526

Sand—Bushels.

1871.....	78,333
1874-5.....	78,427
1876-7.....	43,408
Total sand.....	200,168

Hydraulic Cement—Pounds.

1871.....	915,660
1872-3.....	1,464,788
1874-5.....	2,112,050
1876-7.....	1,363,146
1876-7 Portland cement.....	46,400
Total cement.....	5,902,044

Water—Gallons.

1871.....	183,480
1872-3.....	594,700
1874-5.....	649,818
1876-7.....	863,217
Total.....	2,291,215

Lime—Bushels.

1872-3.....	300
1874-5.....	631
1876-7.....	5,955
Total.....	6,886

Cast Iron—Pounds.

1874-5.....	21,166
1876-7.....	49,329
Total.....	70,495

Wrought Iron—Pounds.

1871.....	14,465
1872-3.....	2,092
1874-5.....	206,150
1876-7.....	1,106,427
Total.....	1,329,135

Steel—Pounds.

1871.....	147
1872-3.....	1,156
1874-5.....	258
1876-7.....	244
Total.....	1,806

Drain Tile—Feet.

Total lineal feet.....	ft. in.
	1,300 3

Pitch—Pounds.

Total.....	40,600
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Lubricating Oil—Gallons.

1872-3.....	54
1874-5.....	204
1876-7.....	92
Total oil.....	350

Tallow—Pounds.

1871.....	57
1872-3.....	116
1874-5.....	82
1876-7.....	874

Total..... 1,129

Coal.

1871.....	bu. lbs.
1872-3.....	1,357 70
1874-5.....	3,661 10
1876-7.....	8,616 70
	13,420 40

Total coal..... 27,056 30

Coke, bushels..... 650½

Sheet Zinc, (Patterns)—Pounds.

1876-7.....	1,741½
Copper.....	7,996

Slate.

29,189 pieces, each 10x20.

Porous Terra Cotta, feet.....	16,072
Terra Cotta Balusters, pieces.....	130

Pine Lumber and Timber—Feet.

1871.....	59,582
1872.....	30,140
1873.....	34,830
1874.....	43,263
1875.....	96,303
1876.....	131,876
1877.....	193,146
Total.....	589,140

Hard Wood Lumber—Feet.

1876, Oak.....	47,922
1877, Oak.....	7,743
1877, Black Walnut.....	80,396
1877, White Walnut.....	32,794
1877, Cherry.....	30,119
1877, Chestnut.....	30,958
1877, Ash.....	50,999
1877, Yellow Pine.....	161,042
Total.....	441,973

Nails—Pounds.

1871.....	225
1872.....	625
1873.....	1,125
1874.....	1,223
1875.....	1,680
1876.....	2,336
1877.....	3,050

Total..... 10,264

Plaster Paris—Barrels.

1876.....	1
1877.....	1
Total.....	2

TABLE II.

Showing cost of Tools and Machinery, and Repairs to same.

1871.....	\$ 7,635.37
1872.....	1,290.92
1873.....	426.34
1874.....	1,004.56
1875.....	8,450.14
1876.....	3,196.90
1877.....	2,534.76
Total.....	\$24,538.99

Cost of Railroad to Capitol Grounds, including Right-of-Way and Repairs.

1871.....	7,614.62
1872.....	1,490.97
1873.....	1,072.18
1874.....	939.63
1875.....	1,520.50
1876.....	976.63
1877.....	607.38
Total.....	14,221.81

Cost of Patterns and Models.

1872.....	2.00
1873.....	72.86
1874.....	303.51
1875.....	321.15
1876.....	922.18
1877.....	1,631.14
Total.....	3,252.84

Work Done.

Excavation.....	17,656 cubic yards,
	yds. ft.
Concrete.....	4,902 23
Rubble masonry.....	948 7

Dimension of Stone Set.

	feet. in.
In foundation walls.....	124,977 8
In basement walls.....	50,234 5
In office story walls.....	89,486 8
In second story walls.....	58,953 5
In third story walls.....	38,559 6
Total stone set.....	362,211 8

*Brick Work.**

In 1871.....	43,000
In 1872.....	86,816
In 1873.....	902,163
In 1874.....	1,681,036
In 1875.....	2,084,066
In 1876.....	1,818,796
In 1877.....	1,900,920

Total brick, kiln count.....8,516,797

Of the Above there was Laid

In cistern.....	43,000
In cellar.....	719,851
In basement story.....	2,018,004
In office story.....	2,794,214
In second story.....	1,616,316
In third story.....	1,325,412

Total brick.....8,516,797

Wrought Iron Set.

In 1874, pounds.....	201,409
In 1876, pounds.....	488,191
In 1877, pounds.....	518,364
Total.....	1,202,964 — 1,202,964

Cast Iron Set.

In 1874-5, pounds.....	21,166
In 1876, pounds.....	30,000
In 1877, pounds.....	17,719
Total.....	68,885 — 68,885

Total of wrought and cast iron set, pounds.....1,271,849

Roofing, squares.....	135
Copper work, pounds.....	7,996

*The measurements of Brick, are actual cubic contents, rejecting all constructive measurements—there was too great an allowance made to the cubic foot in the measurement from 1872 to 1875—showing too many brick laid, hence the above will not agree with the amounts reported formerly for those years.

MATERIAL ON HAND.

DIMENSION STONE.

KIND OF STONE.	CUT.		ROUGH.		TOTAL.	
	Feet.	Inches.	Feet.	Inches.	Feet.	Inches.
Limestone.....	667	4	728	4	1,395	8
Granite.....	...	...	56	6	96	6
Carroll county sandstone.....	4,496	0	2,178	4	6,674	4
St. Genevieve sandstone.....	8,391	2	695	10	9,087	0
Totals.....	13,554	6	3,699	0	17,253	6

Brick.....	309,729
Sand, bushels.....	1,356
Cement (63 sacks), pounds.....	10,930
Portland cement, barrels.....	16
Cast iron, pounds.....	1,610
Wrought iron, pounds.....	116,571
Porous terra cotta, square feet.....	2,572

Hard Wood Lumber.

Oak, feet.....	55,665
Black Walnut, feet.....	80,396
White Walnut, feet.....	32,794
Cherry, feet.....	30,119
Chestnut, feet.....	30,958
Ash, feet.....	50,999
Yellow Pine, feet.....	161,042

Total.....441,973

Pine lumber and timber (estimated), feet.....250,000

CLASSIFICATION BY STORIES.

Setting apart those items which pertain to the cost of the whole building, the following is a classification by stories:

Board of Commissioners.....	\$14,277.58
Salaries.....	64,224.42
Plans.....	4,101.65
Cistern.....	1,512.12
Railroad.....	14,221.81
Tools and machinery.....	24,538.99
Water pipe and meter.....	791.95
Main sewer.....	1,272.28
Printing and advertising.....	2,368.50
General expenses.....	2,074.61
Accidents.....	173.50
Cash.....	995.85
Repairs to first foundation.....	52,353.76 — \$182,907.02
Expenditures on foundation.....	214,055.41
Expenditures on basement story.....	210,803.28
Expenditures on superstructure.....	642,234.29

Total to November 30, 1877.....\$1,250,000.00

NUMBER TWO.

STATEMENT

Showing the Number of Days' labor performed on the Capitol Building by men and teams, working by the day, including Foremen, and the wages paid per day from November 29, 1875, to October 27, 1877. Also the Aggregate Number of days including days at the Iowa City quarry, from May 18, 1872, to October 27, 1877. Excluding stone cutting done by the foot.

HOW EMPLOYED.	Wages per day.	Days in 1876.	Days in 1877.
Foremen of stone cutters.....	\$6.00	308.50	272.50
Foremen of iron work, carpentering pattern making, assistant foremen of stone cutters, and modelers.....	5.00	627	748.40
Foremen of iron work, carpentering, and pattern making.....	4.50	131	.....
Foremen of laborers, derrickers, and stone setting, stone setters and stone cutters.....	4.00	555.75	620.95
Stone setters and stone cutters.....	3.75	320.45	48.20
Stone cutters and brick masons.....	3.50	2,074.35	407.55
Blacksmiths and stone cutters.....	3.25	456.75	642.50
Engineers, stone cutters and blacksmiths.....	3.00	414.15	929.90
Engineers, riggers, stone cutters and brick masons.....	2.75	153.25	1,308.10
Engineers, riggers, stone cutters, carpenters, derrick foremen and brick masons.....	2.50	2,217.10	941.05
Engineers, riggers, carpenters, blacksmiths, derrick foremen, stone cutters and riveters.....	2.25	1,548.45	2,152.70
Carpenters, blacksmiths, riveters and stone cutters.....	2.00	1,028.45	1,212.55
Laborers.....	1.75	5,498.95	858.85
Laborers.....	1.65	2,620.33	74.55
Laborers.....	1.60	335.50	.....
Laborers.....	1.50	8,971.35	11,933.30
Laborers.....	1.40	.....	125
Laborers.....	1.35	15.50	72.50
Laborers.....	1.30	15.25	.....
Laborers.....	1.25	636.25	1,967.70
Laborers.....	1.20	8	.....
Water boys.....	1.00	389	270.95
Water boys.....	.75	715.75	480.50
Two horse team and driver.....	.45	9.50	.....
Two horse team and driver.....	3.00	7.75	.....
Two horse team and driver.....	2.75	.....	2.50
Cart, horse and driver.....	2.50	435.50	28.75
Cart, horse and driver.....	2.25	.....	430.75
Horse and driver for hoisting brick.....	2.00	141.25	12.60
Horse and driver for hoisting brick.....	1.75	.....	75.25
Totals.....		29,546.10	25,224.60
Total days, from November 29, 1875, to October 27, 1877.....			54,770.70
Total days, from January 1, 1874, to November 29, 1875.....			40,091.45
Total days, at Iowa City quarry in 1873-4-5.....			23,225.75
Total days, from May 18, 1872, to December 30, 1873.....			22,843.72
Total days, from May 18, 1872, to October 27, 1877.....			140,841.62

REPORT OF THE SUPERINTENDENT OF FINANCE.

To the Board of Capitol Commissioners:

I herewith present my report and exhibits of expenditures in detail, for the year 1876, of \$275,000.00, and in 1877 of \$225,000.00, and in the aggregate, from the commencement of the work to November 30, 1877, showing the disbursement of \$1,250,000.00, being the full amount thus far appropriated, also of the receipts for sales of refuse material and old machinery for the year 1876, of \$290.97, Exhibit "C," and for the year 1877, of \$365.54, Exhibit "F."

In my last biennial report, I purposed to permanently disburse the money received from sales, as it came in hand, but exigencies have arisen that made it advisable, in the prosecution of the work, to retain the money as a reserve fund.

The State Treasury has been embarrassed, during the past season, for the want of money, and the warrants of the board on the new capitol building appropriation could not be paid promptly and have had to abide their regular order of payment as the money came into the Treasury.

The purchase of some special material or machinery has often required prompt payment in cash, which we have been enabled to do by cashing the warrant for such purpose and holding it as cash till paid, thus having the means to meet some of the pecuniary emergencies that frequently occurred.

When the State Treasurer was unable to pay the warrants drawn for the monthly pay roll, the workmen on the new capitol building experienced some difficulty in negotiating them, and many had to suffer exorbitant discounts. Payments by the board are restricted by law, to State Auditor's warrants on the State Treasury and whatever may be, their depreciation, it must be borne by the holder of them. Therefore, to avoid the difficulties and heavy discounts in negotiations that would

naturally arise from so many warrants of small amounts being thrown monthly upon the Des Moines market, the workmen that required money proposed to dispose of their warrants at ninety-eight cents on the dollar. Accordingly, for those that desired it, I have had a warrant for their aggregate amount on the pay roll negotiated at that rate, and the money paid them; all others have had their warrants for the full amount due them.

This arrangement of negotiation I consider very favorable to the parties in interest, as it enabled the workmen in the capitol building to have their monthly wages promptly, and also it establishes a market price for state warrants, not only in Des Moines but throughout the state where the state institutions are located, and which require the negotiation of state warrants.

The pay roll for November and December are payable January 1, 1878, at which time the annual appropriation of \$125,000.00 is due.

The accompanying exhibits are in the following order:

A. Classified statement of the aggregate expenditures in detail, from the commencement of the work to November 30, 1875.

B. General statement of expenditures from November 30, 1875, to November 30, 1876.

C. General statement of cash received in the year 1876, and to what class credited.

D. Classified statement of expenditures in detail, from November 30, 1875, to November 30, 1876.

E. General statement of expenditures from November 30, 1876, to November 30, 1877.

F. General statement of cash received in the year 1877, and to what class credited.

G. Classified statement of expenditures in detail, from November 30, 1876, to November 30, 1877.

H. Condensed classified statement of the aggregate expenditures from the commencement of the work to November 30, 1877.

I. Consolidated classified statement of expenditures and appropriations to November 30, 1877.

All of which is respectfully submitted.

JOHN G. FOOTE,
Superintendent of Finance.

[EXHIBIT "A."]

CLASSIFIED STATEMENT

Of the Aggregate Expenditures from the Commencement of the Work to November 30, 1875, and Reported in the Third Biennial Report of the Commissioners.

ON WHAT ACCOUNT.	Amount.
Plans.....	\$ 4,023.71
Excavation and drainage.....	15,610.99
Stone, limestone and granite.....	96,801.86
Cistern.....	1,512.12
Sand.....	4,083.04
Expenses and miscellaneous.....	1,642.35
Salaries.....	41,069.97
Repairs on first foundation.....	52,353.76
Stone-masonry—foundation.....	14,711.21
Brick-masonry—foundation.....	7,789.80
Concrete labor.....	5,333.36
Printing and advertising.....	2,048.15
General labor.....	807.21
Patterns.....	699.52
Water.....	738.67
Rubble-masonry—foundation.....	4,765.97
Iowa City Quarry.....	66,871.30
Brick-masonry—basement story.....	17,100.37
Stone-setting—basement story.....	6,149.37
Cash.....	339.34
Stone-cutting—limestone and granite.....	88,576.64
Railroad.....	12,637.90
Lumber and timber.....	6,015.15
Wrought iron work.....	13,310.16
Carpenter work.....	5,947.16
Cement.....	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.....	737.44
Brick.....	50,446.61
Iron and steel.....	342.31
Cast iron work.....	754.77
Lime.....	334.86
Carroll county stone.....	29,755.85
Ste. Genevieve stone.....	46,215.19
Sandstone cutting.....	55,166.02
Rubbing stone.....	6,025.08
Accidents.....	173.50
Extra handling stone.....	797.56
Brick-masonry—superstructure.....	18,445.60
Stone-setting—superstructure.....	8,462.58
Total.....	\$750,000.00

[EXHIBIT "B."]

GENERAL STATEMENT OF EXPENDITURES

From November 30th, 1875, to November 30th, 1876.

Date of Voucher.	Number of Voucher.	IN WHOSE FAVOR.	ON WHAT ACCOUNT.	Amount.
Jan.	61277	B'rd of Commissioners	Per diem and expenses.	\$ 20.45
	61273	James Hartman	Sand	6.10
	61279	Carroll Co. Sandstone Co.	Stone	1,085.01
	61280	J. C. Taylor	Brick	209.47
	61281	James N. Close	Brick	300.87
	61282	A. H. Piquenard	Salary as architect	300.00
	61283	R. S. Finkbine	Salary as overseer	218.00
	61284	Ham & Carver	Advertising	20.00
	61285	Gate City office	Advertising	13.00
	61286	Francis Genscor	Brick	1,083.34
	61287	Des Moines Coal Co.	Cement and cement	1,210.93
	61288	Ed Wright	Salary as Secretary and Telegraphing	156.20
	61289	Bolton Brothers	Iron and hardware	8.42
	61290	C. R. I. & P. R. R. Co.	Freight on Stone	1,691.49
	61291	John G. Foote	Per diem & expenses as Supt. of Finance	76.30
	61292	J. S. Clarkson, P. M.	Postage stamps	6.00
	61293	St. Genevieve Sandstone and Granite Co.	Stone	6,149.76
	71294	C. Youngerman	Portland cement	28.00
	71295	Nonpareil Printing Co.	Advertising	12.50
	81296	J. S. Scott	Sand	21.65
	81297	John G. Foote	Pay Roll	3,752.28
	101298	Gilbert Hubbard & Co.	Cotton waste	21.65
	111299	Carlier, Hussey & Curl	Tracing cloth	250.00
	121300	R. S. Finkbine	Salary as Overseer	300.00
	131301	A. H. Piquenard	Salary as Architect	45.35
	141302	James Hartman	Sand	155.75
	151303	Ed Wright	Salary as Secretary and cash paid.	68.20
	161304	John G. Foote	Per diem and expenses Supt. of Finance	42.85
	171305	Pat. Sullivan	Sand	4,242.52
	181306	J. D. Scott	Pay Roll	31.81
	191307	John G. Foote	Per diem and expenses	141.85
	201308	E. Bartlett	Taxes of 1875 on R. R. right-of-way	136.17
	211309	B'rd of Commissioners	Advertising iron work	12.00
	221310	Treasurer of Polk Co.	Salary as Secretary and wood bought	161.68
	231311	John P. Irish	Salary as Architect	300.00
	241312	Ed Wright	Salary as Overseer	225.00
	251313	A. A. Piquenard	Coal for January and February	440.00
	261314	R. S. Finkbine	Blanks and blank books	104.95
	271315	C. R. I. & P. R. R. Co.	Paints, oils, and marking material	49.75
	281316	Des Moines Coal Co.	Hardware, nails and tools	18.10
	291317	Carlier, Hussey & Curl	Lumber	94.67
	301318	C. H. Ward	Per diem and expenses Supt. of Finance	15.40
	311319	Bolton Bros.	Stone	698.90
	321320	H. F. Getchell & Sons	Pay Roll	4,115.00
	331321	John G. Foote	Sand	47.90
	341322	James Hartman	Castings and shop work	155.72
	351323	Brooks, Wilson & Stein	Sand	35.55
	361324	Pat. Sullivan	Sand	44.61
	371325	J. D. Scott	Sand	60.17
	381326	E. Bartlett	Advertising for Iron beams	24.10
	391327	Iowa State Register	Brick on contract	75.32
	401328	James N. Close	Per diem and exp. as Supt. of Finance	46.70
	411329	John G. Foote		

EXHIBIT "B"—CONTINUED.

Date of Voucher.	Number of Voucher.	IN WHOSE FAVOR.	ON WHAT ACCOUNT.	Amount.
April	41332	C. R. I. & P. R. R. Co.	Freights for March	\$ 161.64
	41333	H. F. Getchell & Sons	Iron, steel, tools, etc.	80.00
	41334	Des Moines Coal Co.	Engine coal	32.20
	41335	Gilbert Hubbard & Co.	Manilla and Steel Wire Rope	190.49
	41336	Ed Wright	Salary as Secretary and Expressage	153.60
	41337	Bolton Brothers	Iron, steel, and hardware	51.39
	41338	A. H. Piquenard	Salary as architect	300.00
	41339	R. S. Finkbine	Salary as Overseer and exp. to Chicago.	292.90
	41340	Carroll County Sandstone Co.	Stone on contract	431.19
	51341	John G. Foote	Pay roll for March	3,603.95
	61342	W. S. Dart	Rental on R. R. right-of-way	50.00
	151343	J. C. Taylor	Partial per cent. on brick contract	2,155.80
	221344	St. Genevieve Sandstone and Granite Co.	Stone	2,537.42
May	31345	Carroll County Sandstone Co.	Stone	5,177.05
	31346	Union Foundry Works	Rolled iron beams	6,588.06
	31347	Samuel Green	Cast iron wall plates	207.90
	31348	Des Moines Coal Co.	Fuel	31.90
	31349	C. A. Ryden	Carrying express and mail	9.10
	31350	Martin Tuttle	One barrel plaster of Paris	3.25
	31351	C. J. Hammer	Hauling railroad ties and drayage	6.50
	31352	Des Moines Water Co.	Water	31.58
	31353	C. H. Ward	Paints, oils, brushes, etc.	119.19
	31354	J. D. Seeberger	Rope and hose	53.69
	31355	C. R. I. & P. R. R. Co.	Freights on stone and iron	1,121.50
	31356	Hallack, Holmes & Co.	Hose	72.70
	31357	J. Y. Macomb	Brick and mortar elevator	400.00
	31358	Bolton Brothers	Iron, nails and hardware, tools	65.48
	31359	Francis Genscor	Brick	474.26
	31360	A. H. Piquenard	Salary as architect	300.00
	31361	John G. Foote	Per diem and expenses Supt. of Finance	39.60
	31362	R. S. Finkbine	Salary as Overseer and exp. to quarry	397.20
	31363	Ed Wright	Salary as Secretary and exp. to quarry	292.75
	31364	Board of Commissioners	Per diem and expenses	174.05
	31365	John G. Foote	Pay roll for April	8,508.25
	31366	S. A. Robertson	Lime	15.88
	31367	J. C. Taylor	Brick	232.76
	31368	James Cash	Portico flagging	375.37
	31369	Union Foundry Works	Iron beams	6,992.44
	31370	R. S. Finkbine	Salary as Overseer	281.50
	31371	Ed Wright	Salary as Secretary and express charges	291.50
	31372	J. D. Seeberger	Coil rope	60.00
	31373	Hawk-Eye Printing Co.	Advertising	12.50
	31374	U. S. Express Co.	Expressage on river	8.40
	31375	Gilbert Hubbard & Co.	Steel and iron wire rope	354.44
	31376	Ham & Carver	Advertising	20.00
	31377	J. M. Hedrick & Co.	Advertising	6.00
	31378	A. H. Piquenard	Salary as Architect	300.00
	31379	J. K. & W. B. Gilest	Lumber and timber	97.32
	31380	Hiram Robinson	Pipe, couplings, steam gauge, etc.	10.00
	31381	Des Moines Water Co.	Water for May	10.28
	31382	L. Fisher	Tallow for engine	8.40
	31383	James N. Close	Brick	223.77
	31384	Chicago Lumber Co.	Lumber and timber	70.35
	31385	Alex. Robertson	Wire rope sockets	54.00
	31386	Brooks, Wilson & Stein	Shop work and castings	49.00
	31387	H. F. Getchell & Sons	Lumber and timber	672.62
	31388	Des Moines Coal Co.	Cement, lime and coal	1,069.15
	31389	Bolton Brothers	Iron, steel, tools, etc.	60.17
	31390	Samuel Green	Cast wall plates, etc.	294.94
	31391	E. R. Cary	Barrel engine oil	22.50
	31392	John G. Foote	Per diem and expenses Supt. Finance	36.45
	31393	C. R. I. & P. R. R. Co.	Freight bills for May	3,957.55
	61394	Carroll County Sandstone Co.	Stone	1,712.93
	51395	St. Genevieve Sandstone and Granite Co.	Stone	2,855.59
	51396	J. D. Seeberger	Wheelbarrows	10.50

EXHIBIT "B."—CONTINUED.

Date of Voucher.	Number of Voucher.	IN WHOSE FAVOR.	ON WHAT ACCOUNT.	Amount.
June 6	1397	Ste. Genevieve Sandstone & Granite Co.	Stone.....	\$ 972.03
7	1398	John G. Foote.....	Pay roll for May.....	12,848.52
14	1399	S. A. Robertson.....	Brick on contract.....	406.07
15	1400	Ste. Genevieve Sandstone & Granite Co.	Stone.....	2,000.00
16	1401	Board of Commissioners	Per diem and expenses.....	168.11
30	1402	Edwin Wright.....	Lemont stone for corridor.....	1,256.27
July 10	1403	R. S. Finkbine.....	Salary as overseer, and exp. to Chicago.....	308.10
10	1404	U. S. Express Co.....	Freight on bolts.....	2.50
10	1405	A. H. Piquenard.....	Salary as architect.....	300.00
10	1406	Ed Wright.....	Salary as Secretary and telegraphing.....	255.10
10	1407	Samuel Green.....	Shop work on iron plates.....	302.52
10	1408	Eagle Iron Works.....	Cast wall plates.....	70.00
10	1409	Gilbert Hubbard & Co.....	Galvanized wire rope.....	86.96
10	1410	Des Moines Water Co.....	Wrought iron plates.....	24.54
10	1411	J. D. Seeberger.....	Manilla rope and steel.....	52.54
10	1412	National File Works.....	Re-cutting files.....	111.25
10	1413	J. K. & W. H. Gilcrest.....	Lumber and timber.....	251.25
10	1414	John G. Foote.....	Iron, nails and tools.....	91.74
10	1415	Bolton Bros.....	Freight bills.....	6,827.61
10	1416	C. R. I. & P. R. Co.....	Stone.....	1,316.10
10	1417	Carroll County Sandstone Co.	Brick.....	301.96
10	1418	James N. Close.....	Stone.....	3,516.04
10	1419	Ste. Genevieve Sandstone & Granite Co.	Per diem and exp. as Supt. of Finance.....	55.50
10	1420	John G. Foote.....	Turning rollers.....	21.25
10	1421	Iowa School Furniture Co.....	Brick.....	4,191.02
10	1422	S. A. Robertson.....	Coal, lime and cement.....	937.75
10	1423	Des Moines Coal Co.....	Lumber and timber.....	212.92
10	1424	H. F. Getchell & Sons.....	Pay roll.....	16,170.54
10	1425	John G. Foote.....	Shop work on steel pins.....	8.50
10	1426	Brooks, Weston & Stein.....	Brick.....	199.10
10	1427	J. C. Taylor.....	Water furnished.....	688.91
Aug. 10	1428	James N. Close.....	Packing.....	17.42
10	1429	Des Moines Water Co.....	Portland cement.....	54.90
10	1430	C. Youngerman.....	Nails, hardware and tools.....	80.24
10	1431	Bolton Bros.....	Engineering.....	40.20
10	1432	James Carss.....	Lumber and timber.....	57.15
10	1433	Chicago Lumber Co.....	Proof chain.....	203.50
10	1434	J. D. Seeberger.....	Salary as Secretary and expenses paid.....	31.10
10	1435	Ed Wright.....	Salary and expenses to St. Louis.....	333.25
10	1436	Gilbert Hubbard & Co.....	Brick.....	300.00
10	1437	R. S. Finkbine.....	Lumber and timber.....	881.17
10	1438	A. H. Piquenard.....	Lumber and timber.....	420.30
10	1439	Francis Geneser.....	Per diem and exp. as Supt. of Finance.....	55.70
10	1440	H. F. Getchell & Son.....	Lumber and timber.....	19.11
10	1441	John G. Foote.....	Wrought iron beams.....	1,714.28
10	1442	Chicago Lumber Co.....	Stone.....	1,373.44
10	1443	Union Foundry Works.....	Lime, cement and coal.....	413.20
10	1444	Carroll County Sandstone Co.	Pay roll.....	10,620.98
10	1445	Ste. Genevieve Sandstone & Granite Co.	Paints, oils and brushes.....	23.90
10	1446	Des Moines Coal Co.....	Portico grading.....	1,542.80
10	1447	John G. Foote.....	Freight bills.....	3,121.37
10	1448	Ste. Genevieve Sandstone & Granite Co.	Stone.....	2,450.63
10	1449	S. A. Robertson.....	Lumber.....	2,738.77
10	1450	J. K. Gilcrest.....	Tallow.....	896.72
10	1451	Overnie, McDonald & Co.....	Freight and drayage.....	11.10
10	1452	C. J. Hammer.....	Model, stationery and postage.....	160.65
10	1453	A. H. Piquenard.....	Freight on stone.....	120.00
10	1454	K. & D. M. Ry Co.....	Freights on stone and iron.....	119.27
10	1455	C. R. I. & P. R. Co.....	Per diem and expenses.....	108.95
10	1456	Board of Commissioners	Stone.....	5,900.22
10	1457	Ste. Genevieve Sandstone & Granite Co.	Stone.....	

EXHIBIT "B."—CONTINUED.

Date of Voucher.	Number of Voucher.	IN WHOSE FAVOR.	ON WHAT ACCOUNT.	Amount.
Aug. 31	1460	W. R. Stinson.....	Mail and express carrier.....	\$ 6.15
31	1461	C. E. I. & P. R. Co.....	Freight on stone and iron.....	741.72
31	1462	C. H. Ward.....	Paints, oil and brushes.....	78.20
31	1463	Chicago Lumber Co.....	Lumber and timber.....	90.40
31	1464	Des Moines Post-Office.....	Stamped envelopes and postage.....	35.29
31	1465	J. D. Seeberger.....	Coil rope.....	37.65
31	1466	K. & D. M. Ry Co.....	Freight on stone.....	210.00
31	1467	R. S. Finkbine.....	Salary as overseer.....	280.00
31	1468	A. H. Piquenard.....	Salary as architect.....	300.00
31	1469	Ed Wright.....	Salary as Secretary and expenses paid.....	208.05
31	1470	Des Moines Water Co.....	Lowering pipe and water.....	53.27
Sept. 1	1471	H. F. Getchell & Sons.....	Lumber and timber.....	292.19
1	1472	Bolton Bros.....	Tools, nails and hardware.....	108.88
1	1473	Union Foundry Works.....	Wrought iron beams, &c.....	11,809.94
1	1474	J. K. Gilcrest.....	Oak lumber.....	256.10
1	1475	Carroll County Sandstone Co.	Stone.....	1,790.37
1	1476	S. A. Robertson.....	Brick.....	1,405.50
1	1477	F. Geneser.....	Brick.....	2,036.92
1	1478	Des Moines Coal Co.....	Coal, cement and lime.....	1,988.80
1	1479	John G. Foote.....	Pay-roll.....	15,295.46
1	1480	John G. Foote.....	Per diem and expenses, Supt. Finance.....	54.70
1	1481	K. & D. M. Ry Co.....	Freight on stone.....	120.00
1	1482	Ste. Genevieve Sandstone & Granite Co.	Stone.....	5,908.00
Oct. 31	1483	K. & D. M. Ry Co.....	Freights on stone.....	285.00
31	1484	Ed Wright.....	Salary as Secretary and expenses.....	291.50
31	1485	R. S. Finkbine.....	Salary as overseer.....	300.00
31	1486	A. H. Piquenard.....	Salary as architect.....	300.00
31	1487	C. Youngerman.....	Portland cement.....	19.50
31	1488	Iowa State Register.....	Advertising and letter heads.....	25.00
31	1489	Des Moines Coal Co.....	Cement, coal and lime.....	952.75
31	1490	Overnie, McDonald & Co.....	Tallow.....	15.00
31	1491	Illinois Stone Co.....	Limestone for corridor.....	1,356.95
31	1492	Des Moines Water Co.....	Water for September.....	24.58
31	1493	Bolton Bros.....	Nails, hardware and tools.....	59.80
31	1494	H. F. Getchell & Sons.....	Lumber.....	131.06
31	1495	Grube & Turner.....	Wrought iron plates.....	191.80
31	1496	J. D. Seeberger.....	Iron and rope.....	60.20
31	1497	C. R. I. & P. R. Co.....	Freight bills.....	2,189.27
31	1498	F. Geneser.....	Brick.....	1,837.07
31	1499	J. K. Gilcrest.....	Oak lumber.....	24.34
31	1500	S. A. Robertson.....	Brick.....	1,362.95
31	1501	Union Foundry Works.....	Wrought iron work.....	6,090.98
31	1502	John G. Foote.....	Per diem and exp. as Supt. Finance.....	56.70
31	1503	Carroll County Sandstone Co.	Stone.....	2,039.14
31	1504	John G. Foote.....	Pay-roll for September.....	11,274.10
31	1505	Ste. Genevieve Sandstone & Granite Co.	Stone.....	3,182.48
10	1506	K. & D. M. Ry Co.....	Freight on stone.....	105.00
10	1507	A. H. Swan.....	Rental on right of way.....	240.00
10	1508	Board of Commissioners	Per diem and expenses.....	21.45
10	1509	L. Robinson & Co.....	Granite.....	235.25
10	1510	Edwin Walker.....	Lemont stone.....	1,021.64
Nov. 1	1511	Ste. Genevieve Sandstone & Granite Co.	Stone.....	3,781.12
1	1512	A. H. Piquenard.....	Salary as architect.....	300.00
1	1513	Ed Wright.....	Salary as Secretary.....	200.00
1	1514	John G. Foote.....	Per diem and expenses, Supt. Finance.....	62.20
1	1515	C. H. Ward.....	Paints, oils and brushes.....	23.20
1	1516	J. D. Seeberger.....	Iron.....	4.40
1	1517	Chicago Lumber Co.....	Lumber and timber.....	45.23
1	1518	Bolton Bros.....	Iron, nails and hardware.....	468.92
1	1519	C. R. I. & P. R. Co.....	Freight bills for October.....	21.21
1	1520	K. & D. M. Ry Co.....	Freight bills for October.....	330.00
1	1521	R. S. Finkbine.....	Salary as overseer and expenses.....	357.50
1	1522	Des Moines Water Co.....	Water for October.....	20.25
1	1523	H. F. Getchell & Sons.....	Lumber and timber.....	90.74

EXHIBIT "B."—CONTINUED.

Date of Voucher.	Number of Voucher.	IN WHOSE FAVOR.	ON WHAT ACCOUNT.	Amount.
Nov. 2	1524	J. K. Gilcrest.....	Oak lumber.....	\$ 299.14
2	1525	Union Foundry Works.....	Iron beams.....	1,001.83
2	1526	Carroll County Sandstone Co.....	Stone.....	2,455.94
2	1527	S. A. Robertson.....	Brick.....	3,187.04
2	1528	F. Geneser.....	Brick.....	2,413.89
2	1529	John G. Foote.....	Pay-roll.....	6,124.15
2	1530	Des Moines Coal Co.....	Coal, cement, and lime.....	561.30
2	1531	K. & D. M. R'y Co.....	Freight bills.....	105.00
Dec. 1	1532	R. S. Finkbine.....	Salary and expenses to Springfield.....	329.00
1	1533	Brooks, Wilson & Stein.....	Shop work on tools.....	30.50
1	1534	McDonald & Meara.....	Repairing boiler.....	7.51
1	1535	National File Co.....	Cutting files.....	3.15
1	1536	Ed Wright.....	Salary and postage stamps.....	294.00
1	1537	Ed Wright.....	Freight paid and cotton waste.....	119.00
1	1538	John G. Foote.....	Per diem and expenses Supt. of Finance.....	36.45
1	1539	A. H. Piquenard.....	Salary as architect.....	300.00
1	1540	John G. Foote.....	Partial pay roll.....	157.50
1	1541	C. R. I. & P. R. R. Co.....	Freight bills.....	636.00
1	1542	Ste. Genevieve Sandstone and Granite Co.....	Partial payment on stone contract.....	767.25
Total expenses in 1876.....				\$275,000.00

[EXHIBIT "C."]

GENERAL STATEMENT

Of Cash Received in 1876, and to what Class Credited.

ARTICLES SOLD.	TO WHAT CLASS CREDITED.	Amount.
Spawls and stone sold.....	Carroll County sandstone.....	\$ 110.99
Spawls and stone sold.....	Ste. Genevieve sandstone.....	55.40
Stone sold.....	Iowa City quarry.....	13.20
Limestone sold.....	Limestone.....	103.13
Brick-bats sold.....	Brick.....	7.10
Old railroad ties sold.....	Railroad.....	.85
Amount previously reported.....		\$ 290.97
On hand.....		339.34
		\$ 630.31

[EXHIBIT "D."]

CLASSIFIED STATEMENT

Of Expenditures from November 30, 1875, to November 30, 1876.

ON WHAT ACCOUNT.	Amount.
Plans.....	\$ 50.80
Stone, limestone and granite.....	9,530.85
Sand.....	365.64
Expenses and miscellaneous.....	199.26
Salaries.....	11,528.25
Concrete, labor.....	528.88
Printing and advertising.....	194.85
General labor.....	396.57
Patterns.....	922.13
Water.....	185.22
Cash from material sold.....	290.97
Stone-cutting, limestone and granite.....	10,636.23
Railroad.....	976.53
Lumber and timber.....	4,274.24
Wrought iron work.....	39,598.71
Carpenter work.....	1,986.12
Cement.....	5,642.95
Board of Commissioners, per diem and expenses.....	926.86
Fuel.....	909.43
Machinery and tools.....	3,196.90
Nails and hardware.....	108.32
Water pipe and meter.....	28.85
Brick.....	27,533.83
Iron and steel.....	26.08
Cast iron work.....	967.88
Lime.....	903.43
Carroll county stone.....	24,320.80
Ste. Genevieve stone.....	51,580.92
Sandstone cutting.....	42,227.64
Rubbing stone.....	5,907.07
Extra handling stone.....	582.18
Brick-masonry, superstructure.....	17,843.34
Stone-setting, superstructure.....	10,392.47
Paints and oils.....	158.95
	275,013.20
Iowa City stone sold and charged to cash.....	13.20
Total expenditures in 1876.....	\$275,000.00

EXHIBIT "E."

GENERAL STATEMENT OF EXPENDITURES.

From November 30, 1876, to November 30, 1877.

Date of Voucher.	Number of Voucher.	IN WHOSE FAVOR.	ON WHAT ACCOUNT.	Amount.
1877. Jan.	1543	Stc. Genevieve Sand-stone & Granite Co.	Stone	\$ 5,123.51
	1544	Francis Genesee	Brick	1,258.67
	1545	M. S. Piquensard, Exc.	Salary of architect and models	940.00
	1546	Board of Commissioners	Per diem and expenses	140.40
	1547	Des Moines Water Co.	Water, to November 25	8.26
	1548	Ed Wright	Salary as secretary and expenses	201.15
	1549	Chicago Lumber Co.	Mast for derrick	80.00
	1550	Eagle Iron Works	Wrought iron work	6.30
	1551	W. R. Stimson	Carrying express and mail	6.10
	1552	H. F. Getchell & Sons	Lumber and timber	74.62
	1553	C. J. Hammett	Freight and drayage	34.21
	1554	C. H. Ward	Oils and marking material	4.70
	1555	Bolton Brothers	Toils, nails and zinc	94.57
	1556	Carter, Hussey & Carl	Stationery and blank-books	36.24
	1557	Hiram Robinson	Engine repairs and water pipe	40.31
	1558	Des Moines Coal Co.	Fuel and cement	376.85
	1559	Carroll County Sand-stone Co.	Stone	2,084.43
	1560	K. & D. M. R'y Co.	Freight on stone	15.00
	1561	Christ Huser	Sand	36.43
	1562	G. W. Logan	Brick	28.91
	1563	S. A. Robertson	Brick	5,010.69
	1564	Pat. Sullivan	Sand	22.36
	1565	Stc. Genevieve Sand-stone & Granite Co.	Stone, partial payment on account	462.00
	1566	P. E. Bartlett	Sand	46.12
	1567	C. R. L. & P. R. R. Co.	Freight and switching	120.75
	1568	John G. Foote	Per diem and expenses, Supt. finance	25.45
	1569	James Hartman	Salary as overseer	32.40
	1570	R. S. Finkbine	Salary as overseer	275.00
	1571	S. A. Robertson	Balance on brick	10.00
	1572	John G. Foote	Pay-roll	15,778.18
	1573	Union Foundry Works	Wrought iron, final settlement	5,428.25
Feb.	1574	K. & D. M. R'y Co.	Freight on Carroll county stone	45.00
	1575	Bolton Brothers	Zinc and hardware	61.14
	1576	Harbach & Jackson	Hardwood lumber	916.82
	1577	J. K. Gierret	Hardwood lumber	139.83
	1578	Ed Wright	Salary as secretary and expenses	203.95
	1579	R. S. Finkbine	Salary as overseer	300.00
	1580	G. W. Logan	Plaster Paris	61.95
	1581	Bel & Hackney	Salary as architect	250.00
	1582	Pat. Sullivan	Sand	60.14
	1583	National File Co.	Re-cutting files	5.71
	1584	H. F. Getchell & Sons	Lumber	138.52
	1585	Des Moines Coal Co.	Coal	71.90
	1586	Treasurer Polk County	Taxes on railroad lots	141.51
	1587	Christ Huser	Sand	83.56
	1588	Martin Little	Plaster Paris	3.75
	1589	P. E. Bartlett	Sand	62.71
	1590	James Hartman	Sand	68.96
	1591	Saunders Greene	Mast for derrick	9.95
	1592	K. & D. M. R'y Co.	Freight on Carroll county stone	60.00
	1593	Carroll County Sand-stone Co.	Stone	763.26
	1594	C. R. L. & P. R. R. Co.	Freight on stone	36.10
	1595	John G. Foote	Per diem and expenses, Supt. finance	41.90
	1596	K. & D. M. R'y Co.	Freight on Carroll county stone	120.00

EXHIBIT "E"—CONTINUED.

Date of Voucher.	Number of Voucher.	IN WHOSE FAVOR.	ON WHAT ACCOUNT.	Amount.
1877. Feb.	1597	G. W. Logan	Sand	\$ 24.46
	1598	Pat. Sullivan	Sand	31.29
	1599	Christ Huser	Sand	22.57
	1600	Waldo M. Potter	Advertising, Clinton Herald	10.00
	1601	Bel & Hackney	Salary as architects	250.00
	1602	R. S. Finkbine	Salary as overseer	300.00
	1603	Ed Wright	Salary as Secretary and expenses	200.80
	1604	P. E. Bartlett	Sand	10.08
	1605	John G. Foote	Per diem and exp. Supt. Finance	34.60
	1606	James Hartman	Sand	18.18
	1607	Stc. Genevieve Sand-stone & Granite Co.	Stone	772.41
	1608	John G. Foote	Pay-roll	9,662.23
	1609	Des Moines Coal Co.	Coal	28.45
	1610	C. R. L. & P. R. R. Co.	Freight bills	177.27
	1611	Hill & Tetley	Valves and brass castings	25.10
	1612	Union Foundry Works	Wrought iron beams	961.85
	1613	Carroll County Sand-stone Co.	Stone	648.47
Mar.	1614	H. F. Getchell & Sons	Lumber, timber	132.47
	1615	Harbach & Jackson	Lumber	1,367.96
	1616	J. K. Gierret	Lumber	197.72
	1617	Chicago Lumber Co.	Lumber	830.85
	1618	Hawk Eye Pub. Co.	Advertising	12.00
	1619	Hiram Robinson	Engine repairs, gas fitting	5.45
	1620	K. & D. Railway Co.	Freight on stone	315.00
	1621	Gilbert, Rogers & Co.	Sheaves	18.81
	1622	Stc. Genevieve Sand-stone & Granite Co.	Stone, retained per centage	1,037.46
	1623	Board of Commissioners	Per diem and expenses	310.78
	1624	Francis Genesee	Brick, per centage	1,202.17
April	1625	C. H. Ward	Oil, paints, &c	15.65
	1626	John G. Foote	Per diem and exp. Supt. of Finance	42.40
	1627	Bolton Bros.	Iron, hardware and tools	27.51
	1628	Iowa State Leader	Advertising	14.60
	1629	Des Moines Coal Co.	Cement and coal	198.50
	1630	Iowa State Register	Advertising	15.50
	1631	Ed Wright	Salary as Secretary and expenses	232.00
	1632	Parks & Sons	Tallow	15.00
	1633	Bel & Hackney	Salary as Architects	250.00
	1634	R. S. Finkbine	Salary as Overseer	270.00
	1635	J. K. Gierret	Salary as Architect	250.00
	1636	K. & D. M. Railway Co.	Freights on stone	165.00
	1637	C. R. L. & P. R. R. Co.	Freights and switching	603.00
	1638	H. F. Getchell & Sons	Lumber	60.16
	1639	K. & D. M. Railway Co.	Lumber	30.86
	1640	W. S. Dart	Rent on right of way for railway	50.00
	1641	Carroll County Sand-stone Co.	Stone on contract	3,406.83
	1642	Jas. C. Proffer	Chestnut lumber	1,687.27
	1643	John G. Foote	Pay-roll	5,694.79
	1644	K. & D. M. Railway Co.	Freight on Carroll County Stone	196.00
	1645	K. & D. M. Railway Co.	Freight on Carroll County Stone	120.00
May	1646	Stc. Genevieve Sand-stone & Granite Co.	Stone	\$ 3,275.70
	1647	Ed Wright	Salary as Secretary and expenses	234.70
	1648	R. S. Finkbine	Salary as overseer	300.00
	1649	Bolton Bros.	Tools, iron, hardware	43.30
	1650	Bel & Hackney	Salary as Architects	250.00
	1651	W. R. Stimson	Carrying mail and express	6.00
	1652	J. D. Seeberger	Wheelbarrows and rope	103.00
	1653	Iowa School Furniture Co.	Turning rollers	7.00
	1654	John G. Foote	Per diem and exp. Supt. of Finance	42.20
	1655	Carroll County Sand-stone Co.	Stone	2,023.50
	1656	J. K. & W. H. Gierret	Lumber	8.73
	1657	K. & D. M. Railway Co.	Freight on Carroll County Stone	105.00
	1658	Ph. W. Schneider	Polished granite	2,145.00
	1659	Harbach & Jackson	Hardwood lumber	756.52

EXHIBIT "E."—CONTINUED.

Date of Voucher.	Number of Voucher.	IN WHOSE FAVOR.	ON WHAT ACCOUNT.	Amount.
1877. May.	21600	C. R. I. & P. R. R. Co.	Freight and switching.....	907.40
	21601	H. F. Getchell & Sons.	Lumber.....	812.42
	21602	Chicago Lumber Co.	Lumber.....	405.03
	21603	J. K. Gilcrest	Lumber.....	96.42
	21604	John G. Foote	Pay-Roll.....	6,427.89
	21605	Des Moines Coal Co.	Cement and coal.....	888.50
	21606	Ph. W. Schneider	Polished granite.....	2,145.00
	21607	Keokuk & D. M. R'y Co	Freights on stone.....	120.00
	21608	Keokuk & D. M. R'y Co	Freights on stone.....	270.00
	21609	Ph. W. Schneider	Polished Granite.....	2,145.00
June,	21610	J. D. Seeberger	Manilla rope.....	118.35
	21611	Brd of Commissioners.	Per diem and expenses.....	145.57
	21612	P. H. Philbrick	Making computations.....	50.00
	21613	J. K. & W. H. Gilcrest	Lumber.....	220.10
	21614	Illinois Stone Co.	Limestone.....	120.60
	21615	St. Genevieve Sandstone and Granite Co.	Stone.....	3,844.14
	21616	H. Channon & Co.	Steel wire hoisting rope.....	192.00
	21617	Union Foundry Works	Wrought iron work.....	408.93
	21618	C. J. Hammer	Freight and drayage.....	3.30
	21619	Bell & Hackney	Salary as Architect.....	201.00
	21620	Ed Wright	Salary as Secretary and expenses.....	201.00
	21621	McDonnell & Meara	Wrought iron work.....	10.98
	21622	R. S. Finkbine	Salary as Overseer and expenses.....	334.40
	21623	H. F. Getchell & Son	Lumber.....	42.50
	21624	Samuel Green	Cast iron work.....	20.47
	21625	Bolton Brothers.	Iron, nails, tools.....	55.30
	21626	Hiram Robinson	Engine repairs.....	10.30
	21627	Des Moines Water Co.	Water furnished.....	45.40
	21628	K. & D. M. R'y Co.	Freight on stone.....	540.00
	21629	John G. Foote	Pay-Roll.....	11,111.37
	21630	Des Moines Coal Co.	Cement, lime and coal.....	619.35
	21631	John G. Foote	Per diem and expenses, Supt. of Finance.....	42.45
	21632	Hawk-Eye Printing Co	Advertising.....	12.00
	21633	Ham & Carver	Advertising.....	17.50
	21634	Carter, Hussey & Carl	Stationery and P. O. Scales.....	15.35
	21635	C. L. Rice & Co.	Packer Hatchet.....	23.00
	21636	J. K. Gilcrest	Lumber.....	2,265.87
	21637	Chicago Lumber Co.	Lumber.....	550.81
	21638	Harbach & Jackson	Lumber.....	1,071.17
	21639	C. R. I. & P. R. R. Co.	Freight bills.....	1,071.00
	21640	K. & D. M. R'y Co.	Freight bills.....	105.00
	21641	Carroll Co. Sandstone Co.	Stone.....	5,480.69
	21642	C. R. I. & P. R. R. Co.	Freight bills.....	170.98
	21643	Ph. W. Schneider	Polished Granite.....	1,709.50
	21644	S. A. Robertson	Cast iron work.....	136.07
	21645	Wm. Ashcraft	Ashcraft Injector.....	137.25
	21646	C. R. I. & P. R. R. Co.	Ties, spikes, and repairs of track.....	2,103.37
	21647	Emmanuel Haugh	Ceiling beams.....	47.00
	21648	Brd of Commissioners.	Per diem and expenses.....	175.25
	21649	Brd of Commissioners.	Per diem and expenses.....	175.25
July	21650	J. K. Gilcrest	Lumber.....	620.21
	21651	Chicago Lumber Co.	Lumber.....	324.42
	21652	Harbach & Jackson	Lumber.....	324.42
	21653	Chicago Lumber Co.	Lumber.....	324.42
	21654	C. R. I. & P. R. R. Co.	Freight bills.....	185.42
	21655	K. & D. M. R'y Co.	Freight bills.....	121.89
	21656	H. F. Getchell & Son	Lumber.....	345.00
	21657	Bell & Hackney	Salary as Architects.....	720.17
	21658	R. S. Finkbine	Salary as Overseer.....	250.00
	21659	Ed Wright	Salary as Secretary and expenses.....	250.00
	21660	Des Moines Water Co.	Water in June.....	24.31
	21661	J. D. Seeberger	Hose and couplings.....	46.65
	21662	Carroll Co. Sandstone Co.	Stone on contract.....	1,871.19
	21663	Bolton Brothers.	Iron, hardware, lead, etc.....	133.55
	21664	C. H. Ward	Paints, oils, brushes, etc.....	35.80

EXHIBIT "E"—CONTINUED.

Date of Voucher.	Number of Voucher.	IN WHOSE FAVOR.	ON WHAT ACCOUNT.	Amount.
1877. July	21723	John G. Foote	Per diem and expenses Supt. of Finance.....	\$ 39.85
	21724	Des Moines Coal Co.	Lime and coal.....	823.50
	21725	John G. Foote	Pay-roll.....	8,739.44
	21726	U. S. Express Co.	Charges on sample of slate.....	5.25
	21727	K. & D. M. R. R. Co.	Repairing freight car.....	92.63
	21728	Harbach & Jackson	Lumber.....	1,223.93
	21729	R. S. Finkbine	Salary as Overseer.....	300.00
	21730	Des Moines Post Office	Stamped envelopes.....	33.20
	21731	Ed Wright	Salary as Secretary and expenses.....	201.85
	21732	Bell & Hackney	Salary as Architects.....	250.00
	21733	C. R. I. & P. R. R. Co.	Repairs on capitol track.....	242.07
	21734	W. R. Stimson	Carrying mail and express.....	1.00
	21735	Childs Berg & Russell	Turning rollers.....	15.50
	21736	Compant & Stark	Copper.....	3.17
	21737	Frederick Hass	Lead for flashing.....	191.14
	21738	M. Worthington	Engine repairs.....	188.78
	21739	H. Robinson	Limestone.....	17.25
	21740	C. H. Ward	Paints, oil, etc.....	702.95
	21741	Francis Geneser	Brick on contract.....	1,238.18
	21742	Des Moines Water Co.	Water.....	22.22
	21743	H. F. Getchell & Son	Lumber.....	263.21
	21744	Carroll County Sandstone Co.	Stone on contract.....	3,529.97
	21745	St. Genevieve Sandstone and Granite Co.	Stone on contract.....	1,192.29
	21746	John G. Foote	Per diem and exp. as Supt. of Finance.....	45.60
	21747	K. & D. M. R. R. Co.	Freight on stone.....	240.90
	21748	Iowa State Register	Advertising.....	11.90
	21749	Bolton Brothers.	Iron, tools and hardware.....	173.26
	21750	Brooks, Wilson & Stein	Engine and derrick repairs.....	345.70
	21751	Oberne, McDaniel & Co	Tallow.....	14.38
	21752	J. K. & W. H. Gilcrest	Lumber.....	12.54
	21753	Des Moines Coal Co.	Coal, lime and cement.....	907.62
	21754	S. A. Robertson	Brick.....	2,228.07
	21755	Davenport Gazette Co.	Advertising.....	25.00
	21756	Chicago Lumber Co.	Lumber.....	609.35
	21757	J. K. Gilcrest	Lumber.....	406.59
	21758	C. R. I. & P. R. R. Co.	Freights.....	887.72
	21759	John G. Foote	Pay-roll.....	8,677.22
	21760	K. & D. M. R. R. Co.	Freights.....	105.00
	21761	Illinois Stone Co.	Limestone.....	1,181.82
	21762	Edwin Walker	Lime.....	14.48
	21763	K. & D. M. R. R. Co.	Freight on stone.....	180.00
	21764	H. Channon & Co.	Steel wire hoisting rope.....	88.90
	21765	R. S. Finkbine	Expenses to Indianapolis.....	49.75
	21766	American Wire Nail Co.	Six kgs wire nails.....	49.72
Sept.	21767	Huron Bay Slate and Iron Co.	Roofing slate.....	79.08
	21768	Union Foundry Works	I beams.....	67.81
	21769	Samuel Green	Cast iron work.....	165.61
	21770	E. G. Everett	Photographs of building.....	6.00
	21771	Francis Geneser	Brick.....	1,080.03
	21772	Emmanuel Haugh	Roof trusses.....	2,087.17
	21773	C. H. Ward	Paints, oils and brushes.....	38.15
	21774	Wm. Ashcraft	One Ashcraft Injector.....	35.00
	21775	Bolton Brothers.	Tools, iron and hardware.....	104.03
	21776	C. Young	Portland cement.....	494.00
	21777	J. D. Seeberger	U. S. Iron.....	3.94
	21778	R. S. Finkbine	Salary as Overseer.....	300.00
	21779	Ed Wright	Salary as Secretary and expenses.....	200.10
	21780	Bell & Hackney	Salary as Architects.....	250.00
	21781	C. R. I. & P. R. R. Co.	Freight bills.....	944.91
	21782	H. F. Getchell & Sons.	Lumber.....	378.55
	21783	K. & D. M. Railway Co.	Freight on stone.....	225.00
	21784	R. S. Finkbine	Lumber.....	1,107.00
	21785	John G. Foote	Per diem and expenses as Supt. Finance.....	59.85
	21786	Des Moines Water Co.	Water for August.....	24.75
	21787	John G. Foote	Pay roll.....	8,871.54

EXHIBIT "E."—CONTINUED.

Date of Voucher.	Number of Voucher.	IN WHOSE FAVOR.	ON WHAT ACCOUNT.	Amount.
1877.				
Sept.	6 1790	Fred Hass	Copper for gutters.....	\$ 1,800.00
	6 1791	Chicago Lumber Co.	Lumber.....	738.96
	7 1796	Des Moines Coal Co.	Cement, fuel and lime.....	702.80
	10 1794	Chicago T. Cotta Works	Balusters.....	597.50
	13 1795	Emanuel Haugh	Wrought iron work.....	1,963.07
	13 1796	Board of Commissioners	Per diem and expenses.....	1,180.39
	13 1797	Board of Commissioners	Per diem and expenses.....	157.85
	19 1798	Iowa Terra Cotta and Fire Clay Co.	Per diem and expenses.....	45.00
	24 1799	John Worthy & Bro.	Porous terra cotta.....	\$22.67
Oct.	2 1800	H. S. Finkbine	Limestone.....	124.14
	2 1801	Bell & Hackney	Salary as overseer.....	300.00
	2 1802	Ed Wright	Salary as architect.....	250.00
	2 1803	Des Moines Post-Office	Salary as secretary, and expenses.....	291.10
	2 1804	Bolton & Bros.	Envelopes and stamps.....	14.30
	2 1805	H. F. Getchell & Sons	Tools, iron and nails.....	81.18
	2 1806	J. K. & W. H. Gilcrest	Lumber.....	184.02
	2 1807	Des Moines Coal Co.	Lumber.....	183.58
	2 1808	John G. Foote	Cement, lime and coal.....	496.40
	2 1809	K. & Des M. Ry Co.	Freight on stone.....	50.35
	2 1810	Francis Geneser	Brick.....	30.00
	2 1811	John G. Foote	Brick.....	1,229.40
	2 1812	H. Chatham & Co.	Pay-roll.....	7,909.96
	3 1813	Des Moines Water Co.	Wire hoisting rope.....	68.50
	3 1814	Emanuel Haugh	Water.....	18.29
	4 1815	C. H. L. & P. R. R. Co.	Wrought iron work.....	2,061.35
	4 1816	Iowa Terra Cotta Co.	Freight bills.....	805.92
	5 1817	Hyland & Hammer	Porous terra cotta.....	572.55
	9 1818	Capital City Gas Co.	Drayage.....	9.10
	23 1819	Iowa Terra Cotta Co.	Ten tons coke.....	62.50
	24 1820	Carter, Hussey & Curl	Tracing cloth and book.....	720.92
	30 1821	C. R. L. & P. R. R. Co.	Repairs on Capitol track.....	30.59
	30 1822	C. R. L. & P. R. R. Co.	Freights.....	12.35
	30 1823	Huron Bay Slate Co.	Roofing slate.....	659.00
	30 1824	Emanuel Haugh	Roof trusses and iron.....	164.54
	30 1825	Des Moines Water Co.	Water furnished.....	2,064.82
	30 1826	J. Worthy & Bro.	Limestone.....	18.32
	30 1827	Oberne, McDonald & Co.	Limestone.....	216.72
	30 1828	Bell & Hackney	Tallow.....	13.30
	30 1829	R. S. Finkbine	Salary as architect.....	250.00
	30 1830	Bolton & Bros.	Salary as overseer.....	280.00
	30 1831	Ed Wright	Tools, nails and hardware.....	83.70
	30 1832	John G. Foote	Salary as secretary and exp.....	294.65
	31 1833	Frederick Haug	Per diem and exp. Supt. of Finance.....	50.00
	31 1834	Des Moines Coal Co.	Copper work.....	1,108.81
	31 1835	Francis Geneser	Cement, lime and coal.....	788.65
	1 1836	H. F. Getchell & Sons	Brick.....	370.46
	1 1837	John G. Foote	Lumber.....	45.17
	1 1838	J. K. & W. H. Gilcrest	Pay-roll.....	6,046.02
	7 1839	C. G. Hipwell	Lumber.....	94.56
	20 1840	K. & Des M. Ry Co.	Laying slate on roof.....	156.75
	26 1841	Chicago Terra Cotta Co.	Freights on stone.....	585.00
	26 1842	S. A. Robertson	Four chimney tops.....	40.00
	26 1843	C. R. L. & P. R. R. Co.	Cement and lime.....	34.40
	26 1844	C. & L. Harbach	Coal and repairs of R. R. track.....	32.61
	26 1845	McDonnell & Means	Matting.....	54.00
	26 1846	Cap. City Gas Light Co.	Wrought iron work and engine repairs.....	87.17
	26 1847	John G. Foote	Coke.....	16.30
	26 1848	R. S. Finkbine	Per diem and exp. Supt. of Finance.....	51.80
	26 1849	Bell & Hackney	Salary as overseer.....	300.00
	26 1850	Ed Wright	Salary as architect and assistant.....	285.00
	26 1851	Brooks, Wilson & Stein	Salary as secretary, and expenses.....	205.67
	26 1852	Des Moines Coal Co.	Tools and repairs on engine, &c.....	106.46
			Partial payment on Cement.....	150.88
Total Expenditures in 1877.....				\$225,000.00

EXHIBIT "F."

General Statement of Cash received in 1877, and to what Class credited.

ARTICLES SOLD.	TO WHAT CLASS CREDITED.	AMOUNT.
Stone and spawls sold.....	Carroll County sandstone.....	\$ 188.03
Stone and spawls sold.....	Sto. Genevieve sandstone.....	84.72
Stone and spawls sold.....	Limestone.....	61.86
Overcharge, freight on rope.....		(\$ 2.10
Granite tools, and old castings sold.....	Machinery and tools.....	18.35
Tools sharpened in shop.....		15.20
Tree tops sold.....	Expenses.....	7.25
Overcharge on repairs refunded.....	Railroad.....	8.25
Use of Derrick labor.....	Stone-setting.....	4.50
Sand sold.....	Sand.....	1.00
Lumber cuttings sold.....	Lumber.....	.75
Packing boxes sold.....	Terra cotta.....	5.00
Cement barrels sold.....	Cement.....	.75
Bricks and bats sold.....	Brick.....	35.08
Total.....		965.54
Amount previously reported.....		680.31
On hand.....		\$ 995.85

EXHIBIT "G."

Classified Statement of Expenditures from November 30, 1876, to November 30, 1877

ON WHAT ACCOUNT.	AMOUNT.
Plans.....	\$ 27.14
Stone, limestone and granite.....	12,856.33
Sand.....	610.02
Expenses and miscellaneous.....	233.00
Salaries.....	12,629.20
Printing and advertising.....	125.50
General labor.....	494.66
Patterns.....	1,631.14
Water.....	159.75
Cash.....	395.54
Stone cutting, limestone and granite.....	14,943.52
Railroad.....	607.38
Lumber and timber.....	21,548.11
Wrought iron work.....	20,290.66
Carpenter work.....	1,979.91
Cement.....	5,222.29
Board of Commissioners.....	1,083.33
Fuel.....	903.06
Machinery and tools.....	2,334.76
Nails and hardware.....	114.75
Water pipe and meter.....	25.99
Brick.....	14,079.27
Iron and steel.....	73.07
Cast iron work.....	331.04
Lime.....	1,873.80
Carroll county stone.....	25,467.43
Sto. Genevieve stone.....	15,971.68
Sandstone cutting.....	37,062.81
Rubbing stone.....	4,066.06
Extra handling stone.....	624.62
Brick masonry, superstructure.....	12,269.08
Stone-setting, superstructure.....	8,922.28
Paints and oils.....	108.50
Roofing and guttering.....	8,073.33
Terra cotta work.....	683.39
Total.....	\$225,000.00

EXHIBIT "H."

Condensed Classified Statement of the aggregate Expenditures from the commencement of the work to November 30th, 1877.

ON WHAT ACCOUNT.	AMOUNT.
Plans.....	\$ 4,101.65
Excavation and drainage.....	15,610.99
Cistern.....	1,512.12
Sand.....	5,058.70
General expenses.....	2,074.61
Salaries.....	64,224.42
Repairs on first foundation.....	52,533.76
Concrete labor.....	5,862.24
Printing and Advertising.....	2,368.50
General labor.....	1,698.44
Patterns and Models.....	3,252.84
Water.....	1,083.64
Cash.....	995.85
Railroad.....	14,221.81
Lumber and timber.....	31,837.50
Wrought iron work.....	73,199.53
Carpenter-work.....	9,913.19
Cement.....	36,538.46
Board of Commissioners.....	14,277.58
Fuel.....	4,254.72
Machinery and tools.....	24,538.99
Nails and hardware.....	866.98
Water-pipe and meter.....	791.95
Iron and steel.....	441.46
Cast iron-work.....	2,053.69
Lime.....	2,912.09
Accidents.....	173.50
Paints and oils.....	267.45
Roofing and guttering.....	8,073.33
Terra-Cotta work.....	583.89
Brick, including brick inspector.....	\$ 92,059.71
Brick-masonry on foundation.....	7,789.80
Brick-masonry on basement.....	17,100.37
Brick-masonry on superstructure.....	165,447.90
Limestone and granite, including stone for concrete	119,189.04
Iowa City quarry, being cost of Iowa City stone.....	66,858.10
Ste. Genevieve sandstone.....	113,767.79
Carroll County sandstone.....	79,574.08
Limestone and granite cutting.....	114,156.39
Sandstone cutting.....	134,456.47
Rubbing limestone and sandstone.....	15,998.21
Extra handling stone.....	2,004.26
Stone-masonry on foundation.....	14,711.21
Rubble-masonry on foundation.....	4,765.97
Stone-setting on basement.....	6,149.37
Stone-setting on superstructure.....	27,777.33
Total expenditures to Nov. 30, 1877.....	\$1,250,000.00

EXHIBIT "I."

Consolidated classified statement of Expenditures and Appropriations, from the commencement to November 30, 1877.

CLASSIFICATION OF ACCOUNTS.	Classified statement of the aggregate expenditures from the commencement of the work to Nov. 30, 1877.	Classified statement of the aggregate expenditures from the commencement of the work to Nov. 30, 1876.	Classified statement of the aggregate expenditures from the commencement of the work to Nov. 30, 1875.	Classified statement of the aggregate expenditures from the commencement of the work to Nov. 30, 1874.	Classified statement of the aggregate expenditures from the commencement of the work to Nov. 30, 1873.
Plans.....	\$ 4,023.71	\$ 50.80	\$ 27.14	\$ 4,101.65	\$ 4,101.65
Excavation and drainage.....	15,610.99	15,610.99	15,610.99	15,610.99	15,610.99
Stone, limestone and granite.....	96,861.86	9,530.85	12,856.33	119,189.04	119,189.04
Cistern.....	1,512.12	363.64	610.02	1,512.12	1,512.12
Sand.....	4,083.04	1,642.35	233.00	5,058.70	5,058.70
Expenses and miscellaneous.....	41,009.97	11,528.25	11,636.30	2,074.61	2,074.61
Salaries.....	52,533.76	52,533.76	52,533.76	64,224.42	64,224.42
Repairs on first foundation.....	14,221.81	14,221.81	14,221.81	52,533.76	52,533.76
Brick-masonry, foundation.....	7,789.80	7,789.80	7,789.80	14,711.21	14,711.21
Concrete labor.....	5,862.24	5,862.24	5,862.24	7,789.80	7,789.80
Printing and advertising.....	2,368.50	2,368.50	2,368.50	5,862.24	5,862.24
General labor.....	1,698.44	1,698.44	1,698.44	2,368.50	2,368.50
Patterns and models.....	609.52	922.18	1,631.14	1,698.44	1,698.44
Water.....	4,765.97	185.22	158.75	3,252.84	3,252.84
Rubble-masonry, foundation.....	60,871.30	60,871.30	60,871.30	1,083.64	1,083.64
Iowa City quarry.....	6,149.37	6,149.37	6,149.37	4,765.97	4,765.97
Brick-masonry, basement story.....	17,100.37	17,100.37	17,100.37	60,871.30	60,871.30
Stone-setting, basement story.....	1,410.37	1,410.37	1,410.37	17,100.37	17,100.37
Cash.....	995.85	995.85	995.85	1,410.37	1,410.37
Stone-cutting, limestone and granite.....	88,576.64	10,630.23	14,943.52	995.85	995.85
Railroad.....	12,637.90	976.53	607.38	14,943.52	14,943.52
Lumber and timber.....	4,015.15	4,274.24	21,548.11	114,156.39	114,156.39
Wrought iron work.....	13,910.16	39,508.71	20,390.66	12,637.90	12,637.90
Carpenter work.....	5,947.16	1,986.12	1,979.91	4,015.15	4,015.15
Cement.....	27,373.31	5,642.05	3,522.20	13,910.16	13,910.16
Board of Commissioners.....	12,317.37	926.86	1,033.33	5,947.16	5,947.16
Fuel.....	2,261.63	999.43	993.60	27,373.31	27,373.31
Machinery and tools.....	18,807.33	3,196.90	2,534.76	12,317.37	12,317.37
Nails and hardware.....	643.91	108.32	114.75	2,261.63	2,261.63
Water pipe and meter.....	757.44	25.46	79.45	18,807.33	18,807.33
Brick.....	50,446.61	27,533.83	14,079.27	643.91	643.91
Iron and steel.....	342.31	26.08	73.07	757.44	757.44
Cast-iron work.....	754.77	967.88	331.04	342.31	342.31
Lime.....	2,912.09	805.45	1,673.80	754.77	754.77
Carroll county stone.....	29,755.85	24,320.80	25,497.43	2,912.09	2,912.09
Ste. Genevieve stone.....	46,215.19	61,580.92	15,071.68	29,755.85	29,755.85
Sandstone cutting.....	55,166.02	42,227.04	37,062.81	46,215.19	46,215.19
Rubbing stone.....	6,023.08	5,907.07	4,098.06	55,166.02	55,166.02
Accidents.....	173.50	173.50	173.50	6,023.08	6,023.08
Extra handling stone.....	797.56	682.18	624.92	173.50	173.50
Brick-masonry, superstructure.....	18,445.60	17,843.34	12,230.08	797.56	797.56
Stone-setting, superstructure.....	8,462.58	10,392.47	8,922.28	18,445.60	18,445.60
Paints and oils.....	267.45	158.95	108.50	8,462.58	8,462.58
Roofing and guttering.....	8,073.33	8,073.33	8,073.33	267.45	267.45
Terra cotta work.....	583.89	583.89	583.89	8,073.33	8,073.33
Iowa City stone sold, charged to "cash."		275,013.20	*13.20	583.89	583.89
Total expenditures.....	\$ 750,000.00	\$ 275,000.00	\$ 225,000.00		
APPROPRIATIONS.					
Chapter 110, Laws of the Thirteenth General Assembly.....				\$ 150,000.00	
Chapter 35, General Laws of the Fourteenth General Assembly, being \$120,000 for the year 1872, and \$125,000 for each of the years, 1873, 1874, 1875, 1876 and 1877.....				725,000.00	
Chapter 68, Local Laws of the Fifteenth General Assembly, being \$75,000 for the year 1874, and \$50,000 for the year 1875.....				125,000.00	
Chapter 151, Laws of the Sixteenth General Assembly, being \$150,000 for the year 1876, and \$100,000 for the year 1877.....				250,000.00	
Total appropriations to December 31st, 1877.....				\$1,250,000.00	

NUMBER THREE.

ARCHITECTS' REPORT.

ARCHITECTS' OFFICE,
DES MOINES, IOWA, NOV. 28th, 1877. }

To the Honorable Board of New Capitol Commissioners:

GENTLEMEN:—In presenting this, our first general report, we deem it advisable to go back to the close of your last biennial report, although the work done during the year 1876 was under the direction of your late architect, Mr. A. H. Piquenard.

Upon our appointment as Architects of your New Capitol Building, it became our first duty to inspect and thoroughly understand the drawings, not only of the parts already executed, but also of the parts of the work yet to be done to complete the building as designed and estimated. After having carefully done this and reviewed the work executed under the direction of Mr. Piquenard, we feel it but due to him to refer herein to his great ability and skill as an Architect; to his fine taste and judgment in designing in general, and his ability in the selection and use of good and lasting materials, which we are convinced will be more fully appreciated as time reveals the fact.

Since the close of your last Biennial Report the work has progressed in a most satisfactory manner, the system employed by your Overseer of Construction, being one of rigid economy and discipline among the men employed, has resulted not only in gaining more work for a given amount of outlay, but has also been found to be more profitable to the men themselves. This system we found inaugurated, with an efficient corps of workmen, at the time of our appointment as your architects, and we have been so fully satisfied with its workings that we have not deemed it advisable to recommend a single change. The work thus far executed, when compared with that of other buildings of a similar character, is the cheapest and best we have ever seen.

At the close of the work done during the year 1875, the exterior walls were all finished to the top of the first story, except one pavilion

and a portion of the north wall. Since then these walls have been completed, the walls of the south wing finished and the roof put on, while the walls of the north, east and west wings have been finished to the top of the second story, and the floor beams and other iron work put in place for the third or gallery story. To accomplish this end a large force of men have been employed in cutting the stone, setting them, laying brick, putting up the iron work, and doing other work necessary in connection with the same, a detailed statement of which will be found fully set forth in the report of the Overseer of Construction.

The Ste. Genevieve and Carroll County, (Missouri) sandstone which you have selected and used in the construction of the superstructure of the building have proved most satisfactory, the combination of color in the two stones producing a very pleasing effect.

The contractors for furnishing materials for the different branches of work, have in most cases been prompt in the delivery of their work, and complied strictly with their contracts.

The action of your Board in substituting polished granite columns in the rotunda, on the House and Senate floor, for the limestone, we deem a most wise decision, as there is nothing more fitting or which would produce a more consistent and pleasing effect. Sustaining as they do a very great weight, they have not only the appearance of solidity of design, but are of the greatest possible use, and the extra cost entailed by them is small compared with the superiority of the work.

The reinforcement of the columns in the corridors which assist in the general support of the dome have been made, and the proper support for a stone dome, if it should be deemed advisable by the legislature to construct the dome of stone, secured beyond a doubt.

In regard to the roofing materials employed on your new capitol, we would say that there is nothing at the present time known to be better. The trusses and framing complete are made of iron, covered with porous terra cotta, and on this is laid the slate firmly bedded in cement mortar, making a solid mass impervious to the elements, not a particle of wood or inflammable material of any description being used in its construction.

The gutters, valleys, flashings and down spouts have all been made of heavy copper, and the counter flashings of sheet lead, proper allowance in all cases having been made for the proper expansion and contraction of the metals, so that the roof should last without repairing

for a century or more. It is an established fact that two of the most important features of a building designed to last for many years are a good foundation and a good roof, and while we have already referred to the other branches of the work, we desire to call your especial attention to these two features and say that we believe you have been extremely fortunate in the selection of your materials and the class of work obtained.

During the next two years we should be able to do much more work than has been done during the same length of time in the past, in order that the building may be enclosed and protected from the weather as soon as possible, and so dried out that the interior work may be commenced.

During the first year we would recommend the following work to be done:

The walls of the north, east and west wings should be completed and the roof put on; at the same time the stylobate of the dome should be carried up and the roof put on over the space between the main walls of the dome and the main roof; the doors and windows throughout the whole building should be closed, and the brick arches for the floors and ceiling in the south wing should be laid.

A boiler house for the reception of the steam boilers and heating apparatus should be built and the boilers and pipes be put in place for use in the drying out of the building, and the supplying of steam for machinery for wood working, hoisting, &c. The plumbing and gas fitting pipes should also be put in place. Machinery should be placed in the basement story for the working out of the wood finish, and much of this work done next winter.

But should it be deemed advisable by the legislature not to appropriate money enough to accomplish all of this work, the walls, at least, should be carried up and the roof put on to enclose and protect the building from the weather. Our estimate to accomplish this is \$200,000.00.

During the second year the north, east and west wings will be enclosed, the brick arches for the floors and ceilings laid, the plastering and much of the wood work done, and the steam heating, gas fitting and plumbing completed.

We also desire to call your special attention to the importance of finishing, with the rest of the work, the grand dome and the turrets of the pavilions. It is difficult to realize the extra expense that will necessarily be incurred if these important features of the building are

left to be completed after the interior of the main building is completed. Besides the inconvenience to the different offices of State, the marble tiling would either have to be removed or would be destroyed, as would also all of the plastering and finish upon the interior of the parts being completed. The same scaffolding at the present time used in the construction of the work can be employed to complete the same, while in the future they would all have to be provided and constructed anew. The temporary roof which would have to be built if these features are omitted, would be saved to the State, and the money employed in their construction put into the permanent structure. There are many other reasons why these features should be constructed in company with the other parts of the work which might be mentioned, and which are easily foreseen. We believe it our duty as the architects of your new capitol building, to call your attention to these things, as we believe them to be for the best interests of the State of Iowa, that the whole work contemplated should be completed in its regular order. In our experience upon other buildings of this class, we have found this to be all important.

The materials used in the construction of these parts should be of the most durable kind, not only that it may properly correspond with the other portions of the building, but because of their elevated positions and the difficulty of repairing an inferior material. It is our opinion that these portions of the building should be constructed of stone same as that already employed in the main superstructure, as this would be much the most economical and satisfactory in the end.

Very respectfully submitted,

BELL & HACKNEY, *Architects.*

NUMBER FOUR.

REPORT OF THE ARCHITECTS ON THE COST OF CON-
STRUCTING MAIN DOME AND TURRETS.

ARCHITECT'S OFFICE, }
DES MOINES, IOWA, NOV. 28, 1877. }

To the Hon. Board of New Capitol Commissioners:

GENTLEMEN:—In accordance with your instructions, we have prepared the drawings required to give full and complete interpretations of the design for the dome and pavilion turrets, and we hereby submit the following report, in company with the illustrative drawings, and details for your consideration.

The construction contemplated by our drawings, as submitted, is for a stone dome and stylobate, with brick backing; the stone to be the same as that already employed in the construction of the superstructure of the main building, using the buff or cream colored Ste. Genevieve for the main body, and the light blue Carroll county stone for the trimmings, which we consider the most appropriate.

The tholus, or bell of the dome, as contemplated, will be of iron framing for the main supports, and sheathed with porous terra cotta and covered with two and one-half pound copper or slate laid in cement on the exterior. The lantern, or cupola, will also be of iron framing and copper covering, with wrought iron flag-staff, covered with copper. The interior finish will be a combination cast and wrought iron support for the peristyle columns of the inner dome above, with brick arches for the support of the floors. The peristyle columns will be of light cast iron, including the pedestal, with a light cast and wrought iron railing between the same. The inside dome proper will be made of light wrought iron ribs and cross bars for the reception of the glass. The concave ceiling above the interior dome will be also of light wrought iron framing and wire lath for plastering, and all sustained by wrought iron rods attached to the main ribs forming the tholus of the dome proper. The general interior finish will be in cinder plastering of good and strong body, finishing in white, pure

plaster of Paris, and properly ornamented. The frieze of the main interior cornice will be nine feet in height, for the representation in oil colors of the history of the State from the time of its earliest settlement down to the present time. The concave surface above the opening in the inner dome is designed to receive an allegorical painting in oil colors also, to be viewed from the different stories below through the opening of the inner dome.

Our estimate for the completion of the dome, as represented by the plans and as described above, is as follows:

STONE WORK.

Stone.....	\$48,881.53	
Stone cutting.....	46,622.64	
Handling.....	8,775.77	
Rubbing.....	3,115.68	
Setting.....	30,120.35	
Scaffolding.....	4,150.00	
Centering.....	520.00	
Patterns and Models.....	3,000.00	\$145,185.97
Bond stone, (cut and set).....	19,875.90	
Balusters, (Terra Cotta).....	1,152.00	
Brick work.....	67,359.10	
Iron framing.....	20,647.64	
Copper work, iron railings and stairs, wood work, doors, windows, &c.....	41,796.35	
Plastering and stucco finish.....	25,952.00	
Painting stone work.....	4,420.64	
Frescoing.....	25,000.00	
Statuary.....	20,000.00	
Commissioners and Architects.....	20,000.00	
Total.....		\$391,389.60

In the construction of an iron dome and stylobate, the same outline and form would be given to each, as that executed in stone, the different parts being cast to imitate, perfectly, stone construction, and anchored to the brick backing, sufficient in thickness to carry the principal weights to the same heights as designed in stone. For this iron construction, our estimate is as follows:

Stylobate, 185,919 pounds, at 5 cents.....	\$ 9,805.99
Porticos, 290,880 pounds, at 6 cents.....	17,452.80
First story walls, 277,280 pounds, at 6 cents.....	16,636.80
Balustrade, 52,960 pounds, at 7 cents.....	3,707.20
Second story, 174,760 pounds, at 7 cents.....	12,133.20
Attic, 51,360 pounds, at 8 cents.....	4,105.80
Flooring, 381,840 pounds, at 6 cents.....	22,910.40
Total.....	\$86,752.19

The stone, which, in the iron dome construction would be replaced by iron, as previously estimated, would be as follows :

Stone.....	\$143,337.97
Iron.....	86,752.19
Difference.....	\$36,585.78

Thus in the employment of iron construction for the dome and stylobate, there would only be a saving of \$36,585.78.

We have also prepared the design and details of the turrets upon the four pavilions, which, in accordance with the same executed in stone, we have estimated as follows :

Cost of stone delivered.....	\$ 4,339.32
Cutting.....	2,431.00
Handling.....	607.75
Rubbing.....	227.99
Setting.....	1,095.50
Brick work.....	2,577.60
Iron.....	1,678.50
Copper.....	3,612.50
Sheathing.....	430.00
Windows.....	250.00
Scaffolding and centering.....	200.00
Total cost of one turret.....	\$17,450.16
Cost of the four turrets.....	\$69,800.64

The cost of the stone which would be dispensed with in the use of iron construction for these turrets, is as follows:

Stone.....	\$34,806.24
Iron.....	25,238.40
Difference.....	\$ 9,567.84

Our estimate, therefore of the difference of cost in the execution of the design for the dome and turrets, between stone and iron, is \$46,153.62, the iron being that much the cheapest. A summary statement of which is as follows:

COST OF STONE CONSTRUCTION.

Main dome.....	\$391,389.60
Four turrets.....	69,800.64
Total.....	\$461,190.24

COST OF IRON CONSTRUCTION.

Main dome.....	\$354,803.82
Four turrets.....	60,232.80
Total.....	\$415,036.62

In regard to the construction of the tholus of the dome in terra cotta, we have to report that our estimate for its construction in this material is as follows:

Terra cotta.....	\$50,000.00
Brick backing.....	8,000.00
Iron arching.....	180.00
Total cost.....	\$58,180.00

Deducting the cost of the materials replaced in the use of terra cotta instead of copper covering, which is \$28,530.00, we have an excess of cost for terra cotta of \$29,647.00, which should be added to our total estimated cost of the dome, making a grand total of \$421,036.60. In the comparative cost of the tholus covering in copper or slate, we have to report that there is, practically, no difference in the expense. The cost of laying the slate compensating for the difference in the price of the material.

Very respectfully submitted,

BELL & HACKNEY, *Architects.*