REPORT OF COMMISSIONERS

FOR THE

ERECTION OF BUILDINGS

FOR A

DEAF AND DUMB ASYLUM,

AT COUNCIL BLUFFS,

TO THE

GOVERNOR OF THE STATE OF IOWA.

JANUARY, 1870.

DES MOINES: F. M. MILLS, STATE PRINTER. 1870.

REPORT OF COMMISSIONERS

FOR THE ERECTION OF BUILDINGS FOR DEAF AND DUMB ASYLUM
AT COUNCIL BLUFFS,

TO THE HON. SAMUEL MERRILL, GOVERNOR OF IOWA:

The undersigned, Commissioners for the erection of buildings for a Deaf and Dumb Asylum at Council Bluffs, submit to you the following report:

By an act of the legislature, chapter 107, laws of 1868, the commissioners were required to procure, without expense to the State, ten acres of ground adjoining the eighty-acre tract already donated by the citizens of Council Bluffs. The owner of this tract of ten acres resided in the state of Mississippi, and all attempts to purchase the same by correspondence having failed, one of the commissioners, Mr. Officer, went to Vicksburg in person, and, after much delay, succeeded in procuring for the State the deed for said land, which deed has been duly recorded.

As soon as possible after this land was purchased, we advertised for proposals for the erection of the buildings authorized to be built by said act. There were three bids for the work, as follows:

Jacob Reichard	180,000.00
Bond & Co	178,028.10
W. R. Craig	121,500.00

These bids were received and opened on the 29th day of July, 1868, and on the 10th day of August, following, the commissioners having accepted of the proposition of W. R. Craig, a contract was

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entered into between the commissioners, on behalf of the State, and the said W. R. Craig, a copy of which is herewith submitted together with a copy of his bond, and other papers connected therewith.

On the 1st day of September, 1868, the commissioners appointed W. Ward, Esq., an architect of experience and ability, as superintendent, at a salary of \$1,600 per annum, on condition that he should devote his whole time and attention to the work on said buildings. Mr. Ward has discharged the duties of his office faithfully and efficiently. We submit his communications and his official reports to the commissioners of the progress of the work under his charge.

We also submit, herewith, a statement of the amount of money received from the State, and the manner in which it has been expended; the vouchers for the money expended have been filed with the Auditor of State, together with the estimates, as required by the act of the legislature.

By reference to this report it will be observed that there has been expended the sum of \$77,239.72. Of this sum \$69,894.62 has been paid to Mr. Craig, the contractor, and the sum of \$7,344.14 has been expended in grading, printing, fencing, planting trees and in payment of the salary of superintendent.

The commissioners regarded themselves instructed by the action of the legislature in directing the purchase of the additional ten acres to place the buildings upon an elevated portion of said grounds. To do this, required a heavy amount of grading. Although this work was done at a very low price, the greater portion of the earth being moved at thirteen cents per cubic yard; yet this work, it will be seen, cost in the aggregate near \$4,000.

Fifty acres of the ground has been enclosed with a good, substantial fence, and about three hundred shade trees set out.

The amount appropriated by the legislature at its last session was \$125,000. The commissioners have expended the sum of \$7,344,14 for grading, etc., as above stated.

The sum agreed upon to be paid to the contractor is \$121,500; the sums thus expended and agreed to be paid, amount in the aggregate to \$128,844.14, which exceeds the appropriation in the sum of \$3,844.14.

To meet this deficiency, to provide for the payment of the super intendent's salary, to further grade and improve the grounds, and to erect such out houses as may be required before the building can be conveniently occupied, will in the opinion of the commissioners require a further appropriation of \$12,000, which we ask you to recommend to the legislature to be made. By reference to the report of the superintendent, it will be seen that he estimates the actual cost of the work and materials on the buildings as now being erected to the contractor, to exceed the contract price in the sum of near \$15,000.

You will recollect that the commissioners at the time this contract was entered into with Mr. Craig were fearful that he had undertaken to do the work at too low a price, but as the letters he produced and the bond he executed satisfied us that he was a responsible man, we considered it our duty to let him have the contract.

We considered at the time that if Mr. Craig could complete the buildings at the contract price, the State would have its buildings erected for at least \$30,000 less than we anticipated.

By reference to the original plans and specifications, it can readily be seen that the portion directed to be constructed, to wit: the main building and one lateral wing, would necessarily cost more than one half of the buildings included in our contract with Mr. Jacob Reichard, as submitted to the last legislature, his bid and contract was \$300,000 the lowest then received.

Knowing that the work was let at such a low price, our instructions to the superintendent were, to watch the work constantly; to -require all of the material to be of the very best quality, and the work to be done in a good and workmanlike manner, and to make estimates only upon the actual value of the material on the ground and the work actually done, so that the State would get value received for every dollar expended. We think our instructions have been fully and implicitly followed by the superintendent.

Mr. Craig entered upon his work with a determination to have it completed by the time fixed in his contract. He is a man of great energy and industry. A good mechanic himself, he in person superintended every portion of the work, until he met with an accident

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Notwithstanding this misfortune, had it not been for the remarkably wet season, the building by this time would have been enclosed.

For the reasons stated in the communication of the superintendent to the board after the contract was let, it was deemed advisable to adopt certain changes in the building as therein suggested. We considered these changes necessary, and that we had the power, and it was our duty to make them. Mr. Craig claims that these changes have increased the cost of the work to him, and with a fair and reasonable compensation for this extra work, he can complete the buildings without loss to himself.

The commissioners also regarded themselves instructed by the action of the legislature in adopting the Schwartz & Dilger plans to have the building heated by the Baker & Smith steam heating apparatus, and accordingly required Mr. Craig to construct his building with reference to its use and to contract for the same.

By requiring him to contract with a certain party for the heating apparatus, he claims he has been compelled to incur a far greater liability than if he could have had competition for the same. We are satisfied, however, that the apparatus adopted is the best that have been submitted to us, although perhaps more expensive to Mr. Craig.

The work so far on the building is of the best character, plain and substantial, and the material of the best kind.

The superintendent estimates that it will require \$15,000 more to complete the buildings and have it ready for occupancy at the time fixed by the contract. We therefore ask you to recommend an appropriation of this sum, to be placed at the disposal of the commissioners to be used by them in case such an amount is justly due to Mr. Craig by reason of any extra work done by him, or even if not due to him, and he should fail to carry out his contract, that the commissioners might have this sum available to secure the completion of the buildings before another appropriation could be made.

The superintendent has also in his report estimated the cost of

building the west wing. We consider it of the greatest importance that this should be erected before the buildings are occupied by the mutes. We regard it as absolutely necessary for the proper division of the sexes and to afford suitable and convenient rooms for the number of that unfortunate class now in our State that desire to avail themselves of the benefits of such an institution.

Since the last meeting of the commissioners at which you were present, God, in his providence, has removed from us one of our number, the lamented Dr. E. Honn.

At that meeting he was in apparent good health, and with as fair a prospect as either of us that his life would be prolonged to see these buildings completed in which he took so great an interest. Dr. Honn was an old citizen of this place and much esteemed by all who knew him. We mourn his loss as a citizen and fellow commissioner.

CALEB BALDWIN, THOMAS OFFICER, G. M. DODGE.

Commissioners.

C. Baldwin, President of the Commissioners of the Deaf and Dumb Asylum at Council Bluffs, Iowa, in account with the State of Iowa.

1868.	LIFE	To cash received from State—Dr.	
Sept.	26.	Auditor's warrant	\$1,778.70
Jan.	11.	Auditor's warrant	5,612.00
	30.	Auditor's warrant	5,679.00
Mar.	20.	Auditor's warrant	2,907.50
April	7.	Auditor's warrant	6,431.93
	8.	Auditor's warrant	2,203.75
May	25.	Auditor's warrant	4,145.44
June	17.	Auditor's warrant	5,139.92
	26.	Auditor's warrant	1,688.46
July	20.	Auditor's warrant	5,519.37
Aug.	6.	Auditor's warrant	3,900.81
	25.	Auditor's warrant	4,176.88
Sept.	10.	Auditor's warrant	6,362.48
	24.	Auditor's warrant	400,00

8 REPORT OF THE COMMISSIONERS	[No. 13.
Sept. 27. Auditor's warrant	3,338.25
Oct. 12. Auditor's warrant	5,539.12
Nov. 12. Auditor's warrant	4,771.00
July 24. Auditor's warrant	94.15
Dec. 10. Auditor's warrant	300.00
10. Auditor's warrant	6,850.00
10. Auditor's warrant	400.00
	\$77,238.76
Estimates to W. R. Craig—Cr.	
No. 1. December 24, 1868	\$5,148.00
No. 2. January 28, 1869	4,271.25
No. 3. March 13, 1869	2,483.50
No. 4. March 31, 1869	8,248.60
No. 5. May 14, 1869	4,145.44
No. 6. June 12, 1869	5,139.92
No. 7. July 14, 1869	5,519.37
No. 8. July 30, 1869	3,900.81
No. 9. August 21, 1869	4,176.88
No. 10. September 8, 1869	6,362.48
No. 11. September 24, 1869	3,338.25
No. 12. October 9, 1869	5,539.12
No. 13. November 5, 1869	4,771.00
No. 33. December,	6,850.00
	\$69,894.62
ESTIMATES.	
No. 14.—September 22, 1868, S. W. Horton	\$1,778.70
No. 15.—February 1, 1869, H. D. Washburn	840.00
No. 16.—March 15, 1869, Wm. Ward	424.00
No. 17.—March 29, 1869, H. D. Washburn	823.83
No. 18.—June 4, 1869, G. F. Smith	1,288.46
No. 19.—June 10, 1869, D. Tutty	75.00
No. 20.—June 15, 1869, Wm. Ward	400.00
No. 21.—November 30, 1869, D. L. Royer	300.00
No. 22.—Wm. Ward, 4th qur. salary, 1869	400.00
No. 23.—November, 1869, Schwartz & Dilger	15.00

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4.15
131.00
400.00
26.00
10.00
12.00
6.00
10.00
400,00
\$ 7,344.14

GLENWOOD, July, 16, 1868.

JUDGE BALDWIN:

I have the pleasure of introducing to you W. R. Craig, of Nebraska City, a master mechanic desirous of examining the plan of your prospective asylum. Mr. C. was heartily recommended to our school board by James Sweet, and others, and has fully sustained his good name here as a builder and gentleman—having completed our new school to the entire satisfaction of all our people.

Very respectfully,

H. C. WATKINS.

COUNCIL BLUFFS, IOWA, Aug. 20, 1868.

MR. SWEET, NEBRASKA CITY:

Will you please inform us what has become of Mr. Craig? Does he intend to file his bond, or not? If not, please return the contract. We must know at once what is to be done.

C. BALDWIN, for Commissioners.

Mr. Craig filled his bond yesterday; left it with me for certificates, but I have been too busy to finish it up. Will forward bond and con-

ract on Monday. Mr. C. informed me he had written you directing grading to be done, in order to commence work first of next month. Yours, truly,

JAMES SWEET.

COUNCIL BLUFFS, July 29, 1868.

To Gov. Samuel Merrill, Thomas Officer C. Baldwin E. Honn, Commissioners of Deaf and Dumb Institute.

Gentlemen:—I propose to erect and complete the main building and one of the connecting wings of your institute, in accordance with plans, drawings and specifications, for the sum of one hundred and twenty-one thousand five hundred dollars.

W. R. CRAIG.

Know all men by these presents, that we, W. R. Craig as principla, and James Sweet and Robert Hawke, as sureties, are held and firmly bound to Gov. Samuel Merrill, Thos. Officer, C. Baldwin, and E. Honn, as commissioners to receive bids for the building of the Iowa State Institution for the Deaf and Dumb, at Council Bluffs, Iowa, in the full sum of five thousand (5000) dollars, for the faithful payment of same we bind ourselves, heirs, executors and administrators by these presents.

The condition of the foregoing obligation is such, that whereas the above named commissioners, as such, have advertised and called for bids and proposals for erecting and constructing the building for such institution at Council Bluffs, Iowa, and whereas the said W. R. Craig, as a builder, has submitted a proposal for erecting and building the edifice for such institution, (reference being had to the enclosed notice published by such commissioners.)

Now, therefore, in the event of such building being awarded to said W. R. Craig, as contractor or builder, and in the event of said Craig giving suitable bond with good and satisfactory security in half the costs of such building, that said Craig will build the same as per specifications and requirements, in a workmanlike manner, this obligation to be void; otherwise to

be in full force and effect.

W. R. CRAIG, JAMES SWEET, ROBT HAWKE.

Dated this 27th day of July, A. D. 1868.

NEBRASKA CITY, NEB., Aug. 26, 1868.

W. R. CRAIG, Esq.:

The clerk of the district court is out of town. I have been to the office four times since Saturday, and have not been able to find him, and for that reason I send the bond without his certificate of sufficiency of sureties.

You can assure Messrs. Officer and Baldwin that Geo. W. Sroat and O. Stevenson's names alone are good for \$30,000.

I am, very truly,

JAMES SWEET.

Know all men by these presents, That we, the undersigned,
W. R. Craig, R. S. Craig, John C. Campbell, S. D. Crook, G. M. Sroat, J. W.

Moore, Wm. Lennan, C. W. Seymour,
Thos. B. Stevenson, O. P. Mason, O.
Stevenson, S. P. Sibley, hereby acknowledge ourselves indebted to the
State of Iowa in the penal sum of sixty-one thousand dollars.

ON BUILDINGS AT COUNCIL BLUFFS.

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The above obligation is upon the following conditions, to wit: WHEREAS, The undersigned W. R. Craig of Nebraska City, Nebraska, did, on the 20th day of August, A. D. 1868, enter into an greement with Thos. Officer, Caleb Baldwin, E. Honn, and Sam'l. Merrill, commissioners appointed by the legislature of the State of Iowa for the erection of buildings for a deaf and dumb asylum near the city of Council Bluffs Iowa, to furnish all material and labor, and erect the main building and one lateral wing of said institution of the dimensions, and according to the plans, drawings and specifications now on file in the office of said commissioners at Council Bluffs, and which are made a part of his said agreementsaid plans, drawings, and specifications being the same that were submitted by Schwartz & Dilger, architects of Springfield Ill., and adopted and approved by said commissioners and the legislature of the said State of Iowa-and have said main building and one lateral wing fully completed and ready for occupancy by the first day of October, A. D. 1870, and that he would commence work on said building, on or before the first day of September, A. D. 1868, and prosecute the same without cessation, unless unavoidably prevented by stress or severity of weather, or the act of God, to the completion of said main building and one lateral wing, and that he will invest all sums of money advanced to him by the State of Iowa on said contract in such material and labor as are required to be used in and about the construction of said main building and one lateral wing, and pay all damages to the State of Iowa which may be sustained by said State of Iowa, in the failure of the said W. R. Craig in any respect to fulfil any part or portion of his said agreement with said commissioners; he, the said W. R. Craig, to receive from the said State of Iowa for such performance, the full sum of one hundred and twenty-one thousand and five hundred dollars to be paid according to the terms of said agreement.

Now, if the said W. R. Craig, shall, on or before the 1st day of September, A. D. 1868, in good faith commence the work on said main building and one lateral wing, and prosecute the same without cessation, exception as above, to completion, and have the same completed in accordance with the terms of said agreement and the plans, drawings and specifications made part thereof, except when

changes shall be made as provided in said contract, and the same accepted and ready for occupancy by the first day of October, A. D. 1870, and if he shall invest all sums of money that may be advanced to him by the said State of Iowa on said agreement, in such material and for such labor as is required in the construction of said main building and one lateral wing as contemplated by said agreement, and shall on his part perform all the requirements and stipulations of said agreement, and pay to the State of Iowa all damages which may be sustained by said State of Iowa, from the failure of the said W. R. Craig in any particular to fulfill and perform any portion of his said agreement with said commissioners, then this obligation to be void, otherwise of full force and effect.

Given under our hands and seals this 20th day of August, A.

D., 1868.

No. 13.7

W. R. CRAIG.	[Seal.]
R. S. CRAIG.	[Seal.]
JOHN C. CAMPBELL.	[Seal.]
S. D. CROOK.	[Seal.]
G. M. SROAT.	[Seal.]
I. W. MOORE.	[Seal.]
WM. M. LENNAN.	[Seal.]
C. W. SEYMOUR.	[Seal.]
THOS. B. STEVENSON.	[Seal.]
O. P. MASON.	[Seal.]
O. STEVENSON.	[Seal.]
S. P. SIBLEY.	[Seal.]

I, James Sweet, do hereby certify that I am well accquainted with the sureties named in the within bond, and whose names are subscribed thereto and believe the said sureties are good for the amount of said bond.

JAMES SWEET. O. P. MASON.

Dated, Nebraska City, August 20, 1868.

Know all men by these presents, That we, Thomas Officer, Caleb Baldwin, E. Honn, and Samuel Merrill, commissioners appointed by

an act of the legislature of the State of Iowa, entitled "an act to permanently locate the Institution for the Deaf and Dumb at Council Bluffs," approved April 3d, 1866—the three former being continued, and the latter as, Governor of said State, ex-officio commissioner by an act of said legislature, entitled "an act providing for the erection of buildings for a deaf and dumb asylum," on behalf of the State of Iowa, and by virtue of the authority by said acts conferred upon us, as party of the first part, and William R. Craig, contractor and builder of Nebraska City, in the state of Nebraska, party of the second part, have, this tenth day of August, A. D. 1868, made and entered into the following articles of agreement, namely:

First—The said commissioners, party of the first part, having accepted of the proposition of the party of the second part, a copy of which said proposition and the acceptance thereof being hereunto attached and made a part of this agreement, to erect the main building and one lateral wing of said institution, do hereby agree to employ the said William R. Craig, party of the second part, to erect said main building and one lateral wing thereto, in accordance with the plans, drawings. and specifications now on file in the office of said commissioners, and upon the terms and conditions hereinafter named.

Second—That said party of the second part, for the consideration hereinafter named, agrees to furnish all the material and labor and erect said main building and one lateral wing, of the dimensions and according to the plans, drawings, and specifications now on file in the office of said commissioners, and the specifications thereto attached and made part of this agreement, the said plans, drawings, and specifications being the same that were submitted by Messrs. Schwartz & Dilger, architects of Springfield, Illinois, and approved and adopted by said commissioners and the legislature of the said State of Iowa, as the plan upon which said main building and one lateral wing thereto should be constructed, and the same as referred to in the proposition of the said party of the second part above referred to as a part of this agreement.

Third—The said party of the second part agrees to erect said main building and lateral wing upon such portion of the ground selected by said commissioners for the location of said institution near Council Bluffs as the said commissioners may direct, and have

the same fully completed in strict literal compliance with all of said plans, drawings, and specifications and terms of this agreement, except when changes are made, as provided in the seventh article of this contract, and ready for occupancy by the first day of October, A. D. 1870.

Fourth—The said party of the second part agrees to execute and deliver to said commissioners within ten days from this date, a bond to the State of Iowa in the penal sum of sixty-one thousand dollars with sureties, to be approved by said commissioners, conditioned that he will on or before the first day of September, A. D. 1868, commence the work on said main building and on one lateral wing, and have the same completed in accordance with the terms of this agreement, and ready to be occupied by the first day of October, A. D. 1870; and that he will invest whatsoever sum or sums of money in such material and labor as is required to be used in the further construction of said buildings, and pay to the said State of Iowa all damages which may be sustained by said State of Iowa from the failure of said party of second part in any respect to fulfill any portion of this agreement.

Fifth-The said party of the first part agrees that the State of Iowa shall pay to the party of the second part in consideration for the erection of said main building and one lateral wing in compliance with the terms of this agreement, the sum of one hundred and twenty-one thousand and five hundred dollars, (\$121,500) in manner as follows, to-wit: Whenever the said party of the second part shall have actually upon the grounds where said asylum buildings are to be erected and built work done and materials furnished for the erection of said buildings to the amount of five thousand dollars, as per the estimates made thereon by the superintendent appointed by said commissioners to superintend the work on said building as provided in said specification, and by him reported to said commissioners, then the said party of the second part shall be paid the amount of such estimate and shall give his voucher therefor to said commissioners, and he shall be so paid from time to time upon such estimates for work done and materials actually furnished and upon said grounds, until the said party of the second part is paid all but the sum of twenty-one thousand five

hundred dollars, which is only to be paid when the whole work is done, and said main building and one lateral wing is fully completed, accepted and ready for occupancy in according with the terms of this agreement.

Sixth—It is expressly agreed and understood that this contract is made under and subject to and with a full understanding of said acts of the legislature above referred to in the location and erection of the buildings for the deaf and dumb sylum at Council Bluffs, Iowa, and said acts are made a part of this agreement so far as they may be in any way material to this act.

Seventh—It is agreed that the party of the first part shall have and hereby reserves the right and privilege to change the plans and specifications of said main building and one lateral wing, and it is further agreed that the plans and drawings as referred to in this agreement and now on file in the office of said commissioners, embrace the following, to-wit:

- No. 1. Basement.
- No. 2. First story.
- No. 3. Second story.
- No, 4. Third story.
- No. 5. Basement and third floor.
- No. 5½. First and second story.
- No. 6. Fourth story and roof plans.
- No. 7. Staff section and building.
- No. 8. Truss roof.
- No. 9. Detail of windows, inside finish, etc.
- No. 10. Belting course, etc.
- No. 11. Details of interior finish.
- No. 12. Detail doors.
- No. 13. Front elevation.

Eighth—It is agreed that in case of any change made by the parties of the first part in the plans of said building, such as in the opinion of the superintendent would necessarily delay its completion beyond the first day of October, A. D. 1870, then and in that case the party of the second part is not to be liable on his bond for a failure to have said buildings completed at the time specified as above and in his bond.

Ninth—It is further agreed that whenever the said party of the second part shall have material upon the ground for the erection of said buildings, and when estimates have been made thereon by the superintendent as aforesaid and payments have been made thereon by said commissioners in behalf of the State of Iowa, then the ownership and right of possession to said material and property passes to the said State of Iowa, and the said party of the second part shall have no further right, title or interest in the same, except for the special purpose of using the same in the construction of said buildings.

THOMAS OFFICER, CALEB BALDWIN. E. HONN, SAMUEL MERRILL, W. R. CRAIG,

Commissioners on behalf of the State of Iowa.

COUNCIL BLUFFS, IOWA, November 30, 1868.

TO THE COMMISSIONERS FOR THE IOWA STATE BUILDINGS FOR THE DEAF AND DUMB AT COUNCIL BLUFFS,

Gentlemen:—I propose the changes on the asylum buildings be in writing, that each member may at his leisure, form an opinion as to its necessity:

No change has been proposed merely to reduce the expense—if it happens to be cheaper it has been proposed because it is better.

Although it is undisputably true that economy limits our choice of means, it is by no means true that the best methods of construction and the most beautiful and harmonious combinations of form are most expensive.

It is evident that while part of the building, designed for the use of one of the sexes, is to be used for both, some change will be required in dividing the rooms.

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ap; ear low. To make them three feet three inches would improve their proportion, and add nine inches to the strength of the walls. The doors are three feet three inches wide, and in the first story eight feet nine inches high; three feet by seven feet six inches is abundantly large, and much more convenient to handle.

In addition to this I would call attention to the size of the rooms in main building—by figures on drawing "No. 3," the back rooms are 25 feet 8 inches in the clear, the front ends of the joists rest on a nine inch brick wall, which not only support this large area of floors in the third and fourth stories, but also the roof and half of observatory. There are also rooms in the front, 24 feet 4 inches in the clear.

I would recommend, if practicable, that all these rooms be reduced to twenty feet in the clear. This would give the necessary stiffness, and reduce the cost about \$5000.

The defects in the original plan seem to be consequent upon an erroneous estimate of the strength of our Iowa brick.

I would also recommend the substitution of a wooden cornice for the one of Milwaukee pressed brick. By this we not only get rid of the overhanging weight above the ceiling joist, 2 feet 3 inches on the wings and 5 feet 3 inches on main building, but get a better construction by the plate being fastened directly on the joist. It also protects the thin upper walls from moisture. This change would necessarily involve other changes, the principal of which would be to leave off the turrets at the corners. I propose this change in the cornice with a full knowledge of the severe and just criticisms against wooden cornices in cities. In the present case, where the building will always be isolated, these objections cannot apply. At first sight it appears an inferior construction, but being tinned over as a part of the roof, it is as well protected as the roof timbers themselves, and more so than the frames. It also greatly increases the architectural effect. I present an 'elevation' of the front, showing these changes. They would reduce the cost some \$12,500.

It has been proposed to add the fourth story above the chapel to its height. At present it is only sixteen feet, and the room above of no use, but to add to the outside appearance of the centre building. This would save that part of the fourth story floor, value about \$575.

There are other minor changes which would improve the building, but are not so important as the above. The windows are four feet wide: on this account, although they are nine feet high, they The common impression that in a large building everything about it must be of large proportions is wrong, we judge of the size of a building represented on a small piece of paper, or the building itself even at a short distance by the number and proportion and its openings, if the openings in a large building are of the same proportion, as in smaller ones, a part of that most powerful element of architectural effect "magnitude" is sacrificed; some eminent architects have reversed these proportions and produced apparent magnitude where it did not exist. I would not recommend deception. The doors should be of the most convenient size, the windows of a proper width and the height to compound with the height of the stories. With these properly proportioned as a unit of measurement a correct judgment of the whole will be found, either at a distance, or while inspecting the different parts in detail.

I would also call attention to the height of the first and second stories, by making these twelve instead of fourteen feet, the rooms would be much easier warmed; the stairs shorter, and about \$300 saved in construction; and I believe would not be a particle worse in any respect. The third story I would leave the whole height fourteen feet, it gives the necessary height for cornice and will receive considerable heat from the lower apartments.

There are other necessary changes which will add to the cost.

To prevent the building from unequal settlement some of the footings must be increased.

The two upper stories of the back wall must be made as thick as the front walls.

The piers between the dining-rooms and dining-hall which are of brick must be of cut stone, or strengthened with iron columns.

That part of the back and front walls of main building supporting the roof and observatory must be made stronger, and several trusses added to the roof framing.

The north-east end finished (instead of being left rough) by returning the belt courses and cornice around it.

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And when the plumber shall locate the tanks, some provision will have to be made for their support.

REPORT OF THE COMMISSIONERS

Respectfully submitted,

WM. WARD, Superintendent.

The above report was adopted by the committee, except the recommendations to reduce the size of the doors and height of the first and second stories.

COUNCIL BLUFFS, IOWA, Dec. 17, 1869.

TO THE COMMISSIONERS FOR THE IOWA STATE BUILDINGS FOR THE DEAF AND DUMB, AT COUNCIL BLUFFS,

GENTLEMEN:-At your request, I submit the following general report:

I took charge of the work September 1, 1868, on the condition that such changes should be made in the plans as would render them practicable. I stated at the time that I believed Messrs. Schwartz and Dilger, the original architects, were men of ability. My better acquaintance with the plans and specifications confirm that opinion, and I feel certain that upon becoming acquainted with the local circumstances they would have made similar changes with those submitted in November, 1868, having made ample provision for such action in the specifications.

The original design was practicable, only, in the very hardest semi-vitrified brick. Therefore, in constructing it of our Iowa brick, the walls had to be increased in thickness, the strength was also further increased and the building rendered less combustible by substituting, as far as practicable, brick for wood partitions, and still further by relieving the outer walls of the heavy brick cornice and stone capping.

For the expensive brick and stone cornice projecting only six inches, one of wood, projecting three and one-half feet has been substituted.

By this change in the cornice the turrets were impracticable. Being merely ornamental and expensive they were dispensed with altogether, giving the design somewhat of a different aspect. A

comparison between the original and improved elevations is seen in the photographs submitted.

When the heating engineer visited the grounds and examined the plans, he stated that a cellar below the present basement was a necessity, in order to return the condensed steam to the boilers This cellar was also added to the original plan.

In making these changes the question of cost was not considered, further than to accomplish that which was necessary to be done in the most economical manner. There could be no question about employing a cheaper construction when it was better; and as regards changes by which the cost is increased, it would have been poor policy not to have made them when evidently necessary. These changes have been discussed at length in report of November 30, '68,

It being late in the fall when the grading was completed it was thought best to spend the winter in collecting material ready for a start on the foundations in the spring.

The first stone was laid April 29, 1869. The work progressed favorably until the middle of June; at that time the contractor was taken sick with severe inflammation of the eyes and continned so for some six weeks, during which time work was almost suspended.

During the latter part of July, the contractor's general health was restored, but his eyesight was permanently injured. Being no longer able to read, and examine plans or go about the scaffolding with safety, he concluded to sub-let the brickwork, which he did on the 27th of July.

It was hoped by this arrangement we would recover lost time. and have got the building under roof this fall, but the extraordinary wet weather has so retarded the making of brick and inundated the country from which the wood was procured for burning them, that we have had to suspend operations until spring.

The building is now leveled off at the second floor of joists, completing the first story of brickwork above the basement.

The material on hand for operations early in the spring, are as follows:

Nearly all the lumber.

The frames and sash, brackets and mouldings for cornice.

Cast iron columns, sash weights, etc.

500 feet of cut stone.

800,000 brick.

There is no doubt that the roof can be put on and the building enclosed by the middle of June.

Up to date I have estimated the following work and material:

Grading, (first contract) W. S. Horton	\$ 1,778.70
Grading, (second contract) H. D. Washburn	1,663.83
Fencing 50 acres of grounds, G. F. Smith	1,288.46
Planting trees, D. Tutty	75.00
Estimates on building, W. R. Craig	69,894.62
Estimates on building, w. R. Graig	300.00
Grading, D. L. Royer	2,024.00
Total \$	77,029.61

The amount estimated may be considered as the actual value of the work done and materials on hand.

The estimates required to finish the building cannot be accurately calculated, because the prices of labor and material may change to some extent. At present rates it will be about \$66,000.

The contract price being \$121,500, it will be seen by the above that the contractor has agreed to do the work for the State for about fourteen thousand dollars less than its cost to himself. It may be premature to notice this fact at this time, when he has given bonds for the faithful performance of his contract; but if, when he has drawn \$100,000, as provided in contract, he fails to proceed with and complete the building, the State must be deprived of its use for at least two years, during which time it might suffer material injury, should not this contingency be provided against by the present legislature.

I do not say that the building can be completed for the amounts specified. It would evidently be unjust to the contractor to calculate other than the *lowest rates*.

In estimating the cost of the west wing, a cellar story is calculated below the foundations of the present building, it was necessary to sink the foundations to this depth on account of the

nature of the ground. As there is no cellarage in the other part, this will be found a great convenience.

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In report of November, 1868, I suggested that the east wing be so divided as to be occupied by the pupils of both sexes. Upon further consideration, it would be useless to incur expense for this temporary purpose. The building cannot be convenient, or the sexes properly separated until the west wing is erected; therefore, I would recommend, if possible, that it be built and carried up with the other parts of the work.

ESTIMATE ON ORIGINAL PLAN.

Excavation	\$ 428.00
Concrete	4,648.00
Rubble stone	5,678.00
Cut stone	19,174.00
Brick-work	28,995.00
Setting cut stone	1,000.00
Paving, sewers, drains, cisterns, etc	1,266.00
Extra cost of Milwaukee brick	5,100.00
Plastering	11,542.00
Deafening	361.00
Carpenter work	28,130.00
Tin work	3,240.00
Plumbing	3,000.00
Glazing and painting	2,300.00
Range and setting	
Cast iron	
Wrought iron	784.00
Gas fitting and apparatus	
Heating apparatus	Harrison Con Co.
Total	\$134,795.00

ESTIMATE ON BUILDING AS NOW BEING CONSTRUCTED.

Excavation	\$	821.00
Dimension stone	1	,974.00
Rubble stone	18	3,840.00
Cut stone	16	,278.00

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Brickwork	29,188.00
Setting cut stone	600.00
Paving, sewers, drains, cisterns etc	1,266.00
Plastering	11,000.00
Deafening	320.00
Carpenter work	31,500.00
Tinner's work	3,000.00
Plumbing	3,000.00
Glazing and painting	2,100.00
Range and setting	700.00
Cast iron	1,800.00
Wrought iron	784.00
Gas fitting and apparatus	3,500.00
Heating apparatus	12,464.00

ESTIMATED COST OF WEST WING.

\$134,135.00

Excavation	\$ 300.00
Dimension stone in footings	1,500.00
1,300 perch of rubble stone at ten dollars	13,000.00
130,000 brick in basement at fourteen dollars	1,820.00
245,000 brick in first story at fifteen dollars	3,675.00
215,000 brick in second story at sixteen dollars	3,440.00
180,000 brick in third story at seventeen dollars	3,600.00
35,000 brick in paving, sewers, etc., at fifteen dollars	525.00
Cisterns, drainage, pipe, etc	500.00
7,700 yards of plastering at sixty cents	4,620.00
Out stone	7,000.00
Carpenter work	13,000.00
Tin work	1,200.00
Painting and glazing	1,500.00
Gas and plumbing	6,000.00
Wrought and cast iron	2,000.00
Setting cut stone	500.00
Heating apparatus	5,500.00
Total	\$69,680.00

FIFTH BIENNIAL REPORT

OF THE

TRUSTEES, SUPERINTENDENT, AND TREASURER

OF THE

IOWA HOSPITAL FOR INSANE,

AT

MOUNT PLEASANT.

FOR THE FISCAL YEARS OF 1868 AND 1869.

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