FIRST BIENNIAL REPORT

OF THE

BOARD OF

STATE CAPITOL COMMISSIONERS

APPOINTED TO

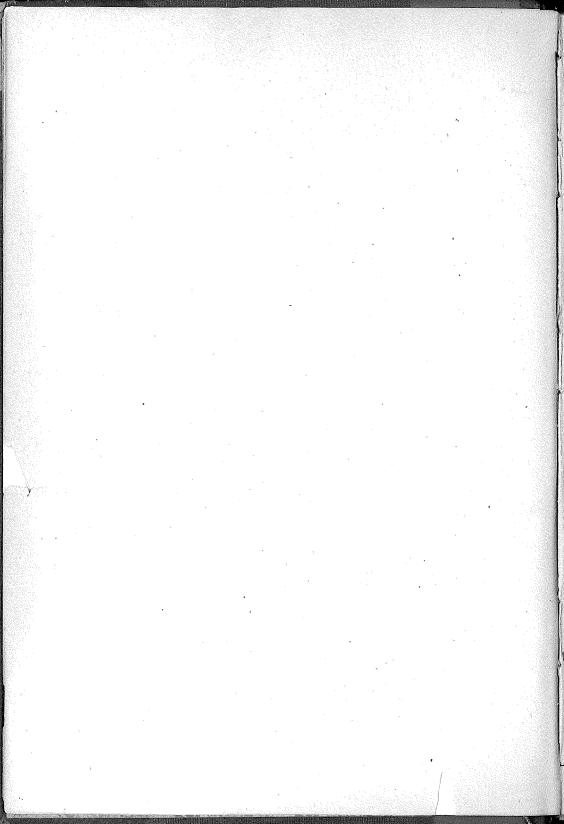
CONSTRUCT A NEW CAPITOL

FOR THE

STATE OF MINNESOTA.

JANUARY 1st, 1895.

ST. PAUL, MINN.: THE PIONEER PRESS COMPANY, STATE PRINTERS. 1895.



REPORT OF STATE CAPITOL COMMISSIONERS.

To His Excellency, Knute Nelson, Governor of the State of Minnesota,

DEAR SIR: Although not required to do so by the act under which we were appointed, we deem it proper to present to you a report of our progress towards the accomplishment of the important trust committed to us by the terms of chapter 2, as amended by chapter 3, of the General Laws of 1893, and we, therefore, respectfully submit

the following:

The first meeting of our board was held at the governor's rooms, in the capitol, on May 13, 1893, all members being present and having duly qualified. At this meeting, the governor of the state being president of the board by the terms of the act, Channing Seabury was elected vice president. It was deemed unnecessary to elect a permanent secretary until the business of the board had sufficiently developed to make the services of one necessary, and Mr. Seabury was, consequently, elected acting secretary, to perform the duties of that office temporarily, which he has done up to the present time.

THE NEW CAPITOL SITE.

The first step taken by the board was to advertise for sealed proposals for the sale of grounds for a site for the new capitol, payable in four equal amounts, during 1895, 1896, 1897 and 1898, and these

were opened June 28, 1893.

Four different locations were offered, viz.: A part (not quite one-half) of the block immediately north of the present capitol grounds, with valuable buildings thereon, containing about one acre of ground, for \$175,000; the block of ground immediately north of Central Park, with three fine residences thereon, containing about three acres, for \$342,000; the property known as "The Bass Hill," at the head of Jackson street, with numerous frame residences thereon, about four acres in extent, for \$132,000; and disconnected portions of the tract at the head of Wabasha street, between Cedar street, University avenue, Park avenue, Wabasha street and Central avenue, by thirteen individual property owners, whose proposals aggregated \$360,082. Estimating for the remaining portions of this last mentioned tract, upon the same basis as the proposals received, the board found that the necessary ground would cost the state about \$480,000, if the last named site was chosen.

After viewing each of the proposed sites, the board were unanimously of the opinion that the one last referred to was much the most desirable, but the prices demanded were greatly in excess of the value of the property, and were almost prohibitive. The offers for the other tracts were also considered far beyond their actual value. Some of the proposals were subsequently modified and somewhat reduced, but the board, after taking them under advisement for several weeks, finally rejected them all.

Private negotiations with property owners followed, extending over a period of several months, and finally resulted in the purchase of the tract at the head of Wabasha street. This was done by an agreement, in writing, on the part of most of the property owners, to submit to an appraisement by Messrs. Alexander Ramsey, Henry M. Rice and Henry S. Fairchild, of St. Paul, the grounds to be tendered to the state at the valuations which these gentlemen might fix upon them. the board having the option to accept or reject their proposition. Twelve of the seventeen owners of lots in this tract joined in the new proposition, which was submitted at a meeting of the board held Oct. 20, 1893. Meantime the board had procured two private appraisements of the property by disinterested experts, for their guidance, and finding the new proposition a reasonable one, it was adopted, and the property has since been acquired. The total cost will be about \$285,000, including one frame, and one brick dwelling and stable thereon. One of the parties to the agreement refused to carry it out, (claiming that the appraisement was to low), and still refuses to do so. The board has the power to condemn, however, and will acquire his two lots, together with an adjoining two, the owner of which also refuses to convey, (aggregating in value \$12,500 of the total), whenever they are needed.

We believe that we have secured a site for the new capitol that possesses all the qualities desirable. It is sufficiently elevated, being about 100 feet,—at University avenue,—above the corner of Wabasha and Seventh streets, and yet not too high to be easy of approach. It is surrounded on all sides by paved streets, under which are sewers and water mains. It fronts south, and the ground gently rises, so that the basement of the new building will be as well lighted as the upper stories.

It has a frontage upon the principal avenue of communication between St. Paul and Minneapolis, and passengers to or from either city will have an unobstructed view of the new building while riding an entire block. Being a part of what was formerly known as the "Wabasha Hill," and only recently graded down to the level of the surrounding streets, but little building has been done upon it. This

fact saves the state the necessity of paying for valuable structures, only to tear them down and practically waste whatever they may have cost.

We think we have been fortunate in securing such a site, located in the heart of the city, and so conveniently accessible to all citizens having business at the state capitol. When the streets and alleys running through it have been vacated, the new site will contain 7 8-10 acres.

It is to be paid for in four equal annual payments, out of the appropriations available under the act, in 1895, 1896, 1897 and 1898, without interest.

THE PLANS.

Having secured a site, the board directed their attention to securing a desirable plan and an architect. In this work we have been greatly hampered by some of the restrictive provisions of the act. The number of drawings required, the scale upon which they must be drawn, the compensation to the successful architect, and several other details incorporated in the law, our experience in this work has demonstrated to be unfortunate. Surely, if we may be left to select a site, without restriction as to its cost,—to choose either granite, brick or sandstone, for the main construction material, at a difference in cost to the state of not less than \$300,000 between them,—to use our discretion as to dimensions of the building, etc., it would seem to have been equally safe to have left some of the less important details to the judgment of the board. The act repeatedly and plainly limits the aggregate expenditure for ground, building and all other expenses, to \$2,000,000, and this would seem to be a sufficient safeguard.

We have, however, endeavored to follow all the requirements of the law under which we are acting. We printed a carefully prepared pamphlet, containing "Instructions to Architects," and issued an advertisement, June 5, 1893, fixing a date, (Sept. 11, 1893) when we would open and proceed to examine the plans submitted by the competing architects of the United States. This notice was given wide circulation through the architectural journals and otherwise, and a large number of architects applied for it, covering the entire country from Maine to California, and from Minnesota to Georgia and Texas. In addition to those who applied, copies were mailed to many of the leading architects of the country, unsolicited. Four hundred and thirty-three copies were mailed in all.

Many requests having been made for longer time, we extended it to Oct 9, 1893, and on that date we had received, in all, fifty six sets of drawings. These have been thoroughly examined by the board, have been exhibited to the public for two weeks, as required

conditions.

by the act, and we have also had the advice and assistance of Edmund M. Wheelwright of Boston, and Henry Ives Cobb of Chicago,—both noted in the profession,—as our expert advisers. Their task was a difficult and delicate one, and it is only just to them to say that all names, or other distinguishing marks, of competing architects, were concealed from them, at their own request, until their decision had been reached. Their report to the board has not yet been acted upon, and the designs are still under consideration.

CONSTRUCTION.

An important fact has been brought to the attention of the board, as we have proceeded in our work. Material of all kinds is exceptionally low priced, and the same is true, to some extent, of labor. Were it possible to push the construction of this building rapidly during the prevailing conditions, a large saving to the state would result.

Structural iron cost 4 to 6 cents per pound when Iowa, Indiana and other neighboring states were constructing their new capitols, while it now can be purchased for 1½ cents per pound. The same is true, to a greater or less extent, of all other materials that enter into the cost of construction.

Another consideration is of interest to every citizen of the state. A period of depression is almost universal throughout the land, and laboring men, of all classes, are everywhere seeking employment, which they sorely need. The far reaching benefits that would accrue to hundreds of our fellow citizens, not alone upon the building itself, but in the stone quarries, brick kilns, iron foundries, etc., within our state, are easily apparent.

The act of 1893 appropriates about \$130,000 per annum (using the present assessed valuation of the state as a basis), commencing in 1895, and about one half of this amount is already pledged, for the next four years, to pay for the site, thus leaving but a small amount for the construction of the building itself, until after 1898. The board believes that the total appropriation will be sufficient to complete the building, but we regret that we cannot, for want of sufficient available funds, take advantage of the present exceptionally favorable

EXPENSES.

The act of 1893 appropriated \$10,000 for the years 1893 and 1894, for the preliminary expenses of the board. Of this amount there has been expended during the two years as follows:

Per diem and traveling expenses of members	\$3,808.33
Clerical assistance and typewriting	775.00
Printing, advertising, stationery and postage	325.94
Topographical survey and plats of new capitol site	308.40
Measurement of present capitol building and estimates of value of struc-	. 600,10
tures on new capitol site	124.76
Plat for use of attorney general, examining abstracts of title	25.00
Recording deeds	13.85
Insurance on dwelling and stable on new capitol site	88.00
Expenses of competition for plan, including public exhibition, expert	
architects, etc., etc., etc.,	1,704.94
Total expenses during 1893 and 1894	\$7,174,22
Add interest on mortgages, to be deducted from final payments for site	1,251,30
Leaving unexpended	1,574.48
TOWING WHOMPODECOMMISSION OF THE PROPERTY OF T	1,011.10
	\$10,000.00

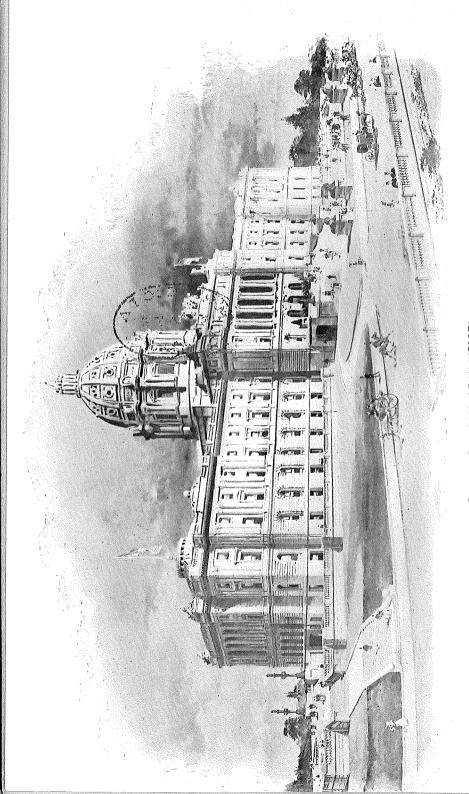
Early in the spring of 1893 a committee of the board visited and carefully inspected the capitol buildings recently erected in Iowa, Michigan, Indiana and Connecticut, as well as the new court house and United States government building in Pittsburg, Pa. Much valuable information was thereby obtained, and the need of a new capitol for Minnesota, commensurate with her rank among her sister states, was made strikingly apparent to every member of the committee.

All of which is respectfully submitted.

St. Paul, Jan. 1, 1895.

CHANNING SEABURY, H. W. LAMBERTON, GEO. A. DU TOIT, JAMES MCHENCH, JNO. DE LAITTRE, C. H. GRAVES, E. E. CORLISS.

Commissioners.



NEW STATE CAPITOL OF MINNESOTA.

IN COURSE OF CONSTRUCTION.

58699

SECOND BIENNIAL REPORT

OF THE

BOARD OF

STATE CAPITOL COMMISSIONERS



FOR THE

STATE OF MINNESOTA.

JANUARY 1, 1897.

ST. PAUL, MINN.: THE PIONEER PRESS COMPANY, STATE PRINTERS, 1897.

SECOND BIENNIAL REPORT

янт чо

BOARD OF

STATE CAPITOL COMMISSIONERS.

To His Excellency David M. Clough, Governor of the State of Minnesota,

Dear Sir: When our first report was made, Jan. 1, 1895, we had

A SITE FOR THE NEW CAPITOL

(with the exception of four lots, the owners of which had refused to accept the valuation placed upon them), and we had under consideration plans for the building. We have since acquired the four lots referred to, under condemnation proceedings, at a total cost to the state of \$250 in excess of the amount originally offered to their owners.

The total cost of the site (containing seven and eight-tenths acres) will be \$285,225, of which amount there has been already paid the sum of \$158,972.50, and of the remainder the sum of \$63,126.25 will be due Aug. 1, 1897, and a like amount Aug. 1, 1898. The streets and alleys within the site have all been vacated by the proper authorities of the city of St. Paul.

We have also acquired a lot, 40×110 feet, on the southwest corner of University and Park avenues, for the steam and electric light plant for the building, at a cost of \$3,600. Connection by an underground tunnel will be made under Park avenue, and the steam plant will thus be isolated from the building and grounds, being

220 feet from the northwest corner of the capitol building. The prevailing winds being southerly, it is expected that the building will be saved from discoloration by coal smoke by this location of the plant.

The selection of

A PLAN FOR THE NEW BUILDING

was a matter of great perplexity and labor. The legislature of 1895 passed an act amending in many important particulars the act of 1893 and removing many of the restrictive features of the latter. The effect of this legislation has been very beneficial to the state, and has made it possible for our board to secure a suitable design for the building and a thoroughly capable architect. This act was approved March 9, 1895, and at a meeting of our board, held April 11, 1895, we rejected all of the designs which had been submitted at the first competition and made preparations for holding a second competition under the more liberal provisions of the amended act.

Forty-one designs were submitted in the second competition, and their general character and merit was superior to those from which our board had been previously endeavoring to make a selection. Our acquaintance and experience with Mr. Edmund M. Wheelwright of Boston in examining the designs submitted in the first competition had inspired us with confidence in his ability and integrity, and we, accordingly, again secured him to assist and advise us in the selection of a design. His report upon them is too lengthy to be incorporated herein, but it was printed and circulated at the time, and copies of it can be had at the office of our board.

Having exhibited the designs to the public for two weeks, as required by law, and after listening to a large number of architects in explanation of the merits of their respective drawings, the board, on Oct. 30, 1895, selected the design submitted by Cass Gilbert of St. Paul (which was also the one holding first place in the opinion of our expert adviser) as the design for the new building, and appointed Mr. Gilbert architect for the same. Appended hereto is his report to date, together with a description of the proposed building.

By comparison with other similar buildings that have been completed within recent years, it is possible to estimate approximately, at so much per cubic foot, the cost of almost any structure, and estimates of this character are valuable. The following are some of the more recently constructed buildings, similar to ours, their cubical contents, total cost, and cost per cubic foot:

		,
Cubical Contents.		
Feet.	Total Cost	Cubic Foot.
10,150,000	\$2,850,000.00	$\$0.27\frac{3}{10}c$
7,163,200	2,268,453.00	$.31_{10}^{-5}{ m c}$
4,377,780	1,576,000.00	.36°c
11,500,000	3,000,000.00	.26le
	Feet. 10,150,000 7,163,200 4,377,780	Feet. Total Cost 10,150,000 \$2,850,000.00 7,163,200 2,268,453.00 4,377,780 1,576,000.00

As shown by our architect, our building will contain 5,060,955 cubic feet. (Minnesota's present capitol building contains 1,561,026 cubic feet.) At anything like the present cost of material and labor, we believe we can construct this building for not exceeding 29 1-10 cents per cubic foot, or \$1,472,664, provided that the work can be prosecuted in a businesslike manner, and not be subjected to long delays, such as are common in public works of this character, while waiting for funds. It will be commodious, handsome, commanding in exterior design, and in keeping with the grandeur and dignity of our state.

Having satisfied ourselves, as required by law to do, by careful preliminary estimates by our architect and by contractors, builders and others, that we could erect the new building without exceeding the appropriation heretofore made, we proceeded to the work of

CONSTRUCTION.

April 21, 1896, we received and opened proposals for the excavation and foundation work, and on April 30, 1896, after carefully examining into the merits of the different varieties of stone proposed to be used (visiting Winona for this purpose), we awarded the contract for this work to Mr. George J. Grant of St. Paul, Minn., he being the lowest responsible bidder. Ground was broken May 6, 1896, and the first stone was laid June 23, 1896.

The footings under all walls and piers are of concrete made up of broken limestone, sand and cement; the main foundation walls and most of the piers of the building are of Winona limestone, a "Dolomite;" the area walls of local blue limestone; the foundation under the dome of Kettle River sandstone; and the caps to piers, as well as various bearing blocks, are of St. Cloud granite. The area walls, main walls, and all other stone work are laid up in the best cement, and wherever the walls will come in contact with the earth, a preservative coating of asphalt has been thoroughly applied to their exterior.

The contractor has done an excellent piece of work, has finished it promptly, and has exceeded, in quality, the specifications of our architect. The last stone in the foundation was laid Nov. 24, 1896.

The following table of quantities shows the work already completed, viz.:

48,460 Cubic yards of earth excavation,

11,434 Cubic yards of excavation in trenches,

77,555 Cubic feet of concrete footings,

87,917 Cubic feet of Winona stone in main foundation walls,

11,219 Cubic feet of Winona stone in piers,

56,829 Cubic feet of local limestone in area walls and step foundations.

6,996 Cubic feet of Kettle River sandstone in piers and vaults,

11,681 Cubic feet of Kettle River sandstone in dome foundation,

2,968 Cubic feet of Granite in pier caps and bearing blocks.

7,740 Lineal feet of seepage tile under walls,

29,656 Square feet of damp proofing over concrete.

22,669 Square feet of asphalt on walls,

74,708 Lbs. cast iron columns, column footings and bearing plates.

297,000 Lbs. steel beams, with separators and connections.

The foundation has been completed within the cost estimated for that portion of the work.

Oct. 6, 1896, we received and opened proposals for the structural steel floor beams for the basement story, and awarded the contract for same to the Universal Construction Company of Chicago, they being the lowest bidder. This work is now completed, and, owing to the present low prices of steel and iron, its cost will be nearly thirty per cent less than our estimate.

We were advised by our architect, in November last, to make a contract during the present winter for all the remaining steel and iron necessary for the building, in view of the present low prices ruling for same, but we were not able to take advantage of the present favorable conditions, because of the exhaustion of the funds at our disposal, to which a further reference will be made in this report.

We are pained to record the death of James McHench, a member of our board, which occurred at Fairmont, Minn., on the 27th day of April, 1895. In September following Daniel Shell of Worthington was appointed to fill the vacancy thus caused. Mr. Shell acted with us until Jan. 16, 1896, when he resigned, and the vacancy thus created has not yet been filled.

Dec. 18, 1895, Frank E. Hanson of St. Paul was elected secretary of the board, to take effect Jan. 1, 1896, and on May 26, 1896, John Boland of Minneapolis was elected superintendent of construction, his duties to commence June 1, 1896.

During the winter of 1895-96 our board invited all the different quarry men throughout this state to submit samples of their several products, uniform in size and cutting, in order that they might be erected upon the site, for exposure to the elements, comparison, etc. Many of the parties thus invited sent us samples from their quarries, and an interesting series of these sample stones may be seen near the Wabasha street front of the site. It is our purpose to test the qualities, liability to discoloration, etc., of these various stones in this way before selecting the material for the superstructure of the building.

The board now occupies a convenient permanent office at 512 Endicott building, St. Paul; there being no room for our use available in the present capitol.

In the prosecution of our work thus far we have met with one statutory provision which we feel called upon to bring to your notice, and that of the coming legislature, namely: Chapter 354 of the General Laws of 1895 provides that no contract for any public work (of the character of ours) in this state shall be valid or binding until the contractor has given a bond, "in an amount not less than the contract price," etc.

We have already let one contract that exceeded \$100,000, and the next one to be let (the superstructure) will probably exceed \$600,000. So large a bond as that is wholly unnecessary, besides being beyond the capacity of many worthy contractors to furnish. The practical effect of this statute is to exclude or make it difficult for small, though capable and honorable contractors, to compete for public work, and to favor the large and wealthy class. We recommend that the law be amended by some limitations, and suggest that a sliding scale be fixed,—say, requiring a bond for full amount on a contract not exceeding \$10,000, with a reasonable reduction in proportions on larger contracts, and a maximum limit of \$100,000. No greater risk than this last named sum is likely ever to occur at any given stage of the execution of a contract, and all parties would be amply protected, while, at the same time, the requirement would not be excessive.

The following statement shows the present condition of the

FINANCES OF THE BOARD.

RECEIPTS.

DISBURSEMENTS.

Printing and advertising	\$614.29	
Stationery and postage	159.00	
Surveying, office rent, etc	1,030.12	
Salaries—secretary, superintendent, clerks, etc	4,300.00	
Inspecting other buildings, test borings, stone sam-		
ples, etc	1,945.46	
Expenses of condemnation proceedings	167.00	
Per diem and traveling expenses of commissioners—		
three years eight months	5,160.87	
Prizes, expert advice and expenses of first competi-	,	
tion for plan	$4,\!472.12$	
Of second competition for plan	4,918.85	
Cass Gilbert, architect, on account of drawings and	,	
specifications	15,364,34	
Construction (excavation and foundation)	107,755.66	:
Payments on site	158,972.50	
Purchase of lot for steam plant	3,600.00	
OBLIGATIONS DUE IN 1897.		
Steel floor beams (recently erected)	\$8,188.00	
Balance due on foundation	2,500.00	
Third payment on site, Aug. 1, 1897	63,126.25	
Total disbursements and outstanding obligations		382,274.46
Balance for use during 1897		\$433.27

It will thus be seen that no funds will be at the disposal of our board for building purposes during 1897.

Our board now finds itself at a point where valuable time will be lost. Our drawings and specifications are so far completed that we are ready to advertise for proposals and let a contract for the erection of the superstructure of the building. This work ought to follow closely upon that already done, otherwise the elements will damage the excellent foundation now in place. Material, of all kinds, is exceptionally low in price. Men have long been idle and greatly need employment. Contractors require ample time to figure, with care, upon a contract as large as the one we shall next offer to them, if intelligent results are to be reached, and their proposals are made with corresponding eagerness when plenty of time is given them. The winter months are especially favorable for this, but we are unable to take advantage of the facts stated, because we have no more funds available for building purposes, and we are prohibited, by the act of 1893, from making any contracts that bind the state to payment earlier than the same are available under the act.

The board, therefore, deems it to be its duty to lay before you certain facts which should be clearly stated to the law-making power, for such action as may, in its opinion, best serve the interests of the state.

The law under which we are acting makes an appropriation in the following terms:

Sec. 7. There shall be transferred, in each of the years 1893 and 1894, from the general fund, to the credit of the board of state capitol commissioners, the sum of five thousand dollars, and in each succeeding year after the year 1894 until the completion of said capitol building, not exceeding ten years, a sum equal to the proceeds of a levy of two-tenths of a mill upon the assessed valuation of the state, for the purchase of a site, or part thereof, and the erection and completion of a new capitol building, in accordance with the terms and provisions of this act; provided, that the total amount so transferred shall not exceed the sum of two millions of dollars.

It was doubtless expected that the assessed valuation of taxable property in Minnesota would increase each year, so that a steadily increasing fund would be provided by the terms of that act for building the capitol.

This expectation has not been realized, and by the valuation for 1897, as fixed in 1896, the available fund for that year will only be \$116,674.53—a less amount than that realized in 1896.

The last payment on the site—\$63,126.25, due Aug. 1, 1898—will take about one-half of the appropriation for that year.

The next contract to be let on this structure is that for the main building, and will call for not less than \$800,000. More than three-fourths of this work could be completed within the next two years if funds were available.

It, therefore, follows that, as the law stands, the board can take no further steps toward letting contracts until the year 1899, and then only a small contract that can be paid out of the appropriation for that year, and, unless otherwise provided, the work will stand as it is, with nothing done towards completion, for the ensuing two years, which means a lapse of fully ten years from the present time before the building can be finished ready for use.

Economy shows itself in every direction if no unreasonable delay shall occur, and a large saving of ultimate cost is apparent to our board if we can take advantage of present conditions.

No private citizen constructs buildings in the halting, dilatory and wasteful way that these public buildings are usually handled. We should be glad to make an exception of this one, and to push it forward to completion and early occupancy, believing that the best interests of the state are in line with our wishes, but the existing provisions of the act are inelastic and inadequate for the proper prosecution of the work.

The board feels in duty bound to present to you the following

considerations:

The building is needed for use at an earlier date than the

First—Because of the unsafe building at present occupied for a above-state capitol, the valuable records, documents and libraries of the various state departments, and of the State Historical Society, and the battle flags of Minnesota regiments—those priceless relics of the war-are all now exposed to imminent danger of loss by fire.

On this head, we call attention to the following letters from prominent architects explaining the insecurity of the present

capitol:

Office of Board of State Capitol Commissioners, St. Paul, Minn., Dec. 26, 1896.

Dear Sir: Remembering that our board employed you, some three years J. W. Stevens, Architect, City. since, to measure every room and corridor in the present capitol building, giving us the cubical contents of same, and of the entire building, which you did, it has occurred to me that you must have pretty thorough knowledge concern-

We are preparing our report to the governor, and I will be greatly obliged ing its construction. if you will give me such facts as are within your knowledge concerning the method of construction, and the fire-proof qualities of the present capitol.

Yours truly.

CHANNING SEABURY, Vice President.

Office of J. W. Stevens, Architect, St. Paul, Minn., Dec. 26, 1896.

Mr. Channing Seabury, Chairman of Board of Capitol Commissioners, St. Paul, Dear Sir: In reply to your inquiry in regard to the present capitol, I will say that I have had charge of repairs on the building several times in the past ten years, and am well acquainted with its construction. Some of the interior walls are constructed of brick, but many of the partitions are of combustible material. All of the floor joists are wood, and all of the roof work, including the trusses, is of wood.

During construction an attempt was made to make parts of the building fire-proof, but, as the material used has never satisfactorily stood the tests made with fire, I consider the building no more fire-proof than one of ordinary construction.

No attempt was made to fire-proof the floors and roof of the tower, and most of the main roof, including the trusses, is unprotected. In making repairs it was discovered that decay had started in some of the floor joists, owing to their contact with the fire-proofing material, and, while I do not know of any immediate danger, I have no doubt that the process of decay is still active, and that, in time, the joists will be so weakened that they cannot sustain the superimposed load and must collapse.

While fire is liable at any time, it may never occur, but, if once started, I am of the opinion that it would be difficult, if not impossible, to save the building from total destruction.

Yours respectfully,

J. W. STEVENS.

Office of Harry W. Jones, Architect, Minneapolis, Dec. 28, 1896.

Mr. Channing Seabury, Chairman, and Board of State Capitol Commissioners, Gentlemen: In accordance with your request for my opinion in regard to the condition of the present capitol building, I will say that I have had no occasion to make a careful investigation of the building; but my observation of its present condition, together with my knowledge of its mode of construction, has led me to believe for some time that the life of the officials, and public property, is being seriously jeopardized in spite of the efforts which have been made from time to time to render the building reasonably safe and secure. For, while a portion of the building is proof against fire, yet, as I understand it, a large part of the combustible construction remains, and also the element of dry rot, which has been threatening and even disastrous heretofore, still imperils those portions of the building where the so-called "slow burning" construction still exists, and where the timbers in unventilated positions are daily becoming more subject to decay. I am gentlemen,

Yours most truly,

HARRY W. JONES.

Minnesota has had one experience of the destruction of its capitol building by fire in 1881 (an account of which is published on page 235, Legislative Manual for 1895), and should thoroughly appreciate the importance of housing its records and precious relics in a fire-proof building. Should a like catastrophe occur no one would like to feel that the irreparable loss which would result to the state might have been prevented by some act of his.

Second—Because of the insufficient, poorly ventilated and unhealthy legislative chambers and committee rooms, and the inadequate rooms for executive officers.

In this connection, we submit the following correspondence:

Office of Board of State Capitol Commissioners, St. Paul, Minn., Dec. 22, 1896.

Dr. C. N. Hewitt, Secretary State Board of Health, St. Paul, Minn.,

Dear Sir: This board desires to include in its biennial report full statements of the character and condition of the present capitol building, that intelligent consideration may be had of the question whether construction of the new capitol shall be expedited or shall be delayed for a term of years.

For this purpose, will you kindly favor the board with a report of the healthfulness and ventilation of the present capitol, and oblige.

Yours respectfully,

CHANNING SEABURY, Vice President.

Minnesota State Board of Health, St. Paul, Dec. 30, 1896.

To Channing Seabury, Vice President State Capitol Commissioners,

Dear Sir: Replying to yours of December 22d, I have made no formal examination of the senate or assembly chambers since four years ago. Then I found ventilation of both rooms very imperfect, as also the committee rooms. Having made no examination since, I can add nothing to the opinion then formed. I do not know what measures may have been taken since then to correct the defects then recognized.

My examination was made at the request of the senate, late in the session, and was not completed.

Yours respectfully,

CHARLES N. HEWITT, Secretary.

Office of Board of State Capitol Commissioners, St. Paul, Minn., Dec. 22, 1896.

To His Excellency D. M. Clough, Governor, and Official Custodian,

Dear Sir: The board desides to include in its blennial report a full statement of the condition and usefulness of the present capitol building, that intelligent consideration may be had of the question whether construction of the new capitol should be expedited or should be delayed for a term of years. For this purpose, will you, as official custodian of the capitol, kindly favor the board with a brief statement of the present situation of the offices therein, and of those which are unable to be accommodated in the building, and oblige,

Yours respectfully,

CHANNING SEABURY, Vice President.

State of Minnesota, Executive Department, St. Paul, Dec. 29, 1896.

Channing Seabury, Vice President Board of State Capitol Commissioners, St. Paul, Minn.,

Dear Sir: In reply to yours of the 22d inst., inquiring of me as to the present situation of the offices and executive departments therein, I desire to state:

Taken as a whole, the space available for offices is entirely insufficient for present needs, and will become more and more insufficient each year, with the growth of the state and the increase of the official business of its departments.

A general lack of fire-proof facilities for the preservation and care of valuable documents, records and books is noticeable in almost every department, and the several officials are seriously alarmed at the danger of loss by fire of the archives committed to their charge. Appropriations have heretofore been made for enlargements of yaults in this building, but the space in it makes further work of that nature impossible. To make the present situation clear, I cite a few of the offices:

The fire-proof vault in the governor's office is now filled with records and documents which are already piled upon each other so as to make it very difficult to search for any that are needed, and this is made worse from the fact that part of the space is necessarily allotted to the attorney general, because there is no vault in his office.

The auditor's office, where all the financial accounting of the state is had, and which also has entire charge of all the state, school and university lands, embracing over 15,000,000 acres, is at present in very cramped and insufficient quarters, of less than half the proper size, while the business of this office increases rapidly with the growth of the state. The auditor says his greatest need is more vault room for the safe storage of records and papers, as at the present time only the most important and valuable articles can be placed in the vault at his disposal.

The legislature two years ago appropriated \$1,500 to enlarge the vault in the treasurer's office, but this accomplished no very satisfactory results, as the treasurer has great doubts whether the vault is really fire-proof. For this reason he keeps his most valuable articles in fire-proof safes inside the vault. This office is so dark that artificial light is needed during the entire day, and the counter is necessarily so small and badly placed that little or no room is afforded the public having business with the treasurer.

The secretary of state, in addition to his other various duties, has charge of the original engrossed copies of laws, the state publications and stationery and supplies for state printing. His great complaint is want of vault room, saying that a large amount of valuable property in his charge is constantly exposed to danger.

The dairy and food commission and some other departments occupy dark rooms in the interior of the building originally designed for closets.

The labor commissioner's office is another mere closet, now quite filled by one table and some books.

The attorney general's office has no vault. His most valuable papers are placed in the vault of the governor's room, which is already overcrowded. The remainder are merely piled up in a closet.

The railroad commission, capitol commission, board of health and some other departments are obliged to rent rooms outside the capitol building, at extra expense, because no provision can be made for them there.

The state library now has 24,429 volumes; the historical society has a collection of inestimable value. Both of these are exposed in the present build-

ing to danger of entire loss by fire, and could not be replaced.

The battle flags of the Minnesota regiments in the war of 1861 are kept in the main corridor of the first floor, partly for exhibition, and partly in the hope that in case of fire they might be seized and carried out to a place of safety.

Very respectfully,

TAMS BIXBY, Governor's Private Secretary.

It is evident that the great State of Minnesota should have a more suitable and safer building for a state capitol than the present structure, and should have it at the earliest day practicable.

If the board is authorized to proceed at once to construct this building, and sufficient moneys are provided to push the work to a speedy conclusion, advantage will be taken of the present very low prices of all building material, and the state will also economize by having the work done in large contracts instead of a wasteful system in building by piecemeal. The main articles to be used in this building are steel, brick, stone, cement and fire-proofing. These are all at the present time purchasable at very low figures, far below any ever known before, as is readily seen by the following comparative prices, viz.:

	Ordinary Price.	Present Price.
Steel beams, standard sizes, per 100 lbs	\$3.50	\$1.70
First quality, hard burned, common brick, per M	7.50	5.25
Best Portland cement, per bbl	3.25	2.75
Best brown lime, per bbl	.60	.50
Three coat plastering, per yard	.25	.20
Wages of stonecutters, per day	4.00	3.00
Wages of bricklayers, per day	4.50	3.50
Wages of common laborers, per day	1.75	1.25

Our investigations lead us to believe that, should funds be provided so that construction may go on at once, the saving to the state will not be less than \$200,000. If the state has ample amounts of money not needed for current expenses, now deposited in banks, with which to do this work, it would seem to be a serious omission of duty not to make this saving for the people.

It is also proper for us to state that, while the plans adopted are based on very careful estimates, indicating that the capitol can be built within the amount limited by the act of 1893, no architect or board can be held responsible for the construction within such limits, or, indeed, within *any* special limits, unless contracts be let for large portions of the work at a time and the construction be pushed along in the usual business-like manner that would be used by private parties engaged in building. No one can tell what the prices of material and labor will be three, six or ten years hence. If they advance ten per cent, or twenty per cent, the building will cost that much more than if built now.

The board having carefully performed its duty up to this point, desires now to perform an equally imperative duty in calling attention to these facts, and make plain the statement that if not authorized to push this work in a business-like manner to speedy conclusion, the responsibility for any excess of cost that may result will rest with the law-making power—the only authority which can decide that question. Respectfully,

CHANNING SEABURY,
H. W. LAMBERTON,
GEO. A. DU TOIT,
C. H. GRAVES,
E. E. CORLISS,
JOHN DE LAITTRE,
Commissioners.

REPORT OF THE ARCHITECT.

Dec. 31, 1896.

Hon. Channing Seabury, Vice President and Chairman Board of State Capitol Commissioners, St. Paul, Minn.,

Sir: I herewith submit my report as architect of the new state capitol building now being constructed at St. Paul, Minn.

The board of capitol commissioners notified me Oct. 30, 1895, that the competitive design for the new building which I had submitted had been selected by them, and that I was appointed architect of the building. I at once proceeded with the preliminary drawings necessary before beginning the working drawings for the construction, amending and revising the design at several points, as required by the commissioners; and after several conferences with the board the same was approved, and I was directed to complete the working drawings and specifications for the foundation work.

On March 27, 1896, I submitted the drawings for the general construction of the building, together with a detailed estimate for its construction, amounting to one million, four hundred and seventy-two thousand, six hundred and sixty-four dollars (\$1,472,664), and in submitting this estimate I placed before the board statements of prices on material and labor made by a number of responsible contractors and dealers in material, showing the basis upon which my figures were made and confirming the same.

On the above date I was directed to issue the plans and specifications for the general grading, excavation and foundation work to bidders as soon as practicable.

On April 21, 1896, eleven (11) proposals were received and publicly opened by the board for the said excavation and foundation work, and the contract was awarded to Mr. George J. Grant of St. Paul for \$107,677, he being the lowest responsible bidder.

Excavation was begun May 6, 1896, and the first stone was laid June 23, 1896.

The work progressed systematically and rapidly during the entire season, and was substantially completed on Dec. 1, 1896.

In the course of the construction several minor modifications were made in the plans, owing to the exigencies of the work, involving a net additional cost of \$2,166.19, the same having been reported to the board and approved by them, as required.

On Sept. 1, 1896, in accordance with the directions of the board, I submitted plans for the structural iron and steel for the basement floor, and it was ordered by the board that the working drawings and specifications for

same be completed, and that advertisement for bids be published. Eleven (11) bids for this work were received and publicly opened by the board Oct. 6, 1896, the lowest bid received being that of the Universal Construction Company of Chicago, and amounting to \$8,188, and the contract was awarded to that company. They began work immediately, and commenced setting the steel work in the building Dec. 7, 1896. This work is now completed. During the construction of this work it was found desirable to make certain minor modifications in the same, all of which were reported to, and approved by, the board; the total cost of same amounting to \$39.21.

I herewith hand you a statement showing the total amount of material included in the aforementioned construction of excavation and foundation work and structural steel for basement floor, together with statement of the cost of the same, and call your attention to the fact that my estimates have been confirmed so far as the work has progressed. In this connection, I would call your attention to the excellent quality of the work which has been furnished by Mr. George J. Grant in the foundation work, and by the Universal Construction Company in the structural steel.

During the past year I have constantly been engaged in perfecting and completing the general working drawings and specifications for the building.

In view of the present low cost of material and labor I again call your attention to my letter of Nov. 5, 1896, recommending that all structural iron and steel for the building should be purchased at the earliest possible date, and that contracts for the general construction should be made as soon as practicable. Recent quotations received from the Carnegie Steel Company, the Universal Construction Company and the New Jersey Steel and Iron Company, all of whom are large producers of structural steel, show that the price of structural steel has varied but little within the past year, but that it is considerably less than several years ago, and that prices are more likely to advance than to decline further. The quotation received for November, 1896, shows the cost of certain standard sizes of steel beams to be \$1.70 per 100 pounds, whereas a few years ago the same material delivered in this market cost \$3.50 per 100 pounds, and though a part of this decline may be attributed to more economical methods of manufacture, the great difference in price is to be accounted for by the present general depression in all prices, and it is unreasonable to suppose that this condition of affairs

In further confirmation of my statement as to the present cost of material and the cost of a few years ago, I have handed to the board letters received from a number of reliable contractors whom I have consulted in this regard, and while I have included in the estimates I have previously submitted to the board what I consider to be an ample amount for contingencies, you will recognize that it is impossible to foresee the market price of material and labor for a series of years in advance, and I respectfully urge that such action be taken as would permit the contracts to be made for the general construction and structural steel work at an early date. I do this believing that it is distinctly to the advantage of the state, and for the good of the building. It is necessary to let contracts of such magnitude somewhat in advance of the date at which the material will be actually required in the building. This is especially the case in the stone work, where the stone should be allowed to season for a certain length of time after it is quarried, and before it is placed in the building, in order that any defects in the material may become apparent and the imperfect stone be rejected.

As I have previously stated, the estimated cost of the building is \$1,472,-664, or about 29.1 cents per cubic foot. This estimate is based upon prices obtained during the current year, as stated by reliable contractors and dealers. I have also obtained information as to the cost of a number of important public buildings erected in various parts of the country within recent years. This information has been obtained by correspondence with the architects of the buildings, and the commissioners or state officers in charge of same, and shows the cost per cubic foot to vary in the several cases from twenty-six (26) to thirty-six (36) cents.

In view of the careful estimates that have been made, I feel justified in stating that the building can be erected and completed at a cost not exceeding 29.1 cents per cubic foot, providing the work can go forward without interruption. Should the work be delayed, and let in small contracts, it would be found more expensive, and it will either be necessary to increase the amount of this estimate or to finish the building in an inferior manner and impair the quality of the construction.

I submit with this report a copy of the general drawings, showing the main floor plans and the elevations of the exterior, together with the perspective view of the building, which you have already had under consideration, and add the following general description of the building, as proposed:

The extreme length, east and west, is 432 feet 10 inches, not including the entrance steps.

The width, through the central portion, from north to south, not including the entrance steps, is 228 feet 3 inches.

The average width of the east and west wings is 120 feet.

The average width of the north wing is 106 feet 6 inches.

The extreme height of the dome from the ground is 220 feet.

The average height of the outside walls from the terrace level is 69 feet. The average depth of outside walls from the grade terrace to bottom of footings is 14 feet.

The total cubical contents is 5,060,955 cubic feet.

A sub-basement is provided under the entire building, insuring a dry basement floor, as well as providing space for the piping and machinery.

The basement story is practically above ground, having all the window sills above the terrace level.

Entrances to the basement are provided at the south front, at the east and west ends, and on each side of the north wing.

The basement will contain the rooms of the state historical society, the offices of the board of health, the dairy commissioner, etc. The elevators—two on either side of the main entrance—start from this floor.

The first story has entrances in the center of each facade, opening into large vestibules and corridors leading to the rotunda, the main corridors extending the full width of the building, east and west, and north and south.

The rotunda will be 60 feet in diameter, and opening from it are the main stair halls and corridors. Fine and well lighted stairways rise from this floor to the second story, these stairways being located in the center of the east and west wings, and on the main axial line of the building.

The first story is occupied by the administrative offices, including the offices of the governor, secretary of state, attorney general, state treasurer, auditor, etc., which are so placed as to best accommodate the business of these departments.

On the second floor is placed the senate chamber, the house of representatives and the supreme court, with the working part of the library, the judges' chambers and the principal committee rooms.

The senate chamber is a domed room, 55 feet square, and located in the center of the west wing.

The supreme court is located in a corresponding position in the east wing, and is somewhat smaller than the senate.

The supreme court also has a domed and vaulted ceiling, and both of these rooms are lighted from above by great skylights designed to conform to the shape of the ceiling, this being the most approved method of lighting rooms of this character.

The house of representatives is placed in the north wing, and will be a semi-circular room entirely surrounded by galleries. The ceiling of this room is in the form of a half-dome, penetrated by great arches opening into the galleries at the third floor level. The extreme width of the house of representatives at the floor level is 77 feet, the extreme width at the gallery line being 101 feet. This room is lighted from the top, and by windows above the gallery line at each side.

On each side of the house of representatives private corridors extend from the main corridors to the retiring rooms, and afford additional lobbies for the use of the members of the house.

There are private corridors, also, on each side of the senate and supreme court, giving access to the various committee rooms and other apartments which will be used in conjunction therewith.

The working part of the law library and the librarian's room are also located in the second story, adjacent to the supreme court.

The third story contains additional committee rooms, meeting room for state boards, and the main part of the law library. The galleries of the senate and house of representatives are, as before stated, in this story, and are made accessible by special stairways and by corridors leading from the elevators.

Each story is amply provided with general and special toilet rooms located at convenient points.

The elevators extend from the basement story to the top.

The main stairways are lighted by vaulted skylights covering the entire stair well in each case, providing ample direct light from the top to the basement.

The height of the several stories is as follows:

Basement story, 12 feet in the clear.

First story, 17 feet in the clear.

Second story, 16 feet in the clear.

Third story, the general level is 12 feet in the clear, varying in the more important rooms.

The height of the senate is 55 feet.

The height of the supreme court is 47 feet.

The height of the house of representatives is 50 feet.

Special attention has been given to the heating and ventilating system, large heating ducts and ventilation flues having been provided to furnish fresh, warm air to all the different rooms in the building, and for the ex-

haust of foul air. The heating will be effected partly by direct radiation and partly by indirect radiation, large fans being designed to force the fresh air into the rooms, and other fans to exhaust the foul air from them.

An independent electric lighting plant will be placed in the engine room. The walls will be built of brick, faced with stone, and lined with terra cotta or hollow brick.

The construction throughout will be absolutely fire-proof, steel beams and concrete, or terra cotta arches forming the floors.

The roof construction will be of steel and terra cotta.

It is intended that the construction shall be of the most thorough and substantial character throughout. The finished floors in the corridors will be of tile or marble, and a certain amount of marble wainscoting will be required for the main corridors and rotunda.

It is proposed to make the interior design of a noble and dignified character, avoiding excessive elaboration, and to design it in a style in harmony with the building.

It is unnecessary to enter into a detailed description of the exterior style of the building, as the accompanying drawings show clearly what is proposed.

Yours respectfully,

CASS GILBERT, Architect.

MEMORANDUM

SHOWING CONTRACTS AND EXTRAS WHICH HAVE BEEN AWARDED AND COMPLETED IN THE CONSTRUCTION OF THE NEW STATE CAPITOL BUILDING AT ST. PAUL, AT THIS DATE, DEC. 34, 1896.

George J. Grant-

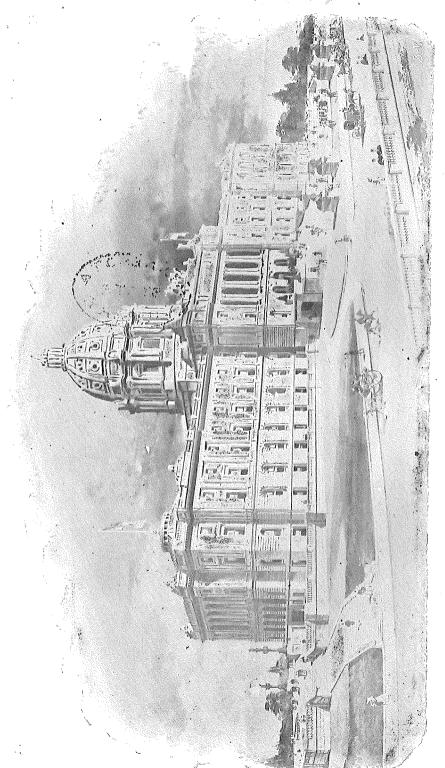
delige s. diant—		
General contract, excavation and foundations		\$107,677.00
Extra orders Nos. 1, 2, 3, 4, 5, 6, 7 and 8, allowed by the		, ,,,,,,,,,,
board for minor changes	\$2,331.94	
Less credit for other work omitted	165.75	2,166.19
		\$109,843.19
Universal Construction Company—		
General contract, structural steel basement floor		. \$8,188,00
Extra order No. 1, allowed by the board		. 39.21
		\$8,227.21

STATEMENT

SHOWING THE ACTUAL AMOUNT OF MATERIAL INWROUGHT IN THE FOUNDATIONS OF THE NEW STATE CAPITOL BUILDING AND THE AMOUNT OF EXCAVATION.

-	
Winona stone in walls, cubic feet	87,917
Winona stone in piers, cubic feet	11,219
Blue limestone in walls, cubic feet	56,829
Granite, cubic feet	2,968
Asphalt on walls, square feet	22,669
Asphalt paper, square feet	29,656
Seepage tile, square feet	7,740
Concrete, cubic feet	77,555
Kettle River stone in piers and walls, cubic feet	7,000
Kettle River stone in dome, cubic feet	11,681
Excavation in trenches, cubic yards	11,434
General excavation, cubic yards	48,460
Cast iron column footings and bearing plates, pounds	74,708
Steel beams, with separators and connections required for same,	
pounds	297,000

Note.—Correction of quantities given in previous monthly statements is made in this statement, so that it will show the actual quantities of material in the work as completed.



NEW STATE CAPITOL OF MINNESOTA.
IN COURSE OF CONSTRUCTION.

58700

THIRD BIENNIAL REPORT

OF THE

BOARD OF

STATE CAPITOL COMMISSIONERS

APPOINTED TO



CONSTRUCT A NEW CAPITOL

FOR THE

STATE OF MINNESOTA.

JANUARY 1, 1899.

ST. PAUL, MINN:
THE PIONEEF PRESS COMPANY,
STATE RINTERS,
1899.

THIRD BIENNIAL REPORT

OF THE

BOARD OF

STATE CAPITOL COMMISSIONERS.

To His Excellency John Lind, Governor of the State of Minnesota,

Dear Sir: In our second biennial report, made Jan. 1, 1897, we urged the necessity of a provision being made by the legislature that would enable our board to proceed with the work in hand, which was at that time impossible, owing to our lack of the necessary funds.

Our request met with a favorable response, and an act was passed at the last session (chapter 96, General Laws 1897), authorizing us to anticipate our future revenue by the issuance of certificates of indebtedness, payable from the appropriations made by the original act of 1893, during the last five of the ten years designated by said act. Of these certificates we have issued, as the work progressed necessitating them, the following, viz.:

Oct. 1, 1897	@F0.000.00
July 1, 1898	\$50,000.00
July 1, 1898	200,000.00
Oct. 1, 1898	100.000.00
Total	
	- \$350.000.00

Although bearing four per cent interest from the several dates of issue, they were all sold at a premium, reducing the net rate of interest to about three and one-third per cent per annum.

The act of 1897 did not become effective until April 3d, and, in consequence of the delay involved and the loss of time between the end of the building season of 1896 and the authority given us to proceed, the entire building season of 1897 was practically lost, and nothing in the way of construction was accomplished during that year except the subbasement floor.

June 15, 1897, we received and opened competitive bids for erection of the superstructure. Fourteen bids were submitted. After carefully considering them, and finding that we could not proceed under them without exceeding the original limit of total expenditure (\$2,000,000), we rejected them all, and instructed Mr. Cass Gilbert, our architect, to revise the specifications, reducing the cost. This was done, and new proposals, twelve in number, were received and opened Aug. 10, 1897. On same date, we opened six bids for construction of the concrete and cement floor (with necessary provisions for drainage connections), covering the subbasement. This work was awarded to Lauer Bros. & Miller of St. Paul, who were the lowest bidders, and they promptly completed the work in an entirely satisfactory manner.

After visiting several stone quarries in our state, and examining the quantity, quality and facilities for producing the amount and kind required for the building, and having carefully considered the entire question, we finally, on Aug. 31, 1897, awarded a contract for erection of the main walls, the roof, the interior cross walls and vaults, the steel floor beams, and the dome piers (but not the dome itself) to the Butler-Ryan Company of St. Paul for \$696,000, the facings of the basement exterior walls to be built of St. Cloud granite, the remaining facings of the exterior walls of Georgia marble, the interior walls, the vaults and the backing of exterior walls, of best hard burned Minnesota brick, and the dome piers of Kettle river (Minnesota) sandstone.

Much criticism has been passed on our board for having selected a material for the exterior walls of this notable building from outside the limits of our state, within which are found many varieties of stone. While excellent in themselves for various purposes, it was the almost unanimous opinion of our board, after long and patient examination of the entire question, that Minnesota was possessed of only one variety that had the enduring and unchanging qualities that this large and permanent state building demanded, namely, granite. Architects and builders were unanimous and unhesitating in advising us to use the lightest colored stone we could find that was otherwise suitable, because a somber or dark colored

material was not adapted to such a large, and necessarily long, building as this one. The lowest bid we had for the use of granite alone was \$31,000 higher than the one we accepted, but a majority of our board was fully satisfied that the bidder would not be able to carry out his contract at the figures named, owing to the great difference in cost of cutting and dressing granite over any other variety of stone, and subsequent information has strengthened this opinion.

Furthermore, we were satisfied, after carefully estimating the amount at our disposal, that no more than \$710,000 was available for this contract. The contract we made requires that all the labor of cutting and dressing this marble shall be done within this state, and this has been carried out, the material being shipped here in large rough blocks, direct from the quarry. The entire amount paid out on it prior to its arrival here, for quarrying and freight, will not exceed five per cent of the cost of the completed building as now planned.

As to the marble itself as a building material, we can only say that we are greatly pleased with it, and believe that all our people will be when the building has been erected. It is not an experiment, for it contains the same ingredients that all true marbles do, viz., ninety-seven to ninety-eight per cent pure carbonate of lime, and marble has been used as a building material for 2,000 years. We have seen it in completed buildings, for example, the Corcoran Art Gallery in Washington, D. C., the St. Luke's Hospital in New York, the Baltimore courthouse, the new state capitol in Providence, R. I., etc., and did not adopt it until we felt that we were doing what a private individual would do under like circumstances, namely, procuring the best results for the money to be invested.

It is essentially a white stone, handsomely clouded with blue colorings, which show more prominently when the stone has been first cut than after a short exposure to the elements. We believe that the criticism we have been subjected to has sprung, mainly, from disappointment, in various quarters, at failure to secure the use of their several products, and since Minnesota possesses no marble quarries, no imputation has been cast by us upon any Minnesota industry. If we are able to carry out hereafter the plans which our architect has in view, we shall have a representation of every desirable stone found in our state in the interior of the building (linings of the corridors, etc.), where every variety and color can have an appropriate place, even though some of them might not be suitable for the exterior walls.

The work of construction has gone forward rapidly during the building season of 1898, and the contractors, the Butler-Ryan Co., have fully demonstrated their ability to complete the work they have undertaken within the time agreed upon (July 1, 1900). The brick walls and vaults are all laid in domestic cement, the quality of which is constantly tested, and the exterior facings are likewise laid in the best known quality of imported non-staining cement. The basement walls (in granite, from the quarries of Wm. C. Baxter, near St. Cloud) are completed, and the first story (in marble) has also been erected, with exception of the four entrances. The cross walls, vaults and dome piers have likewise been carried up to the second story floor line. All the above has been done in an honest and substantial manner, entirely satisfactory to the board.

The contractors have erected a substantial plant, with the necessary buildings, upon the new capitol site, and a large force of men will be constantly employed during the present winter dressing marble for the remaining stories of the building. By the end of the building season of 1899 it is expected that all the walls, up to the roof line, will be in place.

An excellent impression of the new building, its dimensions, and the materials composing it can now be had by a visit within the grounds. The latter has been inclosed by the contractors, at their own expense, to protect the work already completed, as well as to prevent accidents possible to youthful intruders. We think that the beauty of the marble will be apparent to all disinterested persons, and are also confident that this feature will be greatly enhanced when more of it is in place, another year.

As to the building itself, in a general way, we feel compelled to say that we have, as heretofore stated in this report, been obliged to several times revise the original drawings and specifications, and eliminate certain features that would otherwise be desirable, in order to keep within the limit of total expenditure so rigidly fixed by the original and amendatory acts, and which we have constantly kept in mind. We have thought it a wiser course, however, to build a capitol of adequate size, and dignified external proportions, adapted to present requirements and with an eye to future growth and needs, even though limited to a very plain, simple and cheap finish (in plaster, if need be), without adornment or embellishment of any character, internally, rather than to erect one more attractive and pleasing in interior design, but of such dimensions that within a few years it would become overcrowded, cramped and inadequate, like the present one, making it then necessary to enlarge

£.

it by an unsightly addition. We believe that our judgment in this direction will be approved.

July 27, 1898, the corner stone of the new capitol was laid, with imposing ceremonies and in the presence of many thousands of our citizens, by Hon. Alexander Ramsey, the first territorial governor of Minnesota. It was an unusually fitting and pleasant circumstance that the man who has watched the growth of our state for fifty years, from a paltry handful of frontier settlers to its present proud rank in the sisterhood of states, should still be with us, in the full possession of all his faculties, and able to round up his long history of service to our people by the performance of this ceremony. In loving testimony of his services to Minnesota a beautiful silver trowel was presented to him by his fellow citizens on that occasion, and this was used by him in spreading the mortar under the corner stone.

Our honored fellow citizen, Cushman K. Davis, whose name and fame is now national, delivered a powerful oration as a part of the proceedings, the salient features of which were commented upon the day following in the columns of public print, in London, and throughout the civilized world.

We have printed the corner-stone proceedings, in detail, in pamphlet form, for gratuitous distribution.

A vacancy in our board was created Jan. 16, 1896, by the resignation of Hon. Daniel Shell of Worthington. This was filled by the appointment of Hon. Edgar Weaver of Mankato, Jan. 15, 1897. Mr. Weaver took his seat with us April 9, 1897.

Our secretary, Frank E. Hanson, and our superintendent of construction, John Boland, have been continued in their respective positions up to the present time.

Section 12 of the original act of 1893 contains, among other things, the following language:

"Such per cent, not less than ten (10), as in the judgment of the board shall seem proper, shall be reserved from payments on the monthly estimates on work contracted, until such contract, or the portion thereof to which such payments are by the terms of such contract made applicable, shall have been completed, inspected and accepted."

We foresee a hardship to contractors undertaking large amounts of work (like the present one) in our board being held so strictly to the withholding of a full ten per cent on all estimates through a long period of time, and until the entire work has been completed. By reference to our financial statement herein it will be seen that

we now hold in our hands \$31,495.22 that has been earned by the present contractors. This is constantly increasing, and by the end of another year will have been doubled. We hold a good surety company bond, given by the contractors, for \$350,000, and furthermore have the right, under specific provisions of our contract with them, to dispossess them, if it should become necessary, for good cause, and take possession of their plant and buildings and complete the contract at their expense. While the provision referred to is usual, and, in ordinary contracts, is proper, it is too strict in large ones, and becomes more and more onerous the nearer the work approaches completion. We think the original act should be amended by striking out the words "not less than ten (10)," thus leaving to the discretion of the board the proper and reasonable amount to be withheld.

The following is the present condition of the finances of the board:

RECEIPTS (Since May 13, 1893).

		2					
Appropriat	ion for 1893 and	1894			\$10,000.00		
Appropriat	ion, two-tenths	mills, a	vailable	Jan. 1,			
					127,783.20		
Appropriat	ion, two-tenths	mills, a	vaila ble	Jan. 1,			
					128,250.00		
	ion, two-tenths						
					112,789.13		
	ion, two tenths				11110000		
					114,120.00		
	of indebtedness				350,000.00 7.885.25		
	received on same				. ,	\$850.827.58	٠
Tot	al receipts					φυσο,σειίος	•

DISBURSEMENTS (Since May 13, 1893).

New capitol site, now paid for	\$285,275.00
Lot for heating and electric light plant	3,600.00 -
Legal expenses in condemnation proceedings	167.00
Prizes, expert advice, and expenses attending first	
competition for plan	$4,\!472.12$
Prizes, expert advice, and expenses attending second	
competition for plan	4,918.85

CONSTRUCTION.

Excavation and foundation \$111,025.77		
Steel floor beams, basement 8,227.21		
Concrete sub-basement floor 15,727.42		
Superstructure, to Dec. 1, 1898, \$314,-		
952.26; less ten per cent, \$31,495.22 283,457.04		
902.20; less ten per cent, \$02,200.		
Surveying and engineering		
Miscellaneous items	\$420,074.57	
7 -10 11 00	\$420,014.01	
Architect, on account of plans and specifications, as	99 000 00	
per contract	22,000.00	
Architect, commission on construction	9,212.34	
Salary of secretary, superintendent, clerks, etc	8,631.66	
Por diem and traveling expenses of commissioners,		
five years and eight months	8,727.08	
Test pits on site, stone samples, testing materials,		
investigating trips, etc	3,419.16	
Surveying site, office rent, filing deeds, etc	1,970.29	
Printing and advertising	,	
Printing and advertising	220.67	•
Stationery and postage:	3,088.59	
Expenses attending laying of corner stone	7,000.00	
Interest paid on certificates of indebtedness	1,000.00	\$784,200.02
Total disbursements		φ(01,200.02
Balance on hand Jan. 1, 1899		\$66,627.56
Barance on hand Jan. 1, 1888		, ,
FUTURE RESOURCES OF THE BO	ARD.	
FUTURE RESOURCES OF THE BO		\$120,000.00
Appropriation available Jan. 1, 1899 (estimated)		\$120,000.00 150,000.00
Appropriation available Jan. 1, 1899 (estimated) Certificates of indebtedness, to be issued		\$120,000.00 150,000.00
Appropriation available Jan. 1, 1899 (estimated) Certificates of indebtedness, to be issued Two-tenths mills available Jan. 1, 1900 (estimated)	\$125,000.00	
Appropriation available Jan. 1, 1899 (estimated) Certificates of indebtedness, to be issued Two-tenths mills available Jan. 1, 1900 (estimated) Two-tenths mills available Jan. 1, 1901 (estimated)	\$125,000.00 130,000.00	
Appropriation available Jan. 1, 1899 (estimated) Certificates of indebtedness, to be issued Two-tenths mills available Jan. 1, 1900 (estimated) Two-tenths mills available Jan. 1, 1901 (estimated) Two-tenths mills available Jan. 1, 1902 (estimated)	\$125,000.00 130,000.00 135,000.00	
Appropriation available Jan. 1, 1899 (estimated) Certificates of indebtedness, to be issued Two-tenths mills available Jan. 1, 1900 (estimated) Two-tenths mills available Jan. 1, 1901 (estimated) Two-tenths mills available Jan. 1, 1902 (estimated) Two-tenths mills available Jan. 1, 1903 (estimated)	\$125,000.00 130,000.00 135,000.00 150,000.00	
Appropriation available Jan. 1, 1899 (estimated) Certificates of indebtedness, to be issued Two-tenths mills available Jan. 1, 1900 (estimated) Two-tenths mills available Jan. 1, 1901 (estimated) Two-tenths mills available Jan. 1, 1902 (estimated)	\$125,000.00 130,000.00 135,000.00	
Appropriation available Jan. 1, 1899 (estimated) Certificates of indebtedness, to be issued Two-tenths mills available Jan. 1, 1900 (estimated) Two-tenths mills available Jan. 1, 1901 (estimated) Two-tenths mills available Jan. 1, 1902 (estimated) Two-tenths mills available Jan. 1, 1903 (estimated)	\$125,000.00 130,000.00 135,000.00 150,000.00 160,000.00	
Appropriation available Jan. 1, 1899 (estimated) Certificates of indebtedness, to be issued Two-tenths mills available Jan. 1, 1900 (estimated) Two-tenths mills available Jan. 1, 1901 (estimated) Two-tenths mills available Jan. 1, 1902 (estimated) Two-tenths mills available Jan. 1, 1903 (estimated) Two-tenths mills available Jan. 1, 1904 (estimated)	\$125,000.00 130,000.00 135,000.00 150,000.00 160,000.00 \$700,000.00	
Appropriation available Jan. 1, 1899 (estimated) Certificates of indebtedness, to be issued Two-tenths mills available Jan. 1, 1900 (estimated) Two-tenths mills available Jan. 1, 1901 (estimated) Two-tenths mills available Jan. 1, 1902 (estimated) Two-tenths mills available Jan. 1, 1903 (estimated) Two-tenths mills available Jan. 1, 1904 (estimated)	\$125,000.00 130,000.00 135,000.00 150,000.00 160,000.00	150,000.00
Appropriation available Jan. 1, 1899 (estimated) Certificates of indebtedness, to be issued Two-tenths mills available Jan. 1, 1900 (estimated) Two-tenths mills available Jan. 1, 1901 (estimated) Two-tenths mills available Jan. 1, 1902 (estimated) Two-tenths mills available Jan. 1, 1903 (estimated)	\$125,000.00 130,000.00 135,000.00 150,000.00 160,000.00 \$700,000.00	
Appropriation available Jan. 1, 1899 (estimated) Certificates of indebtedness, to be issued Two-tenths mills available Jan. 1, 1900 (estimated) Two-tenths mills available Jan. 1, 1901 (estimated) Two-tenths mills available Jan. 1, 1902 (estimated) Two-tenths mills available Jan. 1, 1903 (estimated) Two-tenths mills available Jan. 1, 1904 (estimated)	\$125,000.00 130,000.00 135,000.00 150,000.00 160,000.00 \$700,000.00	200,000.00
Appropriation available Jan. 1, 1899 (estimated) Certificates of indebtedness, to be issued Two-tenths mills available Jan. 1, 1900 (estimated) Two-tenths mills available Jan. 1, 1901 (estimated) Two-tenths mills available Jan. 1, 1902 (estimated) Two-tenths mills available Jan. 1, 1903 (estimated) Two-tenths mills available Jan. 1, 1904 (estimated) Less certificates of indebtedness	\$125,000.00 130,000.00 135,000.00 150,000.00 160,000.00 \$700,000.00 \$500,000.00	200,000.00 \$470,000.00
Appropriation available Jan. 1, 1899 (estimated) Certificates of indebtedness, to be issued Two-tenths mills available Jan. 1, 1900 (estimated) Two-tenths mills available Jan. 1, 1901 (estimated) Two-tenths mills available Jan. 1, 1902 (estimated) Two-tenths mills available Jan. 1, 1903 (estimated) Two-tenths mills available Jan. 1, 1904 (estimated) Less certificates of indebtedness	\$125,000.00 130,000.00 135,000.00 150,000.00 160,000.00 \$700,000.00 \$500,000.00	200,000.00
Appropriation available Jan. 1, 1899 (estimated) Certificates of indebtedness, to be issued Two-tenths mills available Jan. 1, 1900 (estimated) Two-tenths mills available Jan. 1, 1901 (estimated) Two-tenths mills available Jan. 1, 1902 (estimated) Two-tenths mills available Jan. 1, 1903 (estimated) Two-tenths mills available Jan. 1, 1904 (estimated) Less certificates of indebtedness	\$125,000.00 130,000.00 135,000.00 150,000.00 160,000.00 \$700,000.00 \$500,000.00	200,000.00 \$470,000.00
Appropriation available Jan. 1, 1899 (estimated) Certificates of indebtedness, to be issued Two-tenths mills available Jan. 1, 1900 (estimated) Two-tenths mills available Jan. 1, 1901 (estimated) Two-tenths mills available Jan. 1, 1902 (estimated) Two-tenths mills available Jan. 1, 1903 (estimated) Two-tenths mills available Jan. 1, 1904 (estimated) Less certificates of indebtedness	\$125,000.00 130,000.00 135,000.00 150,000.00 160,000.00 \$700,000.00 \$500,000.00	200,000.00 \$470,000.00
Appropriation available Jan. 1, 1899 (estimated) Certificates of indebtedness, to be issued Two-tenths mills available Jan. 1, 1900 (estimated) Two-tenths mills available Jan. 1, 1901 (estimated) Two-tenths mills available Jan. 1, 1902 (estimated) Two-tenths mills available Jan. 1, 1903 (estimated) Two-tenths mills available Jan. 1, 1904 (estimated) Less certificates of indebtedness	\$125,000.00 130,000.00 135,000.00 150,000.00 160,000.00 \$700,000.00 \$500,000.00	200,000.00 \$470,000.00 62,500.00
Appropriation available Jan. 1, 1899 (estimated) Certificates of indebtedness, to be issued Two-tenths mills available Jan. 1, 1900 (estimated) Two-tenths mills available Jan. 1, 1901 (estimated) Two-tenths mills available Jan. 1, 1902 (estimated) Two-tenths mills available Jan. 1, 1903 (estimated) Two-tenths mills available Jan. 1, 1904 (estimated) Less certificates of indebtedness	\$125,000.00 130,000.00 135,000.00 150,000.00 160,000.00 \$700,000.00 \$500,000.00	200,000.00 \$470,000.00 62,500.00 \$407,500.00
Appropriation available Jan. 1, 1899 (estimated) Certificates of indebtedness, to be issued Two-tenths mills available Jan. 1, 1900 (estimated) Two-tenths mills available Jan. 1, 1901 (estimated) Two-tenths mills available Jan. 1, 1902 (estimated) Two-tenths mills available Jan. 1, 1903 (estimated) Two-tenths mills available Jan. 1, 1904 (estimated) Less certificates of indebtedness	\$125,000.00 130,000.00 135,000.00 150,000.00 160,000.00 \$700,000.00 \$500,000.00	200,000.00 \$470,000.00 62,500.00 \$407,500.00
Appropriation available Jan. 1, 1899 (estimated) Certificates of indebtedness, to be issued Two-tenths mills available Jan. 1, 1900 (estimated) Two-tenths mills available Jan. 1, 1901 (estimated) Two-tenths mills available Jan. 1, 1902 (estimated) Two-tenths mills available Jan. 1, 1903 (estimated) Two-tenths mills available Jan. 1, 1904 (estimated) Less certificates of indebtedness	\$125,000.00 130,000.00 135,000.00 150,000.00 160,000.00 \$700,000.00 \$500,000.00	200,000.00 \$470,000.00 62,500.00 \$407,500.00 66,000.00 \$473,500.00
Appropriation available Jan. 1, 1899 (estimated) Certificates of indebtedness, to be issued Two-tenths mills available Jan. 1, 1900 (estimated) Two-tenths mills available Jan. 1, 1901 (estimated) Two-tenths mills available Jan. 1, 1902 (estimated) Two-tenths mills available Jan. 1, 1903 (estimated) Two-tenths mills available Jan. 1, 1904 (estimated) Less certificates of indebtedness	\$125,000.00 130,000.00 135,000.00 150,000.00 160,000.00 \$700,000.00 \$500,000.00	200,000.00 \$470,000.00 62,500.00
Appropriation available Jan. 1, 1899 (estimated) Certificates of indebtedness, to be issued Two-tenths mills available Jan. 1, 1900 (estimated) Two-tenths mills available Jan. 1, 1901 (estimated) Two-tenths mills available Jan. 1, 1902 (estimated) Two-tenths mills available Jan. 1, 1903 (estimated) Two-tenths mills available Jan. 1, 1904 (estimated) Less certificates of indebtedness	\$125,000.00 130,000.00 135,000.00 150,000.00 160,000.00 \$700,000.00 \$500,000.00	200,000.00 \$470,000.00 62,500.00 \$407,500.00 66,000.00 \$473,500.00
Appropriation available Jan. 1, 1899 (estimated) Certificates of indebtedness, to be issued Two-tenths mills available Jan. 1, 1900 (estimated) Two-tenths mills available Jan. 1, 1901 (estimated) Two-tenths mills available Jan. 1, 1902 (estimated) Two-tenths mills available Jan. 1, 1903 (estimated) Two-tenths mills available Jan. 1, 1904 (estimated) Less certificates of indebtedness	\$125,000.00 130,000.00 135,000.00 150,000.00 160,000.00 \$700,000.00 \$500,000.00	200,000.00 \$470,000.00 62,500.00

We estimate that our future net resources, after paying interest on certificates of indebtedness, will not exceed \$407,500 between Jan. 1, 1899, and Jan. 1, 1904.

Under the act of 1897, there remain to be issued \$150,000 in certificates of indebtedness in anticipation of the above, and this, coupled with the fact that none have been issued against the appropriation available Jan. 1, 1899 (the exact amount of which is yet undetermined), will enable us to complete the contract now being executed, but nothing more. This contract embraces the main walls of the building, the roof, the dome masonry (up to the roof line) and the steel floor beams, but not the dome itself, the skylights, or the entrance steps.

Were funds available, it would be advantageous to contract during the present winter for the portions last named, and also for the tile floor arches, thus saving much valuable time, as well as protecting the work now already constructed.

DEFICIENCY.

Section 7 of chapter 2 of the General Laws of 1893 (being the original act to provide for a new capitol for the State of Minnesota) reads as follows:

"There shall be transferred," etc. * * * "a sum equal to the proceeds of a levy of two-tenths of a mill upon the assessed valuation of the state, * * provided, that the total amount so transferred shall not exceed the sum of two millions of dollars."

It was believed when this act was passed that the assessed valuations of the state would continue to increase, as they had done during the previous decade, as follows:

ASSESSED VALUATIONS.

1 1

1883	\$334,459,359,00
1884	338,258,653,00
1885	
1886	
1887	
1888	
1889	
1890	
1891	
1892	637,459,928.00

Had subsequent events justified the assumption there is little doubt that the full \$2,000,000 would have been provided under the original act. Conditions, now well understood by every one, however, have not only prevented any increase in the assessed valuations of the state, but have decreased them, as follows:

1893	
1894	638,916,326.00
1895	$\dots 641,250,281.00$
1896	563,945,663.00
1897	575,228,581.00

It is therefore obvious that adequate provision should be made by the present legislature for the deficiency that is so plainly apparent, to the end that the work of construction may progress without interruption and the remainder of the \$2,000,000, upon which all our estimates are based, may be provided, so as to become available within the next five years.

We quote from our report Jan. 1, 1897:

"No private citizen constructs buildings in the halting, dilatory and wasteful way that these public buildings are usually handled. We should be glad to make an exception of this one, and to push it to completion and early occupancy, believing that the best interests of the state are in line with our wishes, * * * It is evident that the great State of Minnesota should have a more suitable and safe building for a state capitol than the present structure, and should have it at the earliest day practicable." * * *

If we can have sufficient funds made available as fast as we can judiciously make use of them, we are confident that the legislative session of 1903 can be held in the new building; but, if confined to our present resources, we shall be obliged to discontinue all further construction when the present contract is completed.

The report of our architect in charge of the work, which is appended hereto, contains much valuable information, to which your attention is requested.

All of which is respectfully submitted.

CHANNING SEABURY, E. E. CORLISS, C. H. GRAVES, JNO. DE LAITTRE, GEO. A. DU TOIT, H. W. LAMBERTON, EDGAR WEAVER,

St. Paul, Jan. 1, 1899.

Commissioners.

St. Paul, Minn., Dec. 31, 1898.

Hon. Channing Seabury, Vice President and Chairman Board of State Capitol Commissioners, St. Paul, Minn.,

Sir: I have the honor to submit my report for 1897-98 as architect of the new state capitol building now being constructed at St. Paul, Minn.

From the date of the last biennial report the drawings and specifications for the general construction were constantly under way, until I was able to report to the board, April 9, 1897, that they were sufficiently advanced to permit the letting of a contract at an early date, and I was directed by the board to complete them in such a manner as to allow alternative bids upon several principal divisions of the general construction, so that the work could be separated, if desired, these divisions being:

The general construction up to and including the roof.

The interior face stone work.

The construction of the dome.

The structural steel and iron work.

Various alternative methods of construction of each of the above-named divisions.

I was also directed to prepare a blank form, which could be filled out by the bidders, for such materials as they might wish to offer, in accordance with the plans and specifications. At the same date the board directed the publication of an advertisement for bids, as above noted, providing in this manner for a number of alternative bids upon each portion of the work. This was afterward found to cause some difficulty in making a definite award, as one bidder might be the lowest on one section and high on the others, or vice versa. I had anticipated this in my letter to the board, April 9, 1897, and asked authority to specify definitely the different materials to be used, as would be done in private work. The board, however, desired to give all bidders and the various materials in the market an equal chance, and provided accordingly.

Following the direction of the board, the drawings and specifications for general construction were immediately made ready for the bidders, and issued to them in pursuance of an advertisement duly printed in the daily papers. On June 15, 1897, fourteen bids were received by the board, and publicly opened and read. The board remained in session several days, and had before them all such persons as had signified a desire to present the merits of their materials.

On June 17, 1897, I was directed to prepare a report on the bids, and suggestions as to reducing the cost. On July 8, 1897, I submitted such report, suggesting modifications in the plans and specifications which would reduce the cost, with recommendations regarding the same, and a tabulated statement of the bids. Among the proposed changes was the use of lime mortar for the masonry, instead of cement mortar, which was adopted, this change having been urged by several of the bidders who had appeared before the board, as making a great saving in cost.

After a full discussion of this report, and the said bids, the board directed that plans and specifications be revised, and advertisements be made for new bids upon the general construction of the building (including structural steel work, but not including the dome or interior cut stone work).

On the above date I also recommended that the concrete for the subbasement should be put in, and the board decided to advertise for bids for same, and directed me to prepare the necessary drawings and specifications.

The changes in the drawings and specifications were made at once, and new advertisements inserted in the daily papers.

During this period I continued a very exhaustive investigation as to the building stones that had been offered in the first bidding, and visited a number of quarries from which such stones were produced, at times in company with the chairman and other members of the board. I obtained samples of various stones, and had thorough scientific tests made by Professor Crosby of the Massachusetts Institute of Technology. I also obtained the reports of the United States government engineers, the Smithsonian Institute, and the United States geological survey, and used the same in my subsequent report to the board, as showing the relative merits of the materials offered.

The bids were received for the concreting of subbasement on Aug. 10,

1897.

The new bids upon the general construction were also received the same day, and were all opened and read publicly. The bids for the general construction were referred to me for tabulation and report.

The contract for the concreting and drainage of the subbasement was awarded to Messrs. Lauer Bros. & Miller, Aug. 19, 1897, at the price of \$15,856.

Aug. 19, 1897, I submitted a report on the bids for the general construction, accompanied by test reports on the stone, as obtained from the United States government records and Professor Crosby of the Institute of Technology. In the said report I presented a summary of the cost of construction to that date, and an estimate of the cost of the construction, in addition to what would be required under this contract. Assuming the total cost of the building to be \$1,500,000, the statement showed a balance available for this contract of about \$710,000, after allowing a very moderate contingency fund for extras incident to the construction. I recommended the consideration, then, of only such bids as should come within this amount, or those which closely approximated it, and advised the adoption of Georgia marble for the exterior walls, as being not only the best material offered within the limit of the funds at our disposal, but in itself strong, durable and beautiful. Subsequent information has confirmed me in the opinion then expressed as to the merits of the various materials, and that the bids on granite, while beyond the funds at our disposal, were still much below the cost at which it could be furnished, and had the board adopted either of the several lowest bids for granite throughout it would have been impossible for the bidders to complete such contracts without great loss to themselves and very heavy additional expense to the state. After an exhaustive discussion of the subject, during which the board visited various quarries and heard many experts upon the merits of the materials offered (being frequently in session for that purpose), on Aug. 31, 1897, the board awarded the contract for the general construction to the Butler-Ryan Co., for the sum of \$696,000, the exterior material to be as follows: The basement to be St. Cloud granite, and the superstructure ab we that to be of Georgia marble.

The form of contract with the Butler-Ryan Co. was submitted to the board Sept. 7, 1897, and approved. The contractors, immediately upon the signing of the contract, began the preparation of the material required on the building.

In the meanwhile, Messrs. Lauer Bros. & Miller had progressed their contract for the concreting of the subbasement, and I was enabled to report to the board, Oct. 12, 1897, the completion of the same at a cost slightly less than the original contract, owing to credits for minor modifications that Lhad been enabled to make during the course of the work.

Realizing the importance of the building as one of the notable structures at present being constructed in this country, and desiring to bring to the service of the state not only my own best efforts, but to obtain and use such information as could be gotten in the study of the most recent and important public buildings abroad, at my own suggestion, but with the approval of the board, I spent the winter of 1897-98 in Europe, studying and examining public buildings, with a view to their construction and mechanical equipment, their planning, proportion, detail and embellishment, and for the purpose of bettering the work on the new capitol by fullest information on the subject. I returned to St. Paul April 11, 1898. The said trip was made entirely at my own expense, and as a result of the information obtained I believe we will be able to save many thousands of dollars to the state, and improve the details, the equipment, and in every way make it a more satisfactory and beautiful building.

In May, 1898, the contractors urged the use of cement mortar in place of lime mortar; in other words, urged a return to my original specification in this regard. After the construction of a number of test piers, in which the various materials were used, and an extended discussion of the subject, on June 7, 1898, the board authorized the use of domestic cement in place of lime for the masonry, at an additional expense of \$4,000, plus \$2.80 per barrel, for the use of the best non-staining cement, in the exterior facing of the walls.

The corner stone (St. Cloud granite) was laid with appropriate ceremonies July 27, 1898.

On Aug. 6, 1898, the board, accompanied by myself and Superintendent Abbott, made a trip to Boston, New York and Providence, to examine other public buildings, for the purpose of general information regarding their construction. Close comparison was made between public buildings in those cities and our own work, and the opinion was unanimous that the work at the new capitol was fully equal thereto. The board adjourned at New York, the members returning home separately, Mr. Corliss and myself continuing the trip to Baltimore, Washington, and the quarries from which our marble is produced. Our examination convinced us that the Butler-Ryan Co.'s quarry fully equals, and in some respects is superior, to the other quarries in that vicinity.

On Dec. 6, 1898, I recommended to the board a revision of the design of the south entrance pavilion, increasing the size of the doorways and changing the colonnade above them, the effect being to give a more ample, massive and dignified character to the main approach. This change is the result of many months' study on my part, and is a direct result of the investigations and study made by me in Europe the preceding winter. The board authorized the change, and the drawings have been revised accordingly.

Satisfactory progress has been made upon the building up to the present time, and the general construction is now advanced to the level of the second story floor beams, excepting at the four entrances, and the rotunda piers, where the work has not yet been brought up to the general level. Large quantities of brick, cement, limestone, sandstone, dolomite and granite, produced within our own state, have been furnished for the building, as will be seen by the accompanying statements, and several hundred men have been constantly employed at the building, and at the quarries within the state, preparing or setting the material. The rigid inspection and the high standard required will have the effect of procuring good work and material in this building, and will also tend to maintain a high standard for other public buildings in the state.

The accompanying statement will show the amount of material inwrought in the building up to Dec. 1, 1898. I also append hereto a statement of the various contracts up to the present date, and the amounts paid thereon.

At the rate of progress during the past year I believe the Butler-Ryan Co.'s contract will be completed in about eighteen months. It would be advisable to let the contract for the fireproofing and floor construction and for the construction of the dome within that period. With the extensive machinery plant for sawing, planing and finishing stone now in use on the grounds the sone work of the dome, terraces, steps, etc., could be gotten out to very much setter advantage and at less cost if it could be progressed continuously with the other work.

If funds are available, I should recommend to the board the letting of the contracts for the dome, the fire-proof floors and partitions (making them ready for the plastering), the roofing tile and skylights, the leader pipes, and also for certain portions of the interior cut stone work, the entrance steps and the terraces adjacent to the building. This work could largely be executed while the general construction is going forward, and the dome could be commenced as soon as the present contract is completed up to the dome platform, thus bringing the work to a point where the plastering of a large portion of the building could be done early in the following season, and hastening the completion of the building by at least two years. In such a large contract it is necessary to prepare for the material considerably ahead of time, and I would urge that arrangements be made to let the contracts sufficiently ahead of time to permit the continuous progress of the work. This is desirable from the standpoint of good construction, protecting as it would the work already done, and is also important from the standpoint of economy, owing to the rising prices of all building material. Taking structural steel as a reasonably fair indication of the varying price of building material, I quote for comparison the following: In August, 1892, beams were being sold at \$2.30 per 100 pounds; in August, 1897, the maximum price was \$1.35 per 100 pounds; in December, 1898, the maximum price is \$1.55 per 100 pounds. Compare also the price of selected common brick at the yards: In August, 1892, the price was about \$7 per thousand; in August, 1897, \$5.50 per thousand; in August, 1898, \$6 per thousand; in December, 1898, \$6.25 per thousand. A similar or greater advance is noticeable in all other building material.

I call your attention to the fact that the contract for the construction of the new building was let at a period when the price of all building material was very low; that there has been a steadily rising market since, and that this increase in cost is likely to continue until it approximates the prices of 1892.

Were the funds available, I would also urge that, coincident with the construction of the building, a large portion of the work in the completion and development of the grounds could properly be undertaken. It is necessary in all buildings of this class that suitable approaches and terraces should be provided, and as soon as the general construction of the walls has been completed this work should be done, as such terraces, balustrading, entrance steps and approaches will require a large amount of cut stone work, which, while not an integral part of the building, are still accessories of it should be in harmony with it. This material could all be in course of paration at the present time, and would give employment to a large number of workmen. It is especially desirable that the construction of the terrace walls, and the covering of these terraces next to the building, should be completed as the building advances, so that the whole may be closed in at the same time.

I wish especially to call attention to the very small percentage of "extras" incurred. (The total of the "extras" appears in the statement appended hereto.) You will notice that it amounts to not exceeding one and one-tenth per cent on the total amount of contracts awarded, and not over two and two-tenths per cent on the total amount of the work executed to date. In public work, generally, it is safe to say that the "extras" usually vary from five to ten per cent, and frequently much more than the latter figure.

I desire to call special attention to the very low prices at which the contracts have been awarded on this work, and to the general excellence of the material and workmanship furnished in the construction of the building up to the present time.

Yours respectfully,

CASS GILBERT,
Architect.

MEMORANDUM

SHOWING AMOUNT OF MATERIAL DELIVERED ON THE SITE OF THE NEW MINNESOTA STATE CAPITOL BUILDING SINCE JAN. 1, 1896, BUT NOT INWROUGHT IN THE BUILDING.

Rough marble, including marble sawed and cutcubic feet,	41,374
Granitecubic feet,	597
Kettle River stonecubic feet,	2,088
Brickthousand,	468
Structural iron and steelpounds,	
Flue liningslineal feet,	

STATEMENT

SHOWING THE ACTUAL AMOUNT OF MATERIAL INWROUGHT IN THE NEW STATE CAPITOL BUILDING AND THE AMOUNT OF EXCAVATION, DEC. 1, 1898,

Marble, cubic feet	17,309
Granite, cubic feet	28,619
Kettle River stone, cubic feet	35,787
Winona stone, cubic feet	99,136
Blue lime stone, cubic feet	61,841
Common brick	3,375,743
Sewer brick	2,302,983
Structural iron and steel, pounds	1,649,082
Concrete footings, cubic feet:	77,555
Concrete footings, cubic feet:	73,900
Concrete flooring, square feet	360
Non-staining cement, barrels	124
Back frames	16,800
Cramps and anchors	, ,
Cast iron pipe, lineal feet	1,690
Hubs, tees, etc., subbasement drainage system	226
Seepage tile, lineal feet	9,340
Asphalt on walls, square feet	25,504
Asphalt paper, square feet	$31,\!156$
Clean-outs, subbasement	91
Excavation in trenches, cubic yards	11,434
General excavation, cubic yards	48,460
,	

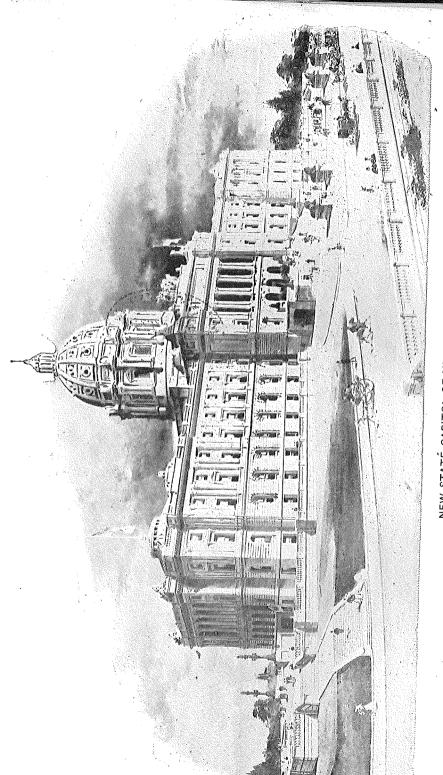
MEMORANDUM

SHOWING CONTRACTS AND EXTRAS WHICH HAVE BEEN AWARDED (A PORTION OF WHICH HAVE BEEN COMPLETED) IN THE CONSTRUCTION OF THE NEW STATE CAPITOL BUILDING, ST. PAUL, MINN., AT THIS DATE, DEC. 31, 1898.

George J. Grant— General contract, excavation and foundations Extra orders allowed by the board for minor changes	
	4,057.38
Amount of certificates	\$111,734.38
Universal Construction Company— General contract structural steel basement floor Extra order allowed by the board	\$8,188.00 39.21
Amount certified	\$8,227.21

Lauer Bros. & Miller— General contract, concreting subbasement, and drainage for same Less credit for work omitted	\$15,856.00 128.58
Amount certified	\$15,727.42
Butler-Ryan Co.— General contract, general construction Extra orders allowed by the board for minor	\$696,000.00
ρη απορα	ς,
Less credit for work omitted 2.29	5,180.23
	\$701,180.23
Amount certified	283,457.04
Balance to complete	\$417,723.19
	w.
${f SUMMARY}.$	
Contracts and extras awarded to date, less credits	\$836,869.24 . 419,146.05
Balance	





NEW STATÉ CAPITOL OF MINNESOTA. IN COURSE OF CONSTRUCTION.

FOURTH BIENNIAL REPORT

OF THE

BOARD OF

STATE CAPITOL COMMISSIONERS



FOR THE

STATE OF MINNESOTA.

JANUARY 1, 1901.

ST. PAUL, MINN.: THE PIONEER PRESS COMPANY, STATE PRINTERS, 1001

FOURTH BIENNIAL REPORT

OF THE

BOARD OF

STATE CAPITOL COMMISSIONERS

To His Excellency S. R. Van Sant, Governor of the State of Minnesota:

Dear Sir:—The original act providing for a new capitol for this state was approved April 3, 1893, but it appropriated no money for the purchase of a site or erection of a building until 1895, and then at an average annual amount of only about \$120,000. selection and purchase of a site was the first necessity, and the revenues for 1895, 1896, 1897 and 1898 had to be largely devoted During the legislative sessions of 1897 and 1899 to this purpose. remedial legislation was enacted, enabling us to anticipate our future revenues as might be necessary, by the issuance of certificates of indebtedness, payable in future years, and since the spring of 1898 there has been no interruption to the steady progress of the work of construction. Ground was broken May 6, 1896, and the first stone in the foundation was laid June 23, 1896. No progress was made towards construction during 1897, because no funds were available until after the passage and approval of the legislative act of The first proposals received for the erection of the that year. superstructure, June 15, 1897, were rejected because exceeding our

resources, making it necessary for us to revise our drawings and specifications preparatory to receiving a second set of bids. These were opened Aug. 10, 1897, and a contract was finally awarded Aug. 31, 1897. This was too late in the building season for the contractors to perform anything more than preparatory work.

In reviewing our labors up to this time, therefore, it is opportune to recapitulate the work of each year since the original act was

passed, as follows.

1893-Site selected and purchased.

1894—First competition for selection of plan and architect held.

1895—Second competition for selection of plan and architect held.

1896—Ground broken; foundation erected.

1897—No construction accomplished.

1898—Superstructure vigorously pushed.

1899-Work on superstructure continued without interruption.

 $1900\mathrm{--Superstructure}$ practically completed, and construction of dome begun.

It will be seen, therefore, that during four building seasons only have we been able to make any progress in the work of actual construction of the building itself, although it is nearly eight years since the original act was passed. But for the remedial legislation before referred to, enabling us to anticipate our future revenues and use them as fast as the work could be pushed, we should not now have the practically completed exterior of the building and one-half of the dome ready for inspection by the citizens of our state, nor, indeed, for several years to come.

During the two years that have elapsed since car last report our time and labors have been almost wholly devoted to the work of construction, and but few questions of general interest have come before us for decision. About a year ago it became necessary to determine what material should be used in the exterior construction of the dome, and to this problem our board gave long and careful investigation. It might be of cast iron, and painted. Terra cotta might be used; but if it were, even the unpracticed eye would easily detect the difference, in material and color, of the building itself and its crowning feature. A brick interior, with marble exterior, would be in complete harmony with the general design of the building itself, and was manifestly the most appropriate material. These ranked, in point of cheapness, in the order here enumerated, but we

decided upon the one last named, for the reasons just stated, even though it might be the most expensive when viewed from the standpoint of first cost alone.

We accordingly, after the usual preliminary proceedings, opened bids for the construction of the dome, complete, on the seventh day of March, 1900, and awarded the contract for same to the Butler-Ryan Company, who were the lowest bidders. They have since made good progress in erecting it.

Several months prior to this we had a plaster model of the proposed dome prepared, for study by ourselves and our architect, and have been able, by its use, to make several minor changes in the design, with a result of saving to the state several thousand dollars. This model will be on exhibition in the present capitol during the coming session of the legislature.

Six plaster models for statuary to adorn the attic over the main entrance to the building are now in our possession on the grounds. These are the work of Daniel Chester French of New York, one of the most famous sculptors of to-day. Some of his more recent productions—the statute of "The Republic," at the World's Fair, in Chicago, the equestrian statue of Washington, unveiled the past summer at Paris, and later in the summer the statue of Ex-Gov. John S. Pillsbury, which was unveiled on the university grounds in Minneapolis, are known to our citizens.

These six figures will be carved from the same material as the building, and will, we are confident, prove one of its most attractive and beautiful features. They will typify Justice, Courage, Bounty Integrity, Wisdom and Truth. The two last named are now in process of execution in the shops, and will soon be completed. Four of these statues were included in the contract for the main building, and the other two were made necessary by a change in the main pavilion, which we found to be desirable after the principal contract had been let.

The following is a statement of the finances of the board at this time:

RECEIPTS SINCE MAY 13, 1893.

Appropriation for 1893 and 1894	\$ 10 000 n	0
Appropriation 2-10 mill, available Jan. 1, 1895		
Appropriation 2-10 mill, available Jan. 1, 1896		
Appropriation 2-10 mill, available Jan. 1, 1897		
Appropriation 2-10 mill, available Jan. 1, 1898		
Appropriation 2-10 mill, available Jan. 1, 1899		
Appropriation 2-10 mill, available Jan. 1, 1900		
Certificates of indebtedness sold\$750,000.00	.,.	
Less certificates paid July 1, 1900 100,000.00		
	650,000.0	0
Premiums received on same	8,205.28	
·		-\$1,384,014.66
DIGDID GYALWAYING GYALGO AFA II 10MI	T 1000	
DISBURSEMENTS SINCE MAY 13TH	1, 1893.	
New capitol site (wholly paid for)	285,275.00)
Lot for heating and electric light plant	3,600.00	
Legal expenses in condemnation proceedings	167.00)
Prizes, expert advice and expenses, attending first		
competition for plan	4,472.12	2
Prizes, expert advice and expenses, attending second		
competition for plan	4,918.85	5
CONSTRUCTION.		
1		
Excavation and foundation\$111,025.77		× 1
Steel floor beams, basement		
Concrete sub-basement floor 15,727.42		1
Paid on superstructure contract 682,185.19		i
Paid on dome contract 140,413.22		
Surveying and engineering		
Architect, for plans and specifications		
as per contract		
Architect, commission on construction 21,073.41		1
Miscellaneous items 4,277.66	005 066 10	
	005,366.10 14,838.33	
Salaries of secretary, superintendent, clerks, etc Per diem and traveling expenses of commissioners,	14,000.00	*
seven years and seven months	11 199 04	
Test pits on site, stone samples, testing material,	11,123.04	
investigating trips, etc	4,043.18	
Surveying site, office rent, furniture, models, etc	2,939.55	
Printing and advertising	1,873.14	
Stationery and postage	230.47	
Expenses attending laying of corner stone	3,088.59	
Interest paid on certificates of indebtedness issued	9,000.99	
under act of 1897	28,500.00	
· ·		
Total disbursements	:	\$1,370,435.37
Balance on hand at this date	:	\$ 13,579.29

As shown above, there are now outstanding certificates of indebtedness to the amount of \$650,000, which pledge our future revenues to that extent. They will mature as follows:

July 1, 1901	\$100,000.00
July 1, 1902	
July 1, 1903	100,000.00
July 1, 1904	
July 1, 1905	
July 1, 1906	100,000.00
July 1, 1907	50,000.00

The last \$400,000 of them were issued bearing three per cent interest, and sold for a small premium. \$450,000 of them are now held by the permanent school and university funds of this state, having been purchased by the investment board.

There remains unexpended on the Butler-Ryan Company's first contract (the superstructure) the sum of \$32,271.09, and \$138,380.78 on their second contract (the dome), both of which amounts will be paid to them the coming season, when the whole has been completed. They have performed their work in a skillful, creditable and workmanlike manner, and we challenge criticism upon that portion of the building which is now completed, believing it to be of a high order of construction, not excelled anywhere.

We have become greatly interested in our work as it has progressed, and take a pardonable pride in it. It is not, and will never be, without perplexities, but, in the main, it has progressed without serious friction in any direction. Some of the criticisms to which we have been subjected from time to time have not helped to make our duties pleasant, but we have known that, in a large public measure of this character, there must inevitably be a great di-It must be self-evident, however, that no single versity of opinion. opinion, formed without the necessary study or investigation, should outweigh that of a board of reasonably intelligent men, who have made it a matter of serious thought and study, provided that full confidence can be placed in their integrity. We have accordingly acted upon our own best judgment, after full and patient investigation of every detail, relying upon future results to justify us. that we have an object lesson for our people to look upon and admire we are beginning to realize some of our hopes in the line of approval, and if we are enabled to complete the building throughout in the way we know that it should be completed, we shall, some time,

reap our reward, in the satisfaction that comes from a duty honestly and intelligently performed.

Every request that we have heretofore made of the legislature, in the way of remedial enactment to facilitate our work, has been granted, in full and without curtailment; and all the state officials, without a single exception, have been at all times ready and willing to assist us in every proper way, from the beginning down to the present time.

FUTURE RESOURCES.

The original appropriation was limited to Of which there has been expended\$	
Outstanding contracts (superstructure)	32,271.09
(dome)	138,380.78
Interest to accrue on certificates of indebtedness	
issued under act of 1897	18,000.00
-	1,559,087.24
	<u> </u>
Leaving for completion of the work	\$ 440.912.76

We have been frequently asked, by members of the Grand Army of the Republic and others, whether we could not, in some way, respond to their oft-repeated and earnest desires, and erect some fitting testimonial, upon the new capitol grounds, to the memory of Minnesota's departed heroes, who took part in our country's recent wars. We are informed that monuments have been heretofore placed on Southern battlefields, in commemoration of the services and sacrifices rendered by two of our Minnesota regiments during the Civil War (appropriations therefor having been made by the state), but that eight other regiments have had no such recognition, to say nothing of Minnesota's part in the more recent Spanish War.

Nothing would give us more pleasure than to fittingly respond to this laudable and very general wish, but it is the same old story, "We have not sufficient money to finish the building properly, and so cannot offer you any encouragement that we can do anything." In the hope, however, that funds might, sometime, be available, we have, in consultation with our architect, formulated a plan for a "Memorial Approach" to the main front entrance (from the junction of Central avenue and Wabasha street), which, we believe, would fully respond to the requirements indicated, and at the same time, be a pleasing departure from the stereotyped monument or shaft.

A sketch of this proposed feature has been (voluntarily) prepared by our architect, and will be shown in the rotunda of the present capitol this winter. It is our hope, though not our present expectation, to some time make it an accomplished reality.

Our work has now advanced to a point where the main building is completed and the dome under way, to be completed in August There remains to be considered, the interior finish and decorations of the building, heating, ventilating and lighting apparatuand the entrance steps and areas immediately surrounding the build-In March, 1896, before final adoption of the plans and letting of contract for the main building, estimates, in detail, were prepared, as required by law, which showed that the structure could be completed at a cost within the limit fixed by the Act of 1893. board had decided on the dimensions of the capitol after an exhaustive investigation, consultations with state officials, examination of capitol buildings of other states, and careful study of the problem. It was found that a plan providing for the senate chamber, house of representatives and supreme court room, on one floor, was essential; that those bodies must have lobbies, committee rooms, cloak rooms, judges' chambers and the state library on the same floor, The dimensions of the floor space of the whole within easy access. building were therefore fixed by the requirements for that floor, the space thus resulting on other floors amply providing for other departments.

The house of representatives has now 120 members. It may probably be increased, within approaching years, to 150. Providing proper seating capacity for that number, with reasonable surrounding space, and providing pleasant galleries, with seating capacity for 350 persons, that the public may be accommodated without the present trying and disturbing intrusion upon the floor of the house, a room was planned off 4,392 square feet of floor space, and with 2,882 feet in the galleries.

The senate, now of sixty-three members, may probably increase to seventy-five. Similar reasoning and estimates to those in the other case indicated a necessary floor space there of 2,997 square feet, with 1,269 feet in the galleries (seating 200 persons.)

The supreme court, now of five judges, may possibly be increased. The bar assembling at opening of the terms of court, and on other important occasions, will be much more numerous than at present. For that department a room with 2,300 square feet of floor was necessary, with 2,500 feet in the judges' rooms and offices of the clerk of the court.

The state library now contains about 35,000 volumes. It is increasing yearly, and within fifty years may probably have several times as many volumes to be cared for and stored in such a way as to be readily accessible.

Around these various departments are grouped committee rooms for both houses, cloak rooms, retiring rooms and public and private lavatories.

Canvass of public sentiment showed that a central dome and rotunda must be part of the design, and that the people would not be satisfied with any other. Moreover, the rotunda, placed at the center of the building, provides space for the people who assemble on occasions of special public interest; also, forms a more direct communication between the various departments, and amply lights corridors which would otherwise need artificial lighting.

A building of less dimensions than the plan adopted would not answer the purposes, or be approved by the sober judgment of the

people when finished.

Two alternatives were thus presented for decision, viz.: a smaller capitol, and have the state obliged, in a few years, to enlarge it by wings, injurious in architectural effect (as in the present case at Columbus, Ohio,) and inconvenient in interior arrangement; or, build a large enough structure, and make the main building strong and sound, and reasonably beautiful, and add the interior finish with what money was left of the appropriation. did not feel that it would do its duty if it built the smaller structure, which in a few years would be crowded and insufficient, necessiating enlargement or the building of another capitol to meet the needs It appeared to be imperative and wise to lay out a of the state. large enough building, provide for solid and safe construction, make the exterior simple, but in thoroughly good taste, and then finish the interior with the remainder of the money left, unless the Legislature decided to increase the limit sufficiently to permit a proper finish for such a building.

The terms of appropriation for this capitol made the money available only in such installments that a contract for constructing the whole structure could not be let; if it could have been done we should have taken advantage of that period of low prices in material and labor, and one contract could have been let for the whole work within the limits fixed and estimates made at that time, as was done by the State of Rhode Island. But our money was only

provided at the rate of about \$120,000 a year, and so that opportunity was lost, and the board was obliged to let partial contracts. For this reason the board asked for bids on the foundation in 1896, and subsequently in 1897 (August 31st), on the main building. These came within the first estimates, and indicated that they were reliable, so contracts were let and the work proceeded.

The state has been exceedingly fortunate in the contracts we have thus far obtained. With the exception of the last one, entered into last year, they were all made during the recent period of depression, and at times when contractors were anxious for work, and prices of material and labor were at the lowest range that has been known for many years. Since 1896, as is well known, there has been a strong advance in the market prices of material and rate of wages. We could not duplicate the work now completed for any less than \$450,000 increased cost were we obliged to begin anew at By a recent report from the secretary of treasury of the United States to congress, a list of public buildings was given which, the secretary reports, to use his exact words, "cannot be completed within the authorized cost because of the rise in prices of building materials and other costs." He recommends an increase in the cost of the building at Aberdeen, S.D., from \$87,000 to \$150,000; Butte, Mont., \$200,000 to \$300,000; Eau Claire, Wis., \$50,000 to \$175,000; Fergus Falls, Minn., \$75,000 to \$125,000; Helena, Mont., \$300,000 to \$400,000; Janesville, Wis., \$50,000 to \$125,-000; St. Cloud, Minn., \$50,000 to \$75,000; St. Paul, Minn. (already nearly completed), \$1,050,000 to \$1,150,000. The state capitol of Minnesota is affected by the same facts. When the board, in 1900, called for bids for completing the dome they were found to be considerably in excess of the original estimates; but the board felt it absolutely necessary to continue the work, and dared not leave the incomplete building standing subject to danger of damage until another legislature should assemble. The contract therefore was let, and the work is partially done.

Now, before proceeding to let further contracts, there is, fortunately, a legislative session, and the board desires to submit the facts, and to ask for such action as the wisdom of the law-making power may prescribe as to what shall be done.

Attention is called to the fact that this is a very large strictly fire-proof building, with a great rotunda and dome and broad corridors. The present appropriation limits the amount which can be

Lorro

expended on it to about \$1,500,000. Fortunately an object lesson in public building construction is at hand, to which attention is especially requested. The United States is constructing a post office and custom house building in St. Paul, near the Windsor Hotel, that is to cost, according to a statement by the treasury, already quoted, \$1,150,000. It has no extensive public rooms, contains but 2,927,000 cubic feet of contents against 5,060,955 cubic feet in the Minnesota capitol, and is very plainly finished. The following information is also of value in this connection:

COST OF CAPITOL BUILDINGS OF OTHER STATES ASIDE FROM THE COST OF THE SITES.

Iowa	
Lime stone	
Furnishing	129,131.77
Assessed valuation of state in 1882 (when building was com-	
pleted)\$426,000,000	
Indiana—	
Lime stone	1,980,969.00
Contractor failed, and applied to legislature for reimburse-	
ment of	300,000.00
Rhode Island—	
Marble	1,744,000.00
Yet required to complete	500,000.00
A smaller building than Minnesota's for a smaller state. In	
addition to the above \$700,000 was appropriated by popular	
vote, at the last general election, for additional decorations,	
adornment of grounds, etc.	
Connecticut—	
Marble	2,460,000.00
One-third the size of Minnesota capitol.	•
Kansas	2,000,000.00
Michigan—	
Lime stone	1,462,000.00
A very inferior building.	
Massachusetts—	
Recent necessary additions to state house	3,000,000.00

The commissioners knew but little about constructing public buildings when they entered upon this work, but have necessarily learned much since then. It is their plain duty to give the state the benefit of all investigations and experience.

This building is now so far along that the people of the state can see that they are to have, externally, one of the most beautiful and monumental public buildings in the United States. It should be finished in the interior in a suitable and permanent manner, and that finish should be better than what was originally planned. Owing to the rise in prices heretofore mentioned, adherence to the original limit of cost would compel the use of inferior material and workmanship. To make this statement brief and to the point, the commission presents the following details.

Present limit of cost will require hard-wood floors throughout, Terrazzo floors are recommended for loggias, stone floors for rotunda and corridors, wood flooring in offices and assembly rooms.

Present limit will require tin or other cheap final roofing. Substantial tile roofing is recommended, because it will be permanent, and save money for future repairs.

Present limit will require plain plaster finish in vestibules. Mosaic ceiling and vaulting is recommended.

Present limit will require fire-proof vault doors in executive and administrative offices only. The same on storage vaults in the basement and burglar-proof doors in the treasurer's vaults are recommended.

Present limit will require the cheapest possible floor construction and partitions and furrings. The latest improved fire-proof construction is recommended for these, some of which has been invented and put in use since the original estimates and plans were made, and were not therefore contemplated.

Present limit will require the rotunda to be left an empty space, without gallery, columns or stone facings, and with plaster finish. Marble columns on first and second stories, a gallery with balustrade; facing of cut stone on the lower walls, and decorative treatment of the upper wall is recommended.

On each side of the rotunda is a large oblong hall, designed for grand staircases, one leading to the great doors of the senate and one to those of the supreme court room. The staircases should be of marble, and the roof above should be supported by columns of marble, or Minnesota stone suitable for the purpose, which also should be used as wainscoting and pilasters for the walls. Present limits will require leaving these staircase halls empty, with plain plaster walls.

. 6

The senate, house of representatives and supreme court room must be left with plain plastered walls unless additional allowance permits proper decorative treatment.

The skylights over the same rooms and the staircase halls and metal roofing around same should be of the latest improved pattern, not known four years ago.

Present limits will require the boilers and ventilating plant to be located in the basement, and an iron smokestack run through flues which are designed for ventilation, and the use of tubular boilers, with a ventilating system which is inferior to the latest improvements, and, while cheap in first cost, is not economical in operation.

The commission has purchased a lot across the street from the capitol, and recommends that a separate building and smokestack be constructed there, with a tunnel to the capitol, for steam and air pipes and electric lighting wires. This will keep all coal dust and smoke and uncontrolled heat away from the main building, and the installation of safety water tube boilers, ventilating fans and electric dynamos will in a few years save the state more than this extra cost, by reduced coal and electric light bills. This has been carefully figured, and the details are prepared for investigation. Providing a proper outfit now will save the state the difference in first cost in a few years of operation.

Ornamental bronze doors are recommended for the main south entrance, instead of oak.

In plumbing, gasfitting and electric light apparatus and fixtures great difference exists between ordinary materials and workmanship, which only can be afforded under the present limits, and the very best and latest, which should be installed in a building of this character. There have been many improvements in this line introduced in the last few years. The commission and architect will be glad to explain details in reference to this item, which are too voluminous for this report.

The entrance steps at the main or south front and at the east and west entrances are great structures, necessary for proper impressive approach to a building of this magnitude. They should be constructed of Minnesota granite, like that in the basement of the building, and adorned with bronze candelabra on either side. Once so built, they will be permanent and satisfactory. The present limit will permit only the use of a much cheaper material, which will

inevitably have to be replaced in a few years, with a final loss of all the present expenditures on that work.

To carry out these betterments of the original design and estimates, to make up for the rise in prices of materials and advanced wages since 1896, to provide for certain needed sculpture on the exterior, to complete the areas and terraces surrounding the building, and steps and approaches from street levels, the limit of cost of this building and site should be increased by the sum of \$1,000,000, which can be done without increasing the annual taxes, nor requiring any present appropriation, by simply extending the time during which the standing appropriation of two-tenths of one mill on the taxable valuation of the state shall be set aside for this purpose, until a total of \$3,000,000 has been reached.

The commission and the architect respectfully present that this is urgent, and plainly for the best interests of the state, and are prepared to furnish detailed information on all these points to legislative committees or members. It is manifestly improper to publish our estimates in this report, since they will become the subject of future contracts.

If authorized to proceed, the commission expects to be able to turn over the capitol building, ready for occupancy, at the assembly of the next legislature in 1903. In that case it will be necessary for provision to be made at this session for furnishing the building.

The commission will submit estimates and plans for such furnishing if desired. Furnishing has not been provided for in any legislation heretofore enacted in reference to the capitol building.

It may not be improper to suggest at this time that the legislature may now properly appoint some authority to contract the sale of the present capitol building and site, the same to be delivered to purchaser on completion of the new capitol, ready for occupancy. There is a popular impression that the state has only a limited title to the old capitol site. This is not the fact. We have had the question examined, and the state has an absolute title, which can be conveyed without reservation or limit. And for the same purpose the sale of the Kandiyohi capitol lands may also be considered. The proceeds of such sales would probably reimburse the state for the extra expenditures deemed necessary and wise at the present time. It would be, in our opinion, however, unwise to compel the board to depend upon the proceeds of these sales for funds with which to speedily complete the new building, owing to the well known uncertainity of effecting sales of real estate of this magnitude without more or less delay, or for ready cash, while our funds should be available with regularity. The proceeds of such sales could be covered into the state treasury independently.

The work executed up to the present time plainly shows that the State of Minnesota will have a more substantial and beautiful capitol building than has been constructed for any state for the same amount of money, or indeed for a much larger amount. Every step the board has taken thus far has been with the greatest care. It has hoped that wise and sufficiently liberal provision will be made for completing it, and that, finally, the verdict of approval by the state at large may reward the trying labors of the commission, and the people have a state house of which they may be justly proud, worthy of this great state, and suitable in every way for the purposes it shall serve.

Appended hereto is the report of our architect, Mr. Cass Gilbert, which contains much valuable information, and to which your attention is respectfully directed.

All of which is respectfully submitted.

CHANNING SEABURY.
JNO. DE LAITTRE.
C. H. GRAVES.
E. E. CORLISS.
H. W. LAMBERTON.
EDGAR WEAVER.
GEO. A. DU TOIT.

St. Paul, Jan. 1, 1901.

REPORT OF THE ARCHITECT.

Dec. 31, 1900.

To the Board of State Capitol Commissioners, St. Paul, Minn.,

GENTLEMEN: I have the honor to submit my report as architect of the new state capitol building for the years 1890-1900.

Since my last biennial report the work has progressed continuously, both in the shops and oil the building, excepting when interrupted on the latter by inclement weather.

On the 1st of January, 1899, the main walls of the building were up to the level of the second story floor, excepting at the east and west ends and central pavilion on the south front. The main walls of the building are now completed, and the main portion of the building is roofed in, although the roofing is not yet complete.

The contract for the dome was awarded to the Butler-Ryan Company early in March, 1900, and executed March 14th for completion on the 1st of August, 1901, they being the lowest bidders on the contract, which had been duly advertised.

In letting this contract the board carefully considered the expense and material to be used, and, at its request, I reviewed the estimates for the minor contracts, entrance steps and terraces, interior fitting and equipment, showing thereby that, upon the market prices then existing, with careful management and the closest economy in every department, there would be a sufficient balance remaining of the appropriation to complete the building, at the same time informing the board that if such economy were to be put in force it would mean that the interior finish and other portions of the structure above named, though providing for the practical uses of the building, could not be ornamental or of the character which might be expected in such a structure. It was decided to make the dome conform to the standard set in the other parts of exterior of the building, both for the sake of keeping a uniformity of effect and because we would thereby obtain a structure of more substantial materials, capable of resisting the action of our rigorous climate for an indefinite period, with the minimum of expense for maintenance and repairs, and if close economy had to be enforced it should be in the interior rather than on the exterior. I cannot, however, refrain from expressing regret that we will apparently be unable to finish the interior in a corresponding manner, and that we must substitute some cheaper material in place of the granite entrance steps and balustrade adjoining the building.

Preparations for the dome work were immediately begun, and the construction of the same is now advanced to a point about fifty-eight feet above the main cornice of the building, and there remains from this point to the top of the ball on the lantern about ninety-four feet yet to build.

A large quantity of material has been prepared, and is now on the site ready for erection with a view to rapid progress and completion of the existing contracts in the coming season.

The work has now advanced to a point where it will be essential in the spring to definitely determine upon the interior construction, equipment and finish, and also upon the entrance steps, approaches and outlying terrace work. If contracts for this portion of the work can be promptly let, the building can be completed in time to provide accommodation for the next ensuing session of the legislature. Contracts for heating, electric work, boilers, engines, elevators and other machinery, should be let, so as to have them installed during the coming summer. The free-proof floor construction, the plumbing and drainage system, the unfinished roofing and skylights, and main stair-ways, and the structural work adjacent thereto, should all be under way at the same time; each being in a measure dependent upon the other, greater economy can be obtained if the work all goes forward promptly and coincidently.

The very marked advance in the cost of all building material will affect the contracts yet to be let. This advance has in many cases exceeded fifty, and in some items even one hundred, per cent. This consideration will require even greater economy, and I shall ask your further instructions in the premises before preparing the final specifications for these contracts. The condition that confronts us illustrates the impracticability of making definite estimates so long in advance as we have been forced to do heretofore, and my estimates will undoubtedly require still further modification. I call your attention to my report of two years ago referring to the same matter.

I herewith submit statements relating to the material used in the construction and to the cost of the building up to the present time.

I wish especially to call attention to the unusually low percentage of extras incurred, amounting to about eight-tenths of one per cent on construction and about one per cent on changes of design determined by the board after the original contracts were awarded, or in all less than two per cent on the total amount of contracts to date. Included in these items, I may add, are a number of items which should not properly be classed as "extras," for the reason that they are simply anticipatory of contracts yet to be let, and will reduce the amount of such contracts proportionately. I venture to assert that no other public building of approximately such dimensions has been erected wherein the percentage of extras has been so low. The workmanship and material throughout is of excellent quality, and will compare favorably with the best modern buildings in this country or abroad.

Respectfully,

CASS GILBERT,
Architect.

\$111,734.38

STATEMENT.

SHOWING THE ACTUAL AMOUNT OF MATERIAL INWROUGHT IN THE NEW STATE CAPITOL BUILDING, AND THE AMOUNT OF EXCAVATION.

TIOI	13011111	,				
(mileta	includes	all	contracts	to	date.)	

(This includes all contracts to date	
(TMS mondo as-	125,768
Marble (cubic feet)	33,340
Granite (cubic feet)	77,629
Kettle river stone (cubic feet)	,99,136
Kettle river stone (cubic feet)	61,841
Winona stone (cubic feet)	7,008,662
Blue limestone (cubic feet)	5,465,487
Common brick	21,750
Sewer brick Enameled brick	100,000
Enameled brick	3,022,693
	77,555
	1,717
N. S. cement (barrels)	290
Back frames	. 1,690
General excavation (cubic yards) Flue linings Book tile (square feet)	
Book tile (square reet)	

MEMORANDUM.

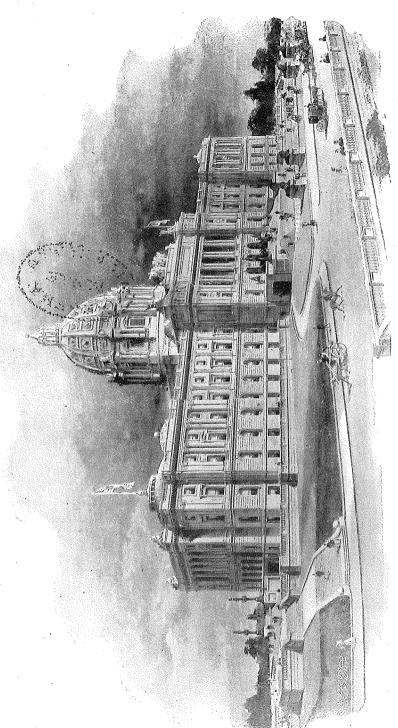
SHOWING CONTRACTS AND EXTRAS WHICH HAVE BEEN AWARDED (A PORTION OF WHICH HAVE BEEN COMPLETED) IN THE CONSTRUC-TION OF THE NEW STATE CAPITOL BUILDING, ST. PAUL, MINN.

George J. Grant-

General contract, excavation and foundations		\$107,677.00
Extra orders allowed by the board for minor changes	\$3,514.52 165.75	
Less credit for work ozzar		\$111.025.77

Less credit for work ozers	\$111,025.77
antroats.	708.61
Additional minor contracts	
Total amount certified	

Universal Construction Co.—	
General contract structural steel basement floor Extra order allowed by the board	\$8,188.00 39.21
Amount certified	\$8,227.21
Lauer Bros. & Miller— General contract, concreting subbasement, and drainage for	
same	\$15,856.00
Less credit for work omitted	128.58
Amount certified	\$15,727.42
Model of dome	\$425.00
Placing same in position twice	10.00
Amount certified Butler-Ryan Co.—General Construction—	\$435.00
General contractExtra orders allowed by the board for minor	\$696,000.00
changes \$21,837.51 Less credits for work omitted 3,381.23	
- 1987년 - 1987년 - 1987년 - 1987	18,456.28
	\$714,456.28
Amount certified	682,185.19
Balance to complete Butler-Ryan Co.—Dome Construction—	\$32,271.09
General contract	\$278,734.00
Extra orders allowed by the board	60.00
	\$278,794.00
Amount certified	140,413,22
Balance to complete	\$138,380.78
Certified	\$3,028.08
Extras on construction amount to \$8,972.48, or .008 per cent of Extras on changes of design amount to \$12,803.20, or .0115	
contracts.	
SUMMARY.	
Contracts and extras awarded, less credits	\$1,132,402.37 961,750.50
Balance	\$170,651.87



NEW STATE CAPITOL OF MINNESOTA.
IN COURSE OF CONSTRUCTION.

FIFTH BIENNIAL REPORT

ов тив

BOARD OF

STATE CAPITOL COMMISSIONERS

APPOINTED TO



CONSTRUCT A NEW CAPITOL

FOR THE

STATE OF MINNESOTA.

JANUARY 1, 1903.

ST. PAUL, MINN.: THE PIONEER PRESS COMPANY, STATE PRINTERS, 1903.

FIFTH BIENNIAL REPORT

OF THE

BOARD OF

STATE CAPITOL COMMISSIONERS.

To His Excellency S. R. Van Sant, the Governor of Minnesota.

Sir: The Board of State Capitol Commissioners have the honor to report that in our last biennial report, January 1, 1901, we recapitulated the work done during each of the preceding years since the original bill was passed in 1893, and showed that, although eight years had elapsed, we had only been able to work on the building during four summers, or building seasons. Two more have been utilized, up to date, making six in all. We think the present condition of the building shows good progress, under the circumstances and in view of the fact that heretofore no work could be done during the winter months. Hereafter, work will proceed, without interruption, all the year around, and we feel safe in promising that the building will be ready for occupancy in time for the legislative session of 1905.

Our report further stated that the superstructure of the main building was practically completed, and construction of the dome was begun. Since then the dome has been completed; the grand entrance steps and platforms, area walls and balustrades (built of Minnesota granite) are nearly finished; roofing and skylights, interior fireproof floors and partition walls are in place,—the structural work being thus complete. It was decided to build a separate engine and power house at some distance from the main building, for obvious reasons. The first

lot purchased for this purpose proving unsuitable, a larger one in a better location was secured, and on it has been erected a substantial fire-proof building, with a tunnel 276 feet long, to the Capitol. One battery of boilers and one engine and dynamo are installed and in operation in the power house, furnishing heat sufficient for prosecution of work in the main building during the present winter. The metal furring necessary for a fire-proof building is provided, and plastering, heating, ventilating and lighting equipments are now in progress.

The provisions of Chapter 168 of the Laws of 1901 required as follows:

"The board shall have plans prepared and bids advertised for, including all work and material required for the general construction, * * * on or before the first day of April, 1902, and contracts shall be closed and executed immediately thereafter unless the bids exceed the aforesaid sum of \$1,050,000 or the proportion of said sum estimated and allowed for the items covered by any proposed contract, by allotment of the board, in which case bids may be rejected and new bids and letting of contracts had."

In accordance therewith, the architect was at once instructed to prepare plans and specifications for all remaining work and material needed for the building.

On June 4, 1901, bids were opened for the main steps, platforms and area balustrades and walls, Minnesota granite being specified as the only stone to be used. Three bids were received, \$392,000.00, \$381,100.00 and \$273,227.00. In 1896, this work was estimated to cost \$224,811.18. The proposals received were much in excess of estimates and allotments for this portion of the work. It was decided that the architect should modify his plans to a less expensive basis, and, as inviting bids for stone from other states might bring more competition, all the bids should be rejected and a new advertisement published.

On July 2, 1901, bids were opened for that work on modified plans, proposals to furnish any kind of stone being invited. In this competition, five bids were received, ranging from \$163,629.00 for Bedford, Indiana, stone, to \$289,505.00 for Georgia marble.

The first story having already been constructed of Minnesota granite, it was deemed necessary to use the same material for this work that was to surround it, and a contract was, therefore, let for

\$238,831.54, with an option to deduct \$48,730.88 for omission of certain approaches at the east and west fronts, bringing the net contract to \$190,100.66.

On September 24, 1901, bids were received for roofing and skylights. Estimates for this work and material made in 1896 were \$47,938.57. Seven proposals were received, ranging from \$119,467.00 to \$99,000.00.

It seemed absolutely necessary to enclose the building to prevent deterioration, and to permit further work to go on, so the board ordered modified specifications, cutting out \$11,700.00 of expense, and awarded a contract for \$87,294.00.

On the same date, proposals were received for the mechanical equipment and power house. This work, of necessity, must be let at an early date. The power house would take a season to build, and looking ahead to the winter of 1902-3, all work in the building would stop unless heat was provided. Besides, the heating and ventilating flues, plumbing, etc., must go in with the partitions and ahead of flooring, plastering, etc., in order to be concealed. Twenty-two bids were received, five of which were for the entire work, and the others for portions of it. The five bids ranged from \$493,000.00 down to \$372,015.00. A contract on specifications modified for economy was let at \$322,864.00, original estimates made in 1896 having placed \$182,275.00 as the cost thereof. The board rejected all bids for elevators, on account of high prices, as that work could wait until the legislature assembled.

On December 3, 1901, bids were opened for fire-proofing the interior of the building. Previous estimates of the cost made in 1896 were \$119,821.20.

The bids opened December 3, 1901, were five in number, and ranged from \$276,000.00 to \$205,198.00. These were so high that the board felt obliged to reject all of them.

Our experience with advertising and receiving proposals during all the year 1901 was most disheartening. It was evident that prices of labor and materials had advanced tremendously, and also that contractors, having plenty of work to do, were not applying, in any great numbers, for contracts; and those who did bid were putting on large margins to cover their risks and insure themselves profits. It was felt also to be an unwise thing to advertise, open bids and then reject all proposals over and over again. On such large work as this,

the trouble and expense to bidders in figuring on contracts is heavy, and the State Capitol work might easily get a bad name among contractors, discouraging them from making proposals, and so result in reducing competition.

The law already quoted compelled the board to advertise, in the spring of 1902, all the remaining work of general construction, and therefore, notwithstanding the experience of 1901, specifications, plans and advertisements were prepared. The times for opening bids were, however, put off as much as possible, and every effort made to secure a large number of bidders. March 4, 1902, bids for fire-proofing were again received, the plans having been much simplified, and requirements reduced from those of the former competition. Five bidders responded, and a contract was let for \$137,553.00, with an additional contract of \$35,270.00 to a second party for a portion of the work. At this time the board was obliged to decide that, notwithstanding high prices, it must go on and complete the shell of the building: get it enclosed and rough finished, to meet the demands of the State that completion should not be unreasonably postponed; that work already done must not be injured by exposure; and that the building should be enclosed and heated during the next winter so that work could proceed. seemed to be an imperative duty, as the legislature would not reassemble till 1903, and there was no opportunity to secure its decision upon the problems forced upon the Commission by advanced prices of labor and material.

On March 4, 1902, bids for metal furring and lathing were opened. Only two tenders were received, and the contract awarded to the lowest bidder at \$57,600.00 for this work.

May 6, 1902, four proposals for plastering were received, varying from \$91,200.00 to \$83,500.00, at which price the contract was let. The estimate of 1896 for this item was \$48,100.00. It was necessary to let the contract, because mortar for plastering such a building must be allowed to stand, after mixing, for months before its application to the walls. On the same date a contract for ornamental iron work, costing \$33,280.00, was made with the lowest bidder of the four submitted, the highest bid being \$48,950.00.

June 3rd, bids for painting and glazing were received from only three bidders, the lowest bid, \$38,628.00, was also in excess of the estimated cost of \$27,739.00, and all bids were rejected.

On the same date four bids for woodwork, \$111,703.00 and upwards, were all rejected, \$38,300.00 being the estimate for that item in 1896.

July 1, 1902, of two bids for hardware, one at \$5,956.00 was so reasonable that it was accepted by the board, and a contract made.

The time for opening bids for interior stone and marble work was postponed till December 2, 1902, in order that arrangements might be made with the lowest bidder to hold the same subject to acceptance by the board, in case it should be authorized to do so by the legislature in its session of January, 1903.

The rise in prices of labor and material has been unprecedented, and has made all previous estimates of cost valueless. The State of Iowa completed her new Capitol 20 years ago, when skilled labor commanded \$2.50 to \$3.00 for a day's labor of 10 hours, while the same class of labor is now receiving \$3.60 to \$5.00 for an eight-hour day. The above detailed statements of estimates and subsequent bids have been presented herein to make clear the difficulties under which the board has labored. It has seemed to be its duty, and for the best interests of the State, not to stop work entirely on account of these conditions, but to proceed with so much of the work as would complete and enclose the structure, and then await further action of the legislature as to interior finish, decorations and furnishing.

Attention should here be called to the fact that this building is none too large for its purpose. At the time the design and plans were adopted, the board made considerable allowance for growth of the commonwealth and its administrative and legislative departments, as has been shown in our previous reports on that subject.

Since then, new conditions have arisen, which show that this allowance was fortunate, and is already seen to be very moderate. For instance, the legal department was originally allotted two rooms. The board is now notified by the Attorney General that five rooms will be required by his department. The Public Examiner's duties have been enlarged by recent laws, and that officer and his assistants will need three rooms instead of one. The Board of Control is a new creation, and will centralize at the Capitol business formerly cared for at the

various locations of public institutions in the State, requiring a large space for clerical and other force.

So it may be said, in brief, that, since original action by the legislature in 1893, growth of the State and its administrative departments has changed the situation to such a degree as to warrant a considerable increase in the expenditure to provide a Capitol Building.

Since 1893, the system and style of interior finish of important public buildings in the United States have radically changed. Both in Washington and in State Capitols and important cities, the finest buildings now standing have been erected during the past ten years. The Congressional Library Building, in Washington, has shown the way, and that example has been generally followed. Your board recommends that the State Capitol of Minnesota be finished in accordance with these modern ideas, and that to its beautiful and impressive exterior be added such interior finish as will place the structure in line with other buildings of its class, and, as it is the permanent Capitol Building of a great State, that it be made an object of pride to our citizens and fitly symbolize the grand Commonwealth of Minnesota.

With this in view, and to eliminate, in present consideration, all mere estimates of future cost, which have proved so unsatisfactory, the board has secured, and can now report, actual bids from contractors. Those for woodwork, painting and glazing, and elevators, can doubtless be duplicated or placed at some reduction. The bid for interior stone and marble work, which was the lowest bid received at the opening, December 2, 1902, has, by stipulation with the bidders, been continued till the legislature shall decide, when the board has the option to accept it and close the contract, or reject it.

It is thus possible to specify what this work can be completed for, and make this the final action required by the legislature.

At the competition of December 2nd last, bids were received for finishing the interior in white marble, after the pattern of the staircase hall in the Congressional Library, at Washington. This work included the floors, wainscoting, door trims, all columns, pilasters, grand stairways, and in fact all interior stone and marble work, of every description. The lowest bid therefor was \$1,128,000.00. Our architect had, however, carefully investigated the native stone of Minnesota, and found that certain ones heretofore used in the State only for exterior work

were capable of being sawed in thin slabs and polished, presenting a beautiful surface of harmonious coloring, suitable for interior finish. He, consequently prepared plans for the use of Minnesota stone on most of the finish (wall coverings and wainscotings), with ornamental marble for columns, pilasters and other use, in front of the Minnesota stone background, which will be most satisfactory in results, and incidentally will introduce to the world Minnesota stone for such purposes. This cannot fail to be of great benefit to the State, while the saving in cost will be considerable.

Under these specifications, three bids were received—respectively, \$832,375.00, \$825,375.00 and \$782,000.00. The lowest bid has been approved by the Board, although not formally accepted, and is recommended.

Our architect has accumulated designs and samples for exhibition to yourself and the legislature, at the New Capitol Building, and will explain them, that the matter may be intelligently understood. It is respectfully urged that the building be visited and these designs be inspected, at an early date.

The following are the amounts of bids actually received for the completion of this building, and the sum which should, in the opinion of this Board, be authorized for expenditure upon it.

For woodwork	111,703.00
For painting and glazing	38,628.00
For interior stone and marble	782,000.00

\$932,331,00

In addition to the above the following items should be provided for at this time, viz.:

Sculpture and decorations—interior.
Quadriga over main entrance.
Desks, tables, chairs, curtains, carpets, etc.
Metal shelving in library and all vaults.
Electroliers and lighting fixtures.
Ornamental gates and candelabra—exterior.
Two elevators—large and modern.
31 fire-proof vault doors.
Burglar-proof door and vault—for treasurer.
Two U. S. mail chutes.

It is obvious that the building has not yet sufficiently approached completion to warrant the board in soliciting proposals for the above items, but we have had as careful estimates as possible made of the amount that ought to be allotted for them, in order to complete the building internally in keeping with its exterior.

Furthermore, it must be apparent to all that certain real estate at the southeast corner of the present site, which is not now included in the new Capitol grounds, ought to be acquired by the State.

expen requir To which	plish all of the above, as well as to meet other necessary ses during the progress of the work, will, we estimate, e the sum of	\$892,450.00 932,331.00
	Making a total ofOf which we have available (see future pages)	\$1,824,781.00 366,147.00
	Making necessary a further appropriation of	\$1,458,634.00

It should be especially noted that we have, in the above figures, made liberal allowance for finishing the interior of this building (in which all citizens of our State have already taken a great pride) in harmony with its exterior, and in a manner that will make it attractive and beautiful, as well as, in the highest degree, useful. Not until recently have we seriously thought of such an elaborate use of ornamental marble and decorative stone-work, besides interior sculpture and mural decorations, but a trip of investigation made by the board, in March, 1902, convinced us, without dissent, that we would not be fulfilling our highest duty did we not make every effort to accomplish the results herein outlined and explained, and make it the equal of any similar building recently constructed.

The alternative is—plain white plaster, no marble and no decorations.

We therefore recommend an increase in the total amount heretofore appropriated of \$1,500,000.00.

The following is a statement of the finances of the board, January 1, 1903:

RECEIPTS (Since May 18, 1893).

•	
Appropriation for 1893 and 1894	\$10,000.00
Appropriation, two-tenths mill, available January 1, 1895	127,783.20
Appropriation, two-tenths mill, available January 1, 1896	128,250,00
Appropriation, two-tenths mill, available January 1,	
1897 Appropriation, two-tenths mill, available January 1,	112,789.13
1898	114,120.00
1899	115,850.42
Appropriation, two-tenths mill, available January 1, 1900	117,016.66
Appropriation, two-tenths mill, available January 1, 1901	117,603.32
Appropriation, two-tenths mill, available January 1, 1902	120,196,12
$Certificates \ of \ Indebtedness \ sold \$1,500,000.00$	120,130,12
Less Certificates of Indebtedness matured and paid	
Premiums received on Certificates of Indebtedness	1,200,000.00 8,205.25
Total receipts	\$2,171,814.10

DISBURSEMENTS (Since May 13, 1893).

New capitol site, including grounds for heating and	
lighting plant	\$294,623.23
Legal expenses in condemnation proceedings	167.00
Prizes, expert advice and expenses attending first	
competition for plan	$4,\!472.12$
Prizes, expert advice and expenses attending second	
competition for plan	4,918.85

CONSTRUCTION.

Excavation and foundation	\$111,025.77
Steel floor beams, basement	$8,\!227.21$
Concrete sub-basement floor	15,727.42
General construction, superstructure	713,262.77
Dome construction	286,215.20
Painting metal lathing	108.41
Painting beams	3,818.59
Surveying and engineering	436.22
Miscellaneous items	4,732.18
Architect for plans and specifications as	
per contract	32,500.00
Architect, commission for superintending	
construction	35,074. 2 1
,	

PAID ON CONTRACTS NOT COMPLETED. .

Steps and terraces	126,812.79	
Roofing and skylights	72,299.04	
Fire-proofing	84,161.46	
Metal furring and lathing	31,331.18	
Plastering	6,112.62	
Marble carving on exterior of building	17,473.50	
Mechanical equipment and power house	110,477.05	
Timbrel arches	6,696.36	
***		\$1,666,491.98
Salaries; Secretary, Superintendent, clerks, e	tc	22,713.33
Per diem and expenses of Commission, 9 yrs.	8 mos	15,664.48
Test pits on site, stone samples, testing	material,	
investigating trips, etc		5,606.23
Surveying site, office rent, furniture, models,		3,997.43
Printing and advertising		2,722.77
Stationery and postage		271.58
Expense attending laying of corner stone		3,040.49
Interest paid on Certificates of Indebtedne	ess, issued	
under act of 1897		41,500.00

 In addition to the above, the following obligations have been incurred by the Board, and the several amounts will become payable as fast as the contracts are completed, viz.:

WORK NOW IN PROGRESS AND NOT COMPLETE,

Steps and terraces	\$111,095.62
Roofing and skylight	17,090.05
Marble carving on exterior	276.50
Heating, lighting, ventilating, plumbing, etc	218,655.95
Fire-proof floors, partitions, etc	58,171.41
Metal furring and lathing	30,825.11
Plastering	77,387.38
Timbrel arches	23,130.64
Ornamental iron, rellings, etc	33,280,00
Hardware	5,956.00

\$575,868,66

As shown in our financial statement, there are now outstanding certificates of indebtedness to the amount of \$1,200,000.00, which pledge our future resources to that extent. They will mature as follows:

July 1, 1903	. \$100,000.00
July 1, 1904	. 100,000,00
July 1, 1905	. 100,000.00
July 1, 1906	. 100,000.00
July 1, 1907	. 100,000.00
July 1, 1908	. 100,000.00
July 1, 1909	100,000.00
July 1, 1910	. 100,000.00
July 1, 1911	100,000.00
July 1, 1912	100,000.00
July 1, 1913	100,000.00
July 1, 1914	

\$1,200,000.00

Of the above, \$1,140,000.00 are held in the Minnesota State Treasury, having been purchased by the Investment Board for the Permanent School Fund of this State. They are drawing 3 per cent interest per annum.

FUTURE RESOURCES.

Total amount available, as per act of 1901)
Less premiums received on certificates 8,205.2	5
\$2,057,984.28 Due on outstanding contracts when completed 575,868.66	
	2,623,852.90
Leaving available for future use	\$366,147,10

Attached hereto is the report of our architect, Mr. Cass Gilbert, which contains valuable information, to which your attention is respectfully directed.

All of which is respectfully submitted.

CHANNING SEABURY,
JOHN DE LAITTRE,
C. H. GRAVES,
E. E. CORLISS,
H. W. LAMBERTON,
EDGAR WEAVER,
GEO. A. DU TOIT,
Commissioners.

REPORT OF THE ARCHITECT.

St. Paul, December 31, 1902.

To the Board of State Capitol Commissioners, St. Paul, Minn.

Sirs:—I respectfully submit my report as Architect for the new State Capitol Building for the years 1901-1902, as follows:

During the winter of 1901 progress was made in preparation of material in the shops, but the building not being enclosed, it was impossible to proceed with

any of the exterior work.

The Act appropriating additional funds for the Capitol was approved April 9, 1901, and on April 10th, the Board being in session, I was directed to complete the working drawings and specifications for the mechanical and sanitary equipment, and it was decided to advertise for bids for the granite entrance steps and terraces and other granite work adjoining the building. I was directed to complete working drawings and specifications for the fire-proofing, for roofing and skylights, and other work; and, in short, immediate action was taken to progress the building under the new appropriation. These instruction were complied with as soon as practicable, and contracts were entered into as follows:

Entrance steps and terraces, July 13, 1901.

Comprising the granite work surrounding base of building and immediately adjacent thereto.

Mechanical equipment, October 11, 1901.

Comprising the boiler house and tunnel connection from same to the Capitol, the boilers, engines, electric generators, electric wiring and lighting plant, interior telephone system, call bells and conduit system, plumbing and sanitary work and marble in connection therewith; heating and ventilating, including thermostat system, fans, motors, fan engines, and a comprehensive system of heat and vent ducts. Elevators which were included in the original proposal were stricken out for motives of economy.

Roofing and skylights, October 12, 1901.

Metal furring and lathing, March 15, 1902.

Fire-proofing, March 15, 1902.

Comprising all of the floor arch construction, fire-proof partition blocks and fire-proof wall furrings throughout the building.

Timbrel arch construction, March 31, 1902.

Ornamental iron, May 12, 1902.

Plastering, May 16, 1902.

Hardware, October 14, 1902.

Bids were received and opened for separate sections of the work on the days as stated below, but the contracts were not entered into, owing to high prices quoted:

Elevators, September 24, 1901.

(Being part of the mechanical equipment contract.)

Painting and glazing, June 3, 1902.

Interior woodwork, June 3, 1902.

Interior stone and marble work, December 2, 1902.

Acting under what appeared to be the intention of the legislature, every effort was made to let these contracts promptly, but owing to the late date in the session at which the bill was passed it became impossible to advertise contracts and obtain bids until some time had elapsed. In the meanwhile prices had risen very considerably since the estimates were made, and as the market was still rising it seemed advisable to postpone the letting in some instances, in the expectation that more favorable prices would prevail later on. It was, however, deemed essential that the heating work be contracted for as soon as possible, that the roofing and skylights be placed before cold weather should come on, and that the steps and terraces should be constructed so as to enclose the base of the building (as well as its roof), the latter contract also providing a large amount of work for local stone cutters and quarry men, and being largely of St. Cloud granite. The conditions existing forced these contracts on the highest market known for many years, with result of running far beyond the preliminary estimates which had been furnished by contractors, dealers in material and employers of labor, and upon which my own estimates to This condition gave rise to grave anxiety on my part, as the Board were based. well as to members of the Board, and it may now be recalled that I recommended the postponement of the mechanical equipment, roofing and skylights, and other contracts, until more favorable prices should prevail. Progress, however, was deemed essential, and it was felt by the Board, as well as by the public generally, that the work must be carried forward without further delay; such contracts as were essential to progress were therefore reluctantly made.

The situation compelling the revision of previous estimates has very much reduced the balance available for the interior finish and decoration of the building and the grounds. I quote the following from my report of December

31, 1900:

"The very marked advance in the cost of all building material will affect the contracts yet to be let. This advance has in many cases exceeded fifty, and This consideration will require in some items even one hundred, per cent. even greater economy, and I shall ask your further instructions in the premises before preparing the final specifications for these contracts. The condition that confronts us illustrates the impracticability of making definite estimates so long in advance as we have been forced to do heretofore, and my estimates will undoubtedly require still further modification. I call your attention to my report of two years ago referring to the same matter."

The progress of constructing the building or preparing material has been practically continuous excepting in January, 1902, when the granite work was interrupted by a labor strike, some 10 weeks being lost by reason thereof. At the beginning of the year 1901 the main exterior walls had been erected and the general surface of the roof covered in, but no skylights or finished roofing were in place. The dome walls had been carried up to a point about the top of the columns of the "drum," and the construction accomplished since may be considered from this point; in this period, then, practically the exterior of the building has been completed.

The dome construction is finished, the grand entrance steps and most of the granite terrace work adjacent to the building have been placed. The roofing has been substantially completed. The fire-proofing has been nearly all installed. A large part of the mechanical equipment has been placed and heat is now in on the building. A substantial power house and funnel connecting the same to the building have been constructed. We have installed four boilers amounting to a total of one thousand horse power, and are now rapidly installing the balance of the mechanical and electrical equipment in the building.

The plastering has gone forward and a large part of it is now in place. The ornamental plastering over the rotunda and over the senate is now complete.

The partitions have been set throughout the building, giving now more adequate impression of the size and shape of the rooms and of their arrangement. The central section of the building, viz., the rotunda and grand stairways and main corridors connecting therewith, are in an incomplete condition owing to the fact that no contract has yet been let for the interior stone and marble work.

I take this occasion to again call attention to the very low percentage of extras incurred since the contracts were let.

It is to be noted that the "extras" on construction amount to 1 2-10 per cent of the contracts, the "extras" on changes of design directed by the Board amount to less than 7-10 of one per cent, or a total of about 1 8-10 per cent of the cost of the work. I know of no other public building of this character wherein the percentage of extras has been so low.

While the building in general follows the standard methods of construction, there are parts of it, as, for instance, the dome, where special conditions prevail, requiring unique construction. Questions of expansion and contraction of the dome-covering itself arose, anchorage of its various parts, condensation due to differences of temperature and other physical conditions quite unusual in previous dome constructions had to be taken into account and adjusted to a nicety. The result of this careful work is now apparent to all who care to examine it in detail.

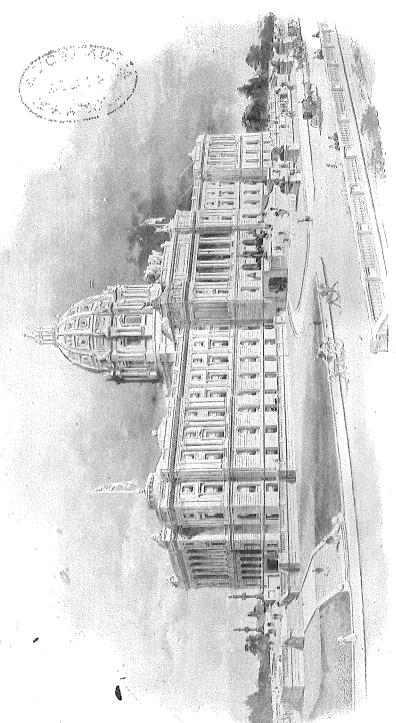
The modern requirements of a first-class building are steadily increasing, and larger and more comprehensive heating and ventilating systems are required than formerly, the entire system of electrical equipment and operation has grown up within a few years, the installation of local telephones, call bells, heat control and other items of convenience have become practical necessities, and finally, in order to make a public building compare favorably with others of modern construction and finish, it should be adorned with mural painting and sculpture of suitable character. Nothing will give the building greater distinction or lend more to its educational value and to the evidence of the advancement of civilization and intelligence of the State than the recognition of the arts as represented by the great painters and sculptors of the present day, and I unhesitatingly and strongly recommend that ample provision be made to decorate the building with mural painting and sculpture, and call especial attention to examples which may be found in the new Library of Congress, in the additions to the Boston State House, Boston Public Library, the new Court House at Baltimore, Maryland, and other important buildings in various parts of the United States where this subject has been given serious consideration.

In conclusion I would say that the workmanship and the material used in the construction of the building have been of excellent quality, that when completed the building will be entirely fire-proof, and thoroughly modern in its appointments and general character.

Respectfully,

CASS GILBERT, Architect.





NEW STATE CAPITOL OF MINNESOTA.

SIXTH BIENNIAL REPORT

OF THE



BOARD OF

STATE CAPITOL COMMISSIONERS

APPOINTED TO

CONSTRUCT A NEW CAPITOL

FOR THE

STATE OF MINNESOTA.

JANUARY 1, 1905.

ST. PAUL, MINN.: THE PIONEER PRESS, MFG. DEPTS., 1905.

SIXTH BIENNIAL REPORT

OF THE

BOARD OF

STATE CAPITOL COMMISSIONERS.

To His Excellency, S. R. Van Sant, Governor of Minnesota,

Sir: The Board of State Capitol Commissioners have the honor to report that immediately after the passage and approval of the act of April 3, 1903, we took measures to expedite the completion of the Capitol building, having plans and specifications prepared and advertising for bids for the various portions of the work, which were recapitulated in our report of Jan. 1, 1903.

Though the late date of the legislative action prevented closing of contracts until summer, the work was hastened as much as possible, and we now have the satisfaction of reporting that the building is so far completed that it may, at this time, be occupied by the officers of the state and the legislature.

There remain to be completed, the building of granite steps at the east and west entrances, completion of roadways and sidewalks, the planting of trees and general adornment of the grounds, and the installation of several special mural decorations with some sculptures. The artists employed for these objects of adornment require additional time in which to complete their commissions, and the granite steps were delayed, pending action upon the line of a street by the City of St. Paul, as stated later in this report.

The mechanical equipment, installed in the power house, for lighting, heating and ventilating the Capitol building, has not yet been sufficiently tested to warrant its final acceptance from the contractors by the Board. After the trial of this winter we shall be enabled to pass upon the question whether the contracts have been satisfactorily filled. Until these various matters are all attended to the Commission cannot finally end its responsibility. As the legislature is about to assemble, our Board has considered

it to be its duty to put the building in running order for their accommodation, and has been compelled to make arrangements with, and engage, temporary employes, to accomplish that object.

WORK OF THE YEARS 1903 AND 1904.

As the building has approached completion our labors have been more complicated and trying. Many questions of detail arose which required the constant and careful attention of the Board. In our last report (Jan. 1, 1903) we called attention to bids then received, and which were being held by us, pending action by the legislature, viz.:

For woodwork	\$111,703.00
For painting and glazing	38,628.00
For interior stone and marble	

\$932,331.00

Believing that the first bid (woodwork) was a favorable one, and lower than could be again secured, we awarded a contract for that amount. We readvertised the second item (painting and glazing) and obtained a bid of \$29,189.00, which was accepted. The last item (interior stone and marble) was materially reduced by modifications and economies (saving \$41,823.55) and finally contrated for, in the sum of \$740,176.45.

Contracts were also awarded, among others—

To the Diebold Safe and Lock Company, for vault doors To the Van Dorn Iron Works Company, for metal shelves, cas-	\$3,425.00
ings and fittings for vaults and offices	32,017.17
To Otis Elevator Company, for passenger elevators	20,000.00
Herter Brothers, for furniture	93,306.00
A. Schuneman and others, for carpets and draperies	20,600.00
The Mitchell Vance Co., for electric light fixtures	50,569.45
Sterling Bronze Co., for electric light fixtures	18,422.08
Winslow Bros. Co., for heat and ventilation registers	5,225.00
Otis Elevator Co., for electric sidewalk lifts	3,300.00

We have also contracted for mural paintings, decorations and sculpture with John La Farge, D. C. French, Edward Simmons, E. H. Blashfield, E. E. Garnsey, F. D. Millett, Douglas Volk, H. O. Walker and Kenyon Cox, all of them being among the most distinguished artists in the United States, to the total cost of \$231,500.00.

In carrying out these contracts, the Board has been called upon for painstaking investigation of many proposed modifications and changes, that by wise decisions the very best results might be obtained.

When the final assignment of rooms for the executive officers of the state was made, it was found necessary to have frequent conferences with the officials in charge of different departments of the state government, and to order movements of partitions, changes of doors and furnishings to suit, as nearly as possible, the proper requirements of those departments. This involved, in some cases, quite a large expense.

PURCHASE OF ADDITIONAL GROUND.

The buildings thereon were sold, by sealed bids, after advertising, realizing	\$ 4,889.00	
Material on the grounds was sold for		
Rents were collected, pending our actual use of the land, to the amount of	867.00	
Total credits		5,805.25
Making the net cost to the state		\$72,638.75

The necessity of acquiring this additional ground, and the added beauty and dignity which it gives to the new Capitol, is more and more apparent, now that the grounds have been graded. No work could be done, in the way of grading any part of the site, until the moving of building materials over them had ended, but immediately after the last of the heavy materials for interior finish were received, grading the grounds was commenced. The gravel and sand of the site has been deeply covered with black

earth, seeded, and planted with turf on the slopes, that the grass may have an early start in the spring of 1905.

The Board desires to publicly express its thanks to E. Pennington, general manager, and Thomas Greene, chief engineer of the Minneapolis, Saint Paul & Sault Ste. Marie Railway Co., and to L. W. Rundlett, commissioner of public works of the City of St. Paul, for kindly assistance in securing garden earth for the Capitol site, without expense to the state.

ROADWAYS AND SIDEWALKS.

Somewhat late in 1904 we advertised for bids for asphalt roadways and cement sidewalks inside the grounds, proposals to be opened October 11th. But one bid was received, viz., from the Barber Asphalt Co., for \$19,075.94. The season was pretty well advanced, and other bidders were busy finishing their season's work, hence were unwilling to undertake anything additional. We could not get any guarantee from the single bidder we had to deal with that he would finish our job before frost came, and consequently, after duly considering the matter, we decided to reject the bid and let the matter go over until spring. Our specifications will be somewhat modified and the cost lessened when we advertise again. Meantime, we have constructed temporary wooden walks to the several fronts of the building, for use during the coming winter. When these have been removed next year and the lumber sold we believe the net result will show economy.

FINANCIAL STATEMENT.

The following is a statement of the finances of the Board Jan. 1, 1905:

RECEIPTS. (Since May 13, 1893.)	
Appropriation for 1893 and 1894	\$10,000,00
Appropriation, 2-10 mill, available Jan. 1, 1895	127,783.20
Appropriation, 2-10 mill, available Jan. 1, 1896	128,250.00
Appropriation, 2-10 mill, available Jan. 1, 1897	112,789.13
Appropriation, 2-10 mill, available Jan. 1, 1898	114,120.00
Appropriation, 2-10 mill, available Jan. 1, 1899.	115,850.42
Appropriation, 2-10 mill, available Jan. 1, 1900.	117,016.66
Appropriation, 2-10 mill, available Jan. 1, 1901.	117,603.32
Appropriation, 2-10 mill, available Jan. 1, 1902.	$120,\!196.12$
Appropriation, 2-10 mill, available Jan. 1, 1903.	$152,\!352.04$
Appropriation, 2-10 mill, available Jan. 1, 1904.	157,373.96
Certificates of indebtedness issued\$3,300,000.00	
Less same, matured and paid 500,000.00	
	2,800,000.00
Total receipts\$	4.073.334.85

DISBURSEMENTS. (Since May 13, 1893.)

ar a training and lighting	
New Capitol site, including ground for heating and lighting	\$367,161.98
plant	φουτ,τυτ.σο
Prizes, expert advice and expenses attending first and second	9,390.97
competition for plans	111,025.77
Excavation and foundation	8,227.21
Steel floor beams, basement	15,727.42
Concrete sub-basement floor	713,262.77
General construction, superstructure	286,215.20
General construction, dome	140,700.83
Fireproofing (walls and ceilings)	62,156.29
Metal furring and lathing	89,509.09
Roofing and skylights	,
Timbrel floor arches	29,827.00
Marble carving on exterior	17,750.00
Painting steel beams and metal lathing	3,927.00
Skylight runways	664.61
Miscellaneous items of construction	5,654.18
Test pits, stone samples, testing material, investigating trips, etc.	6,614.23
Expenses of laying corner stone	3,040.49
Printing and advertising	3,529.04
Legal expenses in condemnation proceedings	1,025.94
Surveying and engineering	1,039.22
Stationery and postage	325.54
Rent of office for Board, Nov. 1, 1895, to Jan. 1, 1905	3,850.00
Sundry minor items of expense	1,358.86
Grading and surfacing site, catch basins, etc	12,096.13
Sodding and seeding site	517.48
Temperary wooden walks for winter of 1904-5	503.56
Watchmen at building during 1904	540.74
Heating building during construction, including wages of engi-	
neers, firemen, etc	24,267.51
Salaries of secretary, superintendent, clerks, etc	31,808.33
Per diem and expenses of Commission, (7), 11 years and 8 months	21,333.88
Architect, for drawings and specifications	82,500.00
Architect, for superintendence	74,336.83
Interest paid on certificates of indebtedness issued	
under act of 1897 \$41,500.00	
Less premiums received on certificates sold 8,205.25	
(Note—This item forms no part of the actual cost of	
the building, and our funds should have credit for	
it.)	33,294.75

PAID ON CONTRACTS NOT COMPLETED.

Steps and terraces	
Plastering	\$188,694.02
Power house and machinists	85,041.51
Power house and mechanical equipment	318,303.90
Ornamental iron work	31,670.91
Woodwork	130,942.08
Interior stone and marble	721,302.88
Painting and glazing	26,898.69
Mural decorations	158,750.00
Elevators and sidewalk lifts	16,000.00
Hardware	6,014.36
Vault doors	2,876.50
Desks, tables, chairs, etc	73,690.50
Carpets, draperies, shades, etc	15,000.00
Metal book stacks and vault fixtures	19,683.50
Electric light fixtures	15,659.88
Register faces for heat and ventilating ducts	2,148.75
)	* ':
	1,812,677.48
Total disbursements	\$2.07F 0.60 0B
Balance in state treasury Jan. 1, 1905	
in source troubury tan, 1, 1000	97,474.52
	04.070.004.07
3	\$4,073,334.85

WORK IN PROGRESS AND NOT COMPLETE.

In addition to the disbursements enumerated above, the following obligations have been incurred by the Board, and the sevral amounts will become payable as fast as the contracts are completed, viz.:

Steps and terraces	\$47,984.39
Plastering	1,480,67
Power house and mechanical equipment	29,806.62
Ornamental iron work	10,482.09
Woodwork	9,766.73
Interior stone and marble	43,915.59
Painting and glazing	3,668.85
Mural decorations	72,750.00
Elevators and sidewalk lifts	7,100.00
Hardware	762.63
Vault doors	659.50
Desks, tables, chairs, etc	19,637.10
Carpets, draperies, shades, etc	8,203.77
Metal book stacks and vault fixtures	13,963,67
Electric light fixtures	53,331.65
Register faces for heat and ventilating ducts	3,476,25
Quadriga over main entrance	35,000.00

\$361,989.51

APPROPRIATIONS UNEXPENDED.

MITHOTHE	
Total amount available, as per act of 1903	\$4,500,000.00
Of which there has been expended\$3,975,860.33	
And will be due on outstanding contracts when 361 989.51	
completed	4,337,849.84
Leaving appropriations unexpended Jan. 1, 1905	\$162,150.16

Candelabra on main entrance steps, bronzes on the four granite pedestals, roadways within the grounds, sidewalks, planting of trees, shrubs, flowers, etc., and other minor items will reduce this unexpended balance, but no further appropriations are needed to fully complete all the work we now have in contemplation.

CERTIFICATES OF INDEBTEDNESS.

As is shown in our financial statement, there are now outstanding, certificates of indebtedness to the amout of \$2,800,000.00, which pledge our future revenues to that extent. They will mature as follows:

as follows.	
July 1, 1905	\$100,000.00
Tuly 1 1906	100,000.00
Tuly 1 1907	100,000.00
July 1, 1908	100,000.00
July 1, 1909	100,000.00
July 1, 1910	100,000.00
July 1, 1911	100,000.00
July 1, 1912	100,000.00
July 1, 1912	100,000.00
July 1, 1914	100,000.00
July 1, 1914	100,000.00
July 1, 1916	100,000.00
July 1, 1917	100,000.00
July 1, 1918	100,000.00
July 1, 1918	100,000.00
July 1, 1919	100,000.00
July 1, 1920	100,000.00
July 1, 1921	100,000.00
July 1, 1922	100,000.00
July 1, 1924	100,000.00
July 1, 1924	100,000.00
July 1, 1925	100,000.00
July 1, 1926	100,000.00
July 1, 1927	100,000.00
July 1, 1928	100,000.00
July 1, 1929	100,000.00
July 1, 1930	100,000.00
July 1, 1931	100,000.00
July 1, 1932	100,000.00

All of the above, except \$10,000.00, are held in the Minnesota state treasury, having been purchased by the Investment Board for the Permanent School and University Funds of this state. Those maturing prior to 1928 bear interest at the rate of 3 per cent per annum, and those maturing in 1928 and afterwards draw $3\frac{1}{2}$ per cent. Certificates maturing in 1924 and subsequently are payable "on or before" maturity, in order that they may be taken up and canceled as New Capitol revenues accumulate hereafter.

PARK AVENUE WIDENED.

Several years ago we purchased a lot, 40x110 feet, on the south west corner of Park and University avenues, on which to erect a power house. When the detailed plans had been more developed, at a later period, it became evident that this lot was not large enough, and another one, more favorably located, was purchased on Aurora avenue, east of Cedar street, on which the heating and lighting plant has since been erected.

Meantime, at the request of the resident member of our Board, the City of St. Paul, during 1904, took steps to widen Park avenue, on the western boundary of the New Capitol site (between University avenue and Wabasha street), from its former width of 60 feet to 100 feet, and, incidental thereto, to straighten it, where an irregularity occurred in its eastern boundary lines. The effect of this was to add to the New Capitol site a strip of land 13 92-100 feet by 399 16-100 feet, without additional cost to the state, since our Board consented to a nominal appraisement of \$1.00 for the power house lot taken in the proceedings, in exchange for the strip of land referred to.

This addition to the westerly boundary of the site is of great benefit to the property, because the latter is high at that point, and a less abrupt descent to the sidewalk is thereby obtained, while the increased width of Park avenue will be a further benefit, as it will add dignity to our building and grounds. The cost to the citizens of St. Paul, by donation out of the general funds raised by taxation, and by assessment on surrounding property, will be not far from \$25,000.00 when the proceedings are concluded. (One of the non-resident property owners has already filed notice of appeal from the award made for property taken.)

A CITY PARK ADJOINING THE CAPITOL SITE.

The City of St. Paul, at the further request of the resident member of our Board, has recently added another \$25,000.00 to the tax levy for 1905, for the purchase of all the remainder of the block of ground bounded by Park avenue, Wabasha street, St. Peter street and University avenue. This ground, added to that taken heretofore, will, after widening Park avenue to 100 feet, afford a nice open space immediately west of and adjoining the Capitol site; and when converted into a park, and cared for by the St. Paul park board, as it ultimately will be, it will add greatly to the beauty of the New Capitol site, besides affording a much more agreeable outlook from the building itself than would otherwise be the case. It will also extend the view of the building, as one approaches it from the west, for an entire block longer than was possible formerly. In this connection, it gives us pleasure to say that both these contributions by the citizens of St. Paul to the New Capitol have been made promptly, freely and cheerfully, and without a dissenting voice on the part of a single one of the public officials or citizens, so far as any knowledge has come to this Board, although, at one time, a question arose as to the necessity of making the last named improvement until a year later.

WABASHA STREET.

Now that the site is graded, so as to give an accurate view of it, its Wabasha street side does not present a wholly satisfactory aspect, not being symmetrical, when compared with the Cedar street side. It is unfortunate that the block of ground on which the New Capitol has been erected is so badly cut into on the southwest by Wabasha street; and it is the hope of this Board that in the near future the state will either purchase or condemn sufficient ground on the opposite side of Wabasha street to make the site symmetrical. In doing this, it will of course be necessary to secure enough to change the line of Wabasha street, with the consent of the city authorities, which we believe can be readily obtained. Mr. Lowry has already offered on behalf of the Street Railway Company to relay their tracks without charge should the change ever be made. Our financial statement shows that we have no funds to devote to this purpose and we have never considered it within the scope of our duty.

EXTERIOR OF BUILDING EASILY CLEANED.

During October and November, 1904, we have had the south front of the building, together with portions of the east and west fronts, washed and cleaned. This had never been done since construction began other than by roughly removing collections of mortar, broken pieces of stone, etc. We had previously been solicited to have it done by the "sand blast" process, at an estimated cost of something more than \$5,000.00. The experience which the much older city of New York has just gone through in using the latter to renovate the exterior of their much venerated city hall (now, as many think, seriously damaged) shows how fortunate we were in declining to use it. Our process was simple and inexpensive. Ladders suspended from roof brackets, in common use by house painters, each manned by two, with water, sponges, soap and pumice stone accomplished good results, as will be seen by examination. Cold weather coming on prevented a continuance of the process over the entire building, but sufficient space has been covered (and that the most difficult and expensive by reason of ornamentation) to warrant us in believing that the entire exterior of the building can be thus thoroughly cleaned at an expense of less than \$1,000.00. In view of the fears entertained by some, concerning the Georgia marble of which the building is constructed, and its liability to discoloration, this experience and the information derived from it is valuable.

PERMANENT CARE OF THE CAPITOL.

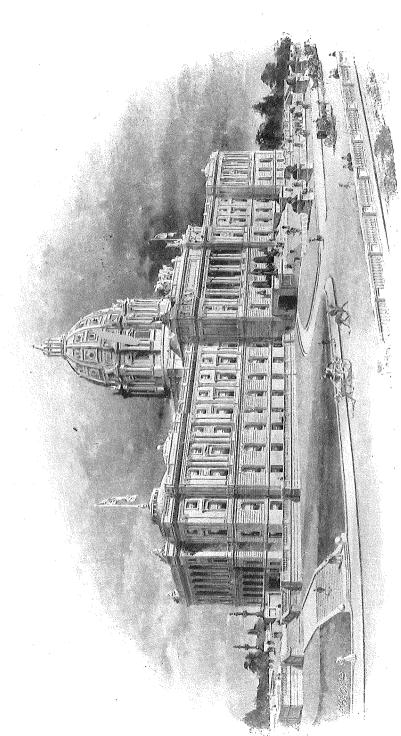
The State of Minnesota is about to occupy her new home—a palace, in comparison with any of its kind heretofore constructed in the West. It is nearly twelve years since our Board first organized (May 13, 1893), although actual construction began May 6, 1896, and nothing was done during 1897. We have naturally become greatly interested in it and its future welfare after our labors shall have ended. We do not believe that it can be properly cared for and preserved, if left to frequently changing and inexperienced hands. We find upon inquiry that the prominent large modern buildings of a similar type elsewhere are placed in the exclusive charge of non-political boards or individuals with complete authority, and so, we think, ours should be.

It is obvious that our Board should have the care of it until it is fully completed, and any conflict of authority over it prior to that time would be unwise. Some well considered provision should be made, however, at the coming session of the legislature, for its future care, accompanied by an appropriation for its annual maintenance. We believe that no building of its class has yet been constructed in the United States that is better arranged for its purpose, nor more artistic and educative to the citizens of a state. We know that for the amount of money expended no state has secured more value in its capitol building. Minnesota is indebted for this result to a far greater extent than to any other source to our esteemed architect Mr. Cass Gilbert, whose exceptional ability and absolute integrity have been the main reliance of this Board through the entire period of its construction. have devoted a great deal of thought, time and energy in providing Minnesota with a building which all its citizen may enjoy, and of which they may be proud, as one of the finest examples of modern architecture. Some one must take especial care of it that the people may not be divested of their pleasure in its perfections.

All of which is respectfully submitted.

CHANNING SEABURY, E. E. CORLISS, JNO. DE LAITTRE, GEO. A. DU TOIT, H. W. LAMBERTON, C. H. GRAVES, EDGAR WEAVER.

St. Paul, Jan. 1, 1905.



NEW STATE CAPITOL, ST. PAUL, MINN.

SEVENTH BIENNIAL REPORT

OF THE

BOARD



State Capitol Commissioners

APPOINTED TO CONSTRUCT

A NEW CAPITOL

FOR THE

STATE OF MINNESOTA

JANUARY 1st, 1907

SEVENTH BIENNIAL REPORT

OF THE

BOARD OF STATE CAPITOL COMMISSIONERS

To His Excellency, John A. Johnson Governor of Minnesota. Sir:

The Board of State Capitol Commissioners have the honor to report that, since our last report, January 1st, 1905, we have given the mechanical equipment of the New Capitol a thorough testing, (the building having been occupied meantime,) and, having found it to thoroughly heat, light and ventilate the building. we have accepted it. We have also completed the granite steps at the east and west entrances; the roadways in the front and rear of the building; sidewalks around the grounds; tree planting and general adornment of the grounds, as far as is at present advisable; the quadriga over the main entrance, except gilding; nearly all of the remainder of the special mural decorations, or pictures, throughout the building; changed the elevator fronts to grilled work; placed additional metal fixtures in the Governor's vault; and have completed numerous minor details which were unfinished at the time of our last report. A wide approach to the main entrance has also been contracted for and nearly completed. This should have been wholly finished November 1st, last, but, largely because of inability to obtain labor when most needed, the contractor is behind with it and it cannot now be entirely completed until spring. We regret this, especially since it cannot be properly lighted during the short days of this winter.

There remain several other things that we think should be done to make the New Capitol complete, in every way, but which we have been unable to accomplish, as will be more fully explained later in this report.

In April, 1905, Charles H. Graves, a member of our Board since its organization, ceased to act with us, having been appointed

U. S. Minister to Sweden, where he has since resided. At our request, no appointment has been made in his place. December 31st, 1905, Henry W. Lamberton, also a member of our Board since it was organized, died at Winona. Failing health had prevented Mr. Lamberton from meeting with us, except at infrequent intervals, for some time previously. We have greatly missed the wise counsel and assistance of both the gentlemen above named. In March, 1906, Mr. John Ludwig, of Winona, was appointed to fill the vacancy caused by the death of Mr. Lamberton, but Mr. Ludwig was in poor health and died September 21, 1906. To succeed him, Mr. Henry M. Lamberton, of Winona, was appointed in October, 1906.

PARK AVENUE WIDENED.

In our last biennial report, January 1st, 1905, we explained, at some length, the action taken by the city of St. Paul to widen Park Avenue, on the west side of the capitol grounds, from 60 to 100 feet, and also to convert the block of ground adjoining thereto into a public park, to be cared for by the city hereafter. The street has now been widened and the remainder of the block has been acquired by the city. During the coming season, the park will be put in condition. All this has been done by the city at an expenditure exceeding \$50,000.00, and without cost to the State. It will add greatly to the beauty of the New Capitol, by reason of the removal of former unsightly surroundings. We also call your attention to the following language in our last report in relation to—

WABASHA STREET.

"Now that the site is graded, so as to give an accurate view of it, its Wabasha Street side does not present a wholly satisfactory aspect, not being symmetrical when compared with the Cedar Street side. It is unfortunate that the block of ground on which the New Capitol has been erected is so badly cut into on the southwest by Wabasha Street; and it is the hope of this Board that in the near future the State will either purchase or condemn sufficient ground on the opposite side of Wabasha Street to make the site symmetrical. In doing this, it will of course be necessary to secure enough to change the line of Wabasha Street, with the consent of the city authorities, which we believe can be readily

obtained. Mr. Lowry has already offered on behalf of the Street Railway Company to relay their tracks without charge, should the change ever be made. Our financial statement shows that we have no funds to devote to this purpose and we have never considered it within the scope of our duty."

We can now add nothing to the above, except to repeat our hope that the suggestions we made two years ago will be carried out in the near future.

FINANCIAL STATEMENT.

The following is a statement of the finances of our Board, January 1st, 1907:

RECEIPTS.—(Since May 13, 1893.)

Appropriation for 1893 and 1894. Appropriation 2-10 mill, available Jan. 1, 1895. Appropriation 2-10 mill, available Jan. 1, 1896. Appropriation 2-10 mill, available Jan. 1, 1897. Appropriation 2-10 mill, available Jan. 1, 1898. Appropriation 2-10 mill, available Jan. 1, 1899. Appropriation 2-10 mill, available Jan. 1, 1900. Appropriation 2-10 mill, available Jan. 1, 1901. Appropriation 2-10 mill, available Jan. 1, 1902. Appropriation 2-10 mill, available Jan. 1, 1903. Appropriation 2-10 mill, available Jan. 1, 1904. Appropriation 2-10 mill, available Jan. 1, 1905. Appropriation 2-10 mill, available Jan. 1, 1906. Certificates of indebtedness issued. Certificates of indebtedness issued. \$3,550,000.00 Less same, matured and paid. \$4 Available during 1907, (to make up total appropriation).	1 162 120 77
DISBURMENTS.—(Since May 13, 1893.)	,500,000.00
Prizes, expert advice and expense attending first and second	\$367,161.98
competitions for plans	9,390.97
Excavation and foundation	111,025.77
Steel floor beams, basement	8,227.21
Concrete sub-basement floor	15,727.42
General construction, superstructure	713,262.77
General construction, dome	286,215.20
Fireproofing, floors, walls, ceiling, etc	140,700.83
Metal furring and lathing	62,156.20

Roofing and skylights	
Timbrel floor arches	
Marble carving on exterior	
Painting steel beams and metal lathing	
Expenses attending laying of corner-stone	0)112
Rent of office for Board, Nov. 1, 1895 to Jan. 1, 1905	
Test pits, stone samples, testing material, investigating trips, etc	
Temporary wooden walks, 1904, 1905	. 5ò3.56
Flastering	. 88,754.38
Painting and glazing	0.17
Interior stone and marble	10111
Interior woodwork	. 157,652.28
Power-house and mechanical equipment	. 359,084.19
Granite steps and cement terraces	. 240,033.14
Metal book stacks and vault fixtures	. 34,040.60
Elevators and sidewalk lifts	. 23,100.00
Roadways and sidewalks	
Vault doors and burglar-proof sale for treasurer	. 5,344.80
Register faces, for heating and ventilating openings	. 5,641.00
Hardware	. 7,021.38
General mural decorations	. 126,500.00
Special mural paintings and statuary	,
Grading and surfacing site, catch basins, etc	. 13,724.84
Heating building during construction, 1903, 1904, including wage	
of engineers, firemen, etc.	· · ·
Sodding, seeding, trees, shrubbery and plants	, 01
Surveying and engineering	3
Printing and advertising	0.1.0
Stationery and postage	
Watchman at building, 1904	/ 1 1 1 2 2
Miscellaneous small items of construction	
Miscellaneous small items of expense	. 6,182,63
Furniture	. 2,781.68
Carpets and draperies	
Electric light fixtures	. 25,805.64
Storm sash and metal weather strips	. 70,103.08
Salaries of secretary, superintendent and clerks	
Per diem and traveling expenses of Commission (7 members)—	. 38,458.33
13 years and 8 months	00 570 00
Architect's fees for plans, specifications and superintendence	23,512.02
members rees for plans, specifications and superintendence	173,862.16
	\$4,344,732.90
Paid on contracts not completed:	
Ornamental iron work\$44,791.20	à
Quadriga	
Approach to main entrance 14,645.87	
Special mural paintings	\$84,737.07

Total disbursements and obligations\$4,458,628.27	Due on contracts when completed: Ornamental iron work \$1,800.00 Quadriga	

The act passed in 1807, (chapter 96,) authorizing our Board to issue certificates of indebtedness to the amount of \$500,000.00, failed to make any provision for the interest to accrue on them, and the net amount of same, less premiums received on them when sold, amounted to \$33,294.75, which amount has been charged to our fund. As this item constitutes no part of the construction cost of the new building, we do not treat it as a part of our disbursements. Deducted from the amount shown above as "Unexpended," however, it reduces our remaining available funds to \$8,076.98. The Ouadriga is yet to be gilded, there are several minor matters pending, which, when finally adjusted and paid, will exhaust the greater part of the small amount now remaining at our disposal. We have, therefore, been compelled to omit doing some things that we have hoped to reach and complete, several of which are necessary; among them may be enumerated the following:—

Candelabra, to light all entrance steps; bronze lions, (couchant,) on four main pedestals; one or more fountains, in the grounds; two more pictures, for entrance to Governor's reception room; statues of men prominent in the history of our State, for niches inside building; statuary on cornice of the building.

These, however, we must leave to the future, and to other hands than ours.

We also regret not having been able to secure a picture of the 3rd Minnesota regiment in the Civil War. There are many survivors of this regiment now living, and its members were no less brave than those enlisting in other regiments. We recommend that an appropriation be made, at some time, for this purpose.

CERTIFICATES OF INDEBTEDNESS.

As shown in our financial statement, there are now outstanding, certificates of indebtedness to the amount of \$2,850,000.00. They will mature as follows:—

July 1, 1907 \$100,000.00 July 1, 1908 100,000.00 July 1, 1909 100,000.00 July 1, 1910 100,000.00 July 1, 1911 100,000.00 July 1, 1912 100,000.00 July 1, 1913 100,000.00 July 1, 1914 100,000.00 July 1, 1915 100,000.00 July 1, 1916 100,000.00 July 1, 1918 100,000.00 July 1, 1919 100,000.00 July 1, 1920 100,000.00 July 1, 1921 100,000.00	July 1, 1922. \$100,000.00 July 1, 1923. 100,000.00 July 1, 1924. 100,000.00 July 1, 1925. 100,000.00 July 1, 1926. 100,000.00 July 1, 1927. 100,000.00 July 1, 1928. 100,000.00 July 1, 1930. 100,000.00 July 1, 1931. 100,000.00 July 1, 1932. 100,000.00 July 1, 1933. 100,000.00 July 1, 1934. 100,000.00 July 1, 1935. 50,000.00
July 1, 1921	July 1, 1935 50,000.00

\$2,850,000.00

All of the above except \$10,000.00, (which mature July 1st, 1907,) are held in the Minnesota State Treasury, having been purchased by the Investment Board for the Permanent School and University Funds of this State. Those maturing prior to 1928 bear interest at the rate of 3 per cent per annum, and those maturing in 1928 and afterwards, draw 3½ per cent. Certificates maturing in 1924 and subsequently, are payable "on or before" maturity, in order that they may be taken up and cancelled as New Capitol revenues accumulate hereafter.

COST OF MAINTENANCE.

The legislature, at its session in 1905, passed an act instructing our Board to care for and operate the building for a period of two years, unless sooner completed, and appropriated \$60,000.00 annually, for the expenses of maintenance. Pursuant thereto, we have equipped it with the necessary operatives and

have endeavored to give it the best of care. The total cost has been as follows:—

	Jan. 1, to	Jan. 1, to
	Dec., 31, 1905.	Dec.,31, 1906.
Pay-rolls, main building	\$24,049.5	8 \$27,268.47
Pay-rolls, heating and lighting	10,859.2	1 11,272.83
Coal		9 8,823.68
Telephone		3,085.50
Water, (city supply)	1,538.10	749.94
Supplies, main building	1,673.03	,
Supplies, power house		4 1,263.44
Alterations and betterments		4 2,760.51
New furniture, carpets, etc.,		642.80
Total	\$52,928.12	4 \$58,234.14

In view of the fact that this is a very large and new building, the need of constant care, with occasional renewals of carpets and other repairs, to keep it from deterioration, must be apparent. We, therefore, recommend that at least \$10,000.00 be included, annually, for contingencies, in addition to the regular maintenance fund.

The people of Minnesota owe a debt of gratitude to the members of the several legislatures that have met since the original New Capitol act was passed in 1893. At every session, we have felt compelled to ask for remedial legislation, and, in every instance, we have met with cordial co-operation at their hands. Without such aid, it is needless to say, our hands would have been tied, and our ambitions to make the building what it now is, could not have been realized. Especially is this true of the session of 1903. We had previously asked and received an increase in the total limit, from \$2,000,000 to \$3,000,000, but had reached a point where we were quite anxious to finish the interior in keeping with the exterior, which was then so much admired. It seemed very bold to ask a further increase of \$1,500,000.00. We were not alone, however, in the desire to make the building beautiful, and the bill was passed by a decisive vote in both branches. The confidence thus placed in us, at all times, by the legislature, has always been fully realized, and we take pleasure in thus publicly acknowledging our full appreciation of it.

But, to our architect, Mr. Cass Gilbert, is mainly due the credit for the well balanced and harmonious completeness of this whole work. Entering upon it with an earnest desire to make it the chief undertaking of his life, and having thoroughly prepared himself beforehand, he has given it his most earnest thought and study. Growing with it as we all have grown, changing and redrafting his designs, again and again in many instances, and often at great expense to himself, he has had one constant aim and purpose, to achieve the best and only the best results. His great artistic talent, combined with a thorough practical knowledge of architecture in all its phases, from the mixing of mortar to the carving of marble, added to his unswerving integrity, has been to us, through all these years, our mainstay and reliance. To him also are the citizens of Minnesota indebted to an extent that will be more and more understood and appreciated as the years go by.

We cannot close this report without paying a well deserved tribute to our faithful and efficient secretary, Mr. Frank E. Hanson, who has been with us throughout the entire period of construction. Genial, affable and thoroughly capable, it has been a pleasure to us all to be associated with him. His books, records and papers are models of neatness and accuracy, and our reliance on him has never been misplaced or disappointed. He has lightened our labors in no small degree.

Our competent superintendent, Mr. John Boland, has also filled his position to our entire satisfaction, at all times. He came to us when the first foundation stone was laid and has remained faithful to the end. Previous experience had made him thoroughly competent, and on him we have likewise greatly relied. Occupying the position of arbiter between the State and the contractors, (not always a pleasant one,) he will leave the work in full possession of their respect and ours.

We would like to call attention to the excellent work of the various contractors and artists, but they are so numerous that time and space forbid. No suit against our Board or the State has ever been commenced by any one of them. This is some evidence that they had fair treatment at our hands.

IN CONCLUSION.

Minnesota's New Capitol has been visited by many thousands of people during the past two years and continues to be an attraction to our own citizens and to strangers. Numerous conventions, held in the Twin Cities since the building has been opened to visitors, have brought into our State a countless number of the citizens of

other states and from all sections of our country. During some of these periods, fifteen thousand visitors have passed through it in a single day, for several days, and with no unusual gatherings in our midst, every pleasant day finds a continuous stream of people enjoying its beauty and completeness. Its fame has been widely spread, at home and abroad, and hundreds, passing through this gateway to the Northwest, stop over, either eastward or westward bound, to visit it. Criticisms are seldom heard, but expressions of delight and satisfaction are almost universal. Strangers, with one voice. express surprise that Minnesota, a far western state, has been so progressive as to have erected such a beautiful and useful building, one prominent among those of its class recently built anywhere in the United States. It has thus become and will continue to be, a very valuable advertisement of Minnesota's standing in the front ranks of progress and development. From this point of view alone, it will be worth all that it has cost. That it is beautiful, however, is not its chief virtue. It fulfills its purpose, in every way, and is enjoyed quite as much by its occupants as by others.

To have been the medium through which this result has been accomplished, is, of course, a matter of pride and satisfaction to our Board. Through a period of nearly fourteen years, we have been engaged in this work. Patiently, thoughtfully and conscientiously, we have carried it to a successful conclusion, at all times being governed and controlled by a knowledge that, though possibly making some mistakes, we were each one doing what his best judgment and conscience approved. That our work and its results give pleasure and satisfaction to the people of our State is very gratifying to us. Our labors are nearly over, and we shall soon cease to have any official relation to the enterprise, but we shall always feel proud of it and interested in its future welfare.

All of which is respectfully submitted,

CHANNING SEABURY, E. E. CORLISS, JNO. DE LAITTRE, GEO. A. DU TOIT, HENRY M. LAMBERTON, EDGAR WEAVER.

St. Paul, January 1st, 1907.

Commissioners.