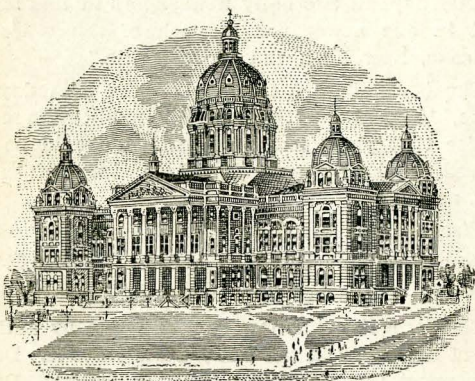


C. Dunham

CAPITOL OF IOWA

With Descriptions. Paintings and Statuary. History and Dimension, Cost of Structure and Other Useful Information



By W. A. DUCKWORTH,
Custodian of Public Buildings and Property



IOWA STATE LAW LIBRARY
State House
DES MOINES, IOWA

DES MOINES, IOWA
August 8, 1913

THE IOWA CAPITAL

The first act for the erection of a new capitol building was passed by the Twelfth General Assembly and approved April 6, 1868. Under its provisions, the census board, which was composed of the governor, secretary of state, auditor of state and state treasurer, was authorized to procure plans and specifications by advertising "at least twenty days in two daily newspapers in this state, and in one newspaper in each of the cities of Chicago, New York and Philadelphia."

The board held a meeting on the 20th day of June, 1868, and authorized the publication of a notice that plans and specifications would be received by the governor for three styles of building, as follows:

First.—Plans based on cost of \$1,000,000.

Second.—Plans based on a cost of \$1,500,000.

Third.—Plans based on a cost of \$2,000,000.

The foregoing publication was made by authority of the board in the Daily State Register, Daily Davenport Gazette, Daily Chicago Tribune, Daily New York Tribune and the Philadelphia Press.

The board ordered that the time for the reception of such plans and specifications by the governor be limited to September 1, 1869. About fourteen plans of the styles designated were submitted, "three of which were adopted by the board," and the drawings and specifications were presented to the Thirteenth General Assembly for its consideration. The plans thus adopted were presented to W. W. Boyington, of Chicago, and J. C. Farrand, of Des Moines, based on the estimated cost of \$2,000,000, \$1,500,000 and \$1,000,000, the two first being drawn by Mr. Boyington and the latter by Mr. Farrand.

An act entitled "an act to provide for a state capitol" was then passed by the general assembly and approved April 13, 1870. It became a law by publication in the Daily Iowa State Register and the Des Moines Daily Bulletin April 15, 1870.

Under its provisions a board of commissioners was established consisting of the governor, who was president *ex-officio* thereof, and six other members to be chosen by the senate and house of representatives in joint convention. In addition thereto two commissioners for the state at large were named in the bill, Gen. G. M. Dodge and Hon. James F. Wilson. They were to continue in office for two years and until their successors were elected and qualified. They were to carry out the provisions of the foregoing act, and each member, excepting the governor, was to receive as compensation for actual services performed \$5 per day and traveling expenses.

In joint convention on Wednesday, the 13th day of April, 1870, the Thirteenth General Assembly elected the following named gentlemen as members of said board of commissioners: James Dawson of Washington county, Simon G. Stein of Muscatine, James O. Crosby of Clayton, Charles Dudley of Wapello, Col. J. N. Dewey of Des Moines, and William L. Joy of Sioux City. They met in the senate chamber at Des Moines and organized as a board on the 25th day of May, 1870, elected A. R. Fulton secretary *pro tem* and entered upon the discharge of their duties as such commissioners.

The board was authorized to employ an architect to assist in determining "upon one of the plans for a capitol selected by the census board" "or some modification thereof" the cost of which was not to exceed the sum of \$1,500,000, and to proceed with the work of construction in the manner provided by law. Accordingly Edward Clark of Washington, D. C., architect of the United States capitol, was employed in August, 1870, to act in the foregoing capacity. The board submitted to him the three plans adopted by the census board, together with one prepared by Messrs. Cochrane & Piquenard of Chicago, Ill., with instructions "to suggest such modifications and make such revision of estimates as they should deem best, in order to fully determine that the expenditure under the plan which might be adopted, should not exceed \$1,500,000."

Mr. Clark made his report thereon December 19, 1871, and so far as it related to the exterior, was

based upon the design prepared by Messrs. Cochran & Piquenard and which, with some of the modifications suggested by Mr. Clark, was the one finally adopted.

On the 21st day of October, 1870, Messrs. Cochran & Piquenard were appointed by the board general architects and superintendents of the work at a salary of \$3,600 per annum.

Mr. Fulton, having been elected secretary, received a salary of \$50 per month, from May 25, 1870. Afterwards, his whole time being occupied with the duties of the office, his salary was increased to \$100 per month, from June 25, 1871.

James Appleyard, of Detroit, Mich., was appointed local superintendent, and his salary fixed at \$3,500 per annum, payable monthly.

The board began the construction of the capitol in June, 1871, and under its supervision most of the excavating was done and more than half of the foundation walls were built. The laying of the corner stone took place with imposing ceremonies on the 23d day of November, 1871. The following distinguished gentlemen delivered addresses commemorative of the occasion: Hon. James F. Wilson, Hon. Samuel Merrill, governor of Iowa, and Hon. John A. Kasson. A poem was read by the Hon. J. B. Grinnell.

The corner stone was cut from granite obtained in Buchanan county, Iowa, and presented for that purpose by David Armstrong, of the same county. Its dimensions are 7x3x3 feet.

The board of commissioners was reorganized by an act of the Fourteenth General Assembly, approved April 10, 1872, which amended the former act and establishing a board of commissioners, consisting of the governor, who was to be *ex-officio* president of the board, John G. Foote of Des Moines county, Maturin L. Fisher of Clayton county, R. S. Finkbine and Peter A. Dey of Johnson county.

This board was charged with the execution of the provisions of law having reference to the erection of the capitol. It was specially made the duty of the board to remove any part of the original foundation which in its judgment "did not conform to a proper standard of material and

workmanship." The commissioners decided that the stone which composed the foundation was "unsafe for the foundation of a massive structure designed to endure a thousand years." The whole cost of taking down the wall and rebuilding it with good material was \$52,353.76.

The first meeting of the new board was held on the 17th day of April, 1872. Mr. Fulton, secretary to the old board, was continued in office until February 1, 1873. When he resigned, Ed Wright was elected to succeed him.

Mr. Appleyard was discharged as local superintendent in December, 1871. It was therefore necessary for the board to select a superintendent to succeed Mr. Appleyard. Mr. Robert S. Finkbine acted in that capacity, as chairman of an executive committee, during the year 1872.

At the extra session of the legislature in 1873, a joint resolution authorizing the board to appoint one of its own members local superintendent or overseer was passed, and immediately thereafter the board unanimously elected Mr. Finkbine to that office at a salary of \$3,000 per annum, which included his compensation and traveling expenses as commissioner.

Mr. John G. Foote was appointed superintendent of finance.

On the 3d of September, 1872, Mr. John C. Cochran resigned his position as one of the architects and Mr. A. H. Piquenard was appointed sole architect.

Mr. Piquenard died at his home in Springfield, Ill., on the 19th day of November, 1876. One of his colleagues, Mr. Hackney, paid him the following tribute: "What loss the state and the world of art sustained in his death cannot be estimated. He was a man scholarly in his attainments, grand in his conceptions and abounding in expedients, standing at the first rank in his profession."

On the last day of January, 1877, Messrs. Bell & Hackney, who had been assisting Mr. Piquenard, were elected to succeed him. The work was completed under their supervision. Mr. Bell resigned his position on the 18th day of December, 1883, to accept the appointment of supervising

architect of the treasury department at Washington. Mr. Hackney had sole charge of the work from that time.

On the 5th day of February, 1879, Maturin L. Fisher, a member of the board, died at his residence in Clayton county. He was a prominent and useful man in the public affairs of the state for many years. Cyrus Foreman, of Osage, was appointed by the governor to succeed him. He qualified as such commissioner on the 27th day of March, 1879. This was the only change in the membership of the board since its organization, save the different governors who were *ex-officio* presidents thereof.

The stone for the foundation was furnished by Messrs. Tuttle & Robertson, of Des Moines, from the Madison county quarries near Winterset. The stone for the basement story is from the old Capitol quarry in Johnson county, in the vicinity of Iowa City.

The Ste. Genevieve Sand, Stone and Granite Company and J. A. Gaines & Company, of Carroll county, Mo., furnished the stone for that part of the building above the basement.

The outside steps and platforms are the "Forest City" stone, from near Cleveland, Ohio. The rails are the Sauk Rapids granite.

The pilasters and piers in the interior of basement are from Anamosa, in this state, and Lemont, Ill.

All the columns, piers and pilasters in the corridors of the first story are from Lemont, Ill.

The red granite columns in the second story are from Iron Mountain, Mo. The dark colored granite in base and cap of pedestals is from Sauk Rapids, Minn., while the carved capitals, pilasters and piers are of Lemont stone.

KINDS OF MARBLE AND WHERE PROCURED.

DOMESTIC.

"Old Tennessee"	from Tennessee
Knoxville	from Tennessee
Holstein River	from Tennessee
Glens Falls	from New York
Moriah	from Vermont
Virginia	from New York
Iowa Coral	from Charles City, Iowa

Mexican Onyx	from Mexico
Lisbon	from Spain
Sienna	from Italy
Verona Red	from Italy
Statuary White	from Italy
Veined	from Italy
Italian Dove	from Italy
Alps Green	from Italy
Languedoc	from France
Rose Vif	from France
Rouge Grotte	from France
Grotte Renaissance	from France
Yellow Eschalleon	from France
Fermona	from Germany
Pongord	from Belgium
Belgian Black	from Belgium
Bardiglio	from Italy
Brocatelle	from Italy
Levanto	from Italy
Juan Feure	from France
Kilkenny Green	from Ireland
Victoria Red	from Ireland
Cost of marble work	\$114,815.00

GENERAL DIMENSIONS.

	Feet	Ln.
Length north and south, including porticos	363	8
Length east and west, including porticos	246	11
Length north and south fronts	175	--
Length east and west fronts	118	8
Length east and west through arcades	100	10
Height to top of main cornice	92	8
Height to top of balustrade	59	8
Height to top of stylobate	114	2
Height to top of dome balcony	219	1
Height to top of lantern	249	--
Height to top of ball above lantern	259	--
Height to top of finale	275	--
Height to top of small domes	152	--
Height of basement story	13	1
Height of office story	23	9
Height of second story	22	9
Height of third story	20	9
From office floor to first balcony in dome	101	6
From office floor to second balcony in dome	153	2
From office floor to canopy	175	5
The rotunda is in diameter	66	8
The exterior diameter of dome is	80	--

The House of Representatives is 74x61 feet 4 inches by 47 feet 9 inches.

The Senate Chamber is 58x91 feet 4 inches by 41 feet 9 inches.

ARTICLES DEPOSITED UNDER THE CORNER
STONE OF THE NEW IOWA STATE CAP-
ITOL, NOVEMBER 23, A. D. 1871.

1. Copy of the holy bible, enveloped in the folds of our national flag.
2. Copy of our national ode, "The Star-Spangled Banner," engrossed on parchment.
3. Copies of the constitution of the United States and the state of Iowa.
4. Copy of the Declaration of American Independence.
5. Copy of President Lincoln's emancipation proclamation.
6. Copy of the joint resolution ratifying the amendment to the constitution of the United States abolishing slavery, unanimously passed by the Eleventh General Assembly of Iowa, March 30, 1866, with the names of the members thereof, on parchment.
7. Roll of honor of Iowa soldiers, and a roster of the several Iowa regiments serving in the war for the suppression of the rebellion.
8. Copies of the reports of Adjutant-General N. B. Baker, giving lists of Iowa officers and soldiers serving in the war for the suppression of the rebellion.
9. Copy of Washington's farewell address.
10. Copy of Governor Merrill's thanksgiving proclamation for 1871.
11. Copies of the pamphlet entitled, "Iowa, the Home for Immigrants," in the English, German, Holland, Danish and Swedish languages.
12. Copy of the pamphlet entitled, "Free Lands of Iowa."
13. Copy of "Laws and Instructions relating to the Duties of County Surveyors," compiled by Hon. C. C. Carpenter, then register of the state land office, and now governor-elect.
14. Copy of the revision of 1860, with all laws subsequently passed, including the laws relating to a new capitol.
15. Copy of the report of the committee on building stone, embracing the report, charts and tables of Prof. Gustave Hinrichs, of the Iowa State University, and Lieut. W. P. Butler, giving chemical and mechanical tests of samples of Iowa building stone.

16. Copy of the report of the Iowa State Agricultural society for 1870.

17. List of premiums of the eighteen annual exhibitions of the Iowa State Agricultural Society, with names of officers.

18. List of premiums of the twelfth annual exhibition of the central Iowa District Agricultural Association, with names of officers.

19. A sectional map of Iowa.

20. Names and residences of the state officers, and also lists of the names and residences of the members and members-elect of the Thirteenth and Fourteenth General Assemblies.

21. Copy of the census report of 1867, containing a complete official register of the territorial and state governments, compiled by Hon. Ed Wright, secretary of state.

22. Copies of all legislative documents of the Thirteenth General Assembly, including executive messages, and reports of state officers.

23. Abstracts of votes cast at the general election of Iowa for the years 1868, 1870 and 1871.

24. Iowa official and statistical table for the year 1871, with names of state and county officers, and the population of the several counties.

25. A complete list of the judicial officers of the state for the year 1871.

26. Table of statistics pertaining to railroads in Iowa, compiled by Hon. S. E. Rankin, treasurer of state.

27. Copy of Des Moines city directory, with copies of all city ordinances, and a list of municipal officers.

28. A statement of the population, value of real and personal property, with a catalogue of the manufactures, amount of capital invested, and a list of resident bankers and attorneys of the city of Des Moines.

29. A map of Polk county.

30. A map of the city of Chicago, showing the extent of the great conflagration of October 9, 1871.

31. A chronological table of events pertaining to American history.

32. Calendars for the years 1871 and 1872, with astronomical calculations.

33. Autographs of the several state officers, and members of the board of capitol commissioners, on parchment.

34. Roll of names of the 270 foremen, mechanics and laborers employed on the new capitol during the year 1871, on parchment.

35. Copies of all newspapers and other periodicals published in Des Moines; also, copies of the several daily papers of the state.

36. A roll of the names of the members of the Monroe Cornet Band present at the ceremonies of laying the corner stone, as follows: J. R. Hall, first E flat cornet; James Bain, first B flat cornet; Frank Hiskey, second B flat cornet; George M. Cowels, first E flat alto; S. Dixon, first B flat tenor; G. D. Foust, first B flat baritone; L. M. Shaw, E flat tuba; William Elrod, tenor drummer; J. C. Carr, bass drummer.

37. Program of proceedings relating to the laying of the corner stone of the new capitol, with a copy of the address of his excellency, Governor Merrill, delivered on the occasion.

38. The several denominations of gold, silver and nickel coins of the United States; also, a United States treasury note, and the several denominations of fractional currency.

39. A photographic view of the design of the new capitol.

40. Photographs of the several state and Des Moines city officers.

COINS DEPOSITED.

The following are the denominations and dates of the several coins deposited, to-wit:

Gold.—\$20 of 1870, \$10 of 1855, \$5 of 1853, \$2.50 of 1841, and \$1 of 1851.

Silver.—\$1 of 1871, 50 cents of 1859, 25 cents of 1858, 10 cents of 1857, 5 cents of 1850 and 3 cents of 1858.

Copper and Nickel.—5 cents of 1869, 3 cents of 1866, 2 cents of 1868, 1 cent of 1847 and one cent of 1869.

STATEMENT OF MATERIALS RECEIVED FROM APRIL, 1872, TO JUNE 30, 1886.

	Yards	Feet	In.
Rubble stone, for concrete.....	1,020	00	0
Rubble stone, for walls.....	1,129	15	5
Total rubble.....	2,145	15	5
Dimension stone in foundations.....	4,629	11	8

DIMENSION STONE IN SUPERSTRUCTURE—CUBIC FEET.

Granite	11,370.0
Iowa City limestone	44,429.2
Anamosa limestone	1,654.2
Lemont limestone	17,404.6
Carroll county sandstone.....	145,789.7
Ste. Genevieve sandstone.....	130,768.11
Forest City sandstone	9,623.4

Total stone in superstructure..... 361,339 9-12

Cement—	Bbls.	Lbs.
Hydraulic	29,683	62
Portland	1,684	100

Total cement

Stucco, tons	549
Stucco (fine), barrels.....	1,936
Kune's cement, barrels	68
Lime, bushels	21,160½
Sand, bushels	566,307
Water, gallons	11,601,145

Brick—	
Fire	21,100
Pressed	17,550
Common	13,975,280

Total

Pitch, pounds	43,480
Cast iron, pounds	638,561
Wrought iron, pounds	2,220,023

Total iron, pounds.....

Cast steel, pounds.....	3,139½
Nails, pounds	87,462
Copper and bronze, pounds.....	502,341
Drain tile, feet	3,574½
Slate, squares	568½
Porous terra cotta, squares.....	524½

Terra cotta—	
Balusters, pieces	444
Chimney tops, pieces	13
Cornice, feet	23
Hip and ridge moulds, feet.....	840

Lead—		
Sheet, pounds	13,791½	
Pig, pounds	8,439	
Pipe, pounds	1,651	
Total pounds	23,881½	
Sheet iron—		
Black, pounds	13,615	
Galvanized, pounds	13,352	
Total pounds	24,967	
Lumber—		
White pine, feet	1,595,637	
Yellow pine, feet	194,002	
Poplar, feet	44,833	
Black walnut, feet	44,833	
White walnut, feet	45,044	
Cherry, feet	35,520	
Ash, feet	101,746	
Chestnut, feet	30,957	
White oak, feet	30,957	
Red oak, feet	22,324	
Mahogany	5,471	
Total lumber, feet	2,230,528	
Lath	466,900	
Lath iron wire, square yards	1,006	
Iron sash cord, feet	40	
Copper sash cord, feet	13,400	
Brads, paper	878	
Wood screws, iron, gross	2,655	
Wood screws, brass, gross	352	
Wood screws, nickel-plated, gross	9	
Wood screws, blued, gross	6	
Wood bolts	14,539	
Steam pipes, feet	170,167	
Water pipes, feet	1,726	
Gas pipes, feet	28,892	
Galvanized iron pipes, feet	4,561	
Brass pipes, feet	3,538	
Brass pipe, tinned, feet	3,539	
Cast iron pipe, feet	2,513	
Total pipe, feet, 211,597; miles	40.56	
The above does not include the pipe in the radiators.		
Lubricating oil, gallons	896½	
Kerosene, gallons	736	
Tallow, pounds	3,191½	
Turpentine, gallons	482	
Linseed oil, gallons	1,193½	
Hard oil, gallons	482	
Gold leaf, packs	868	
Gold leaf size, pounds	50	
White lead, pounds	27,968	
Red lead, pounds	4,507	
Plastering hair, bushels	1,740	

Glass—		
Wrought plate, square feet	1,001	
Polished plate, square feet	22,188	11-12
Polished plate, beveled, square feet	668	
Polished plate, enameled, square feet	1,785	6-12
Polished plate, silvered, square feet	607	1-6
Stained glass, square feet	1,193½	
Cylinder glass, square feet	1,001	
Vault doors	12	
Encaustic tile floors, square feet	43,153	1-6
Marble tile floors, square feet	5,227	
Glue stucco	9,157	
	14,384	

CLASSIFIED STATEMENT OF EXPENDITURES FROM
MAY 25, 1870, TO JUNE 30, 1886.

On What Account—	Amount
Excavation and drainage	\$ 17,978.87
Cistern	1,512.12
Repairs, first foundation	52,343.75
Concrete, labor on	9,063.71
Printing and advertising	3,205.26
Water	3,579.84
Cash	1,612.54
Board of commissioners	24,083.15
Cast iron work	6,057.05
Rubbing stone	26,115.56
Accidents	990.72
Extra handling stone	2,224.46
Stone setting and masonry	69,575.81
Paints and oils	8,721.26
Roofing and guttering	95,160.20
Terra cotta work	3,700.04
Lot and sewer	10,000.00
Machinery and tools	34,343.22
Heating and ventilating	81,453.32
Painting	36,752.06
Railroad	16,458.63
Fuel	8,053.67
Cleaning and painting	236.77
Glass	26,843.87
Marble work	117,097.47
Plumbing	14,580.99
Stone	486,417.56
Boiler house	25,844.19
Nails and hardware	15,365.82
Stone cutting	342,138.07
Wrought iron work	187,003.24
Gas fitting	6,818.91
General labor	54,915.43
Cement	49,733.17
Brick	127,565.79
Sand	8,624.00
Sheet metal work	21,020.78
Prismatic lights	3,082.23
Plain plastering	45,616.52
Seagliola work	13,934.85

Ornamental plastering	29,258.05
Electric work	5,945.85
Interest and discount.....	3,155.20
Fresco painting	28,077.37
Floor tiling	34,455.58
Heating expenses	10,989.91
Plans	8,784.13
Furniture	129,131.77
Patterns and models.....	7,868.75
Brick masonry	122,030.36
Extra general assembly	208.55
Salaries	139,829.82
Adjutant-general's office	3,021.01
Capitol grounds	1,021.01
Expenses	4,682.73
Lime	7,863.33
Carpenter work	177,422.75
Lumber and timber	64,530.65
Elevators	7,636.58
Street improvements	24,594.59
Government's settlement account	55.00
Total	\$2,873,294.59

CONDENSED STATEMENT OF APPROPRIATIONS AND

EXPENDITURES.

APPROPRIATIONS.

Chapter 110, laws of the Thirteenth General Assembly	\$ 150,000.00	\$2,876,300.00
Chapter 35 of the general and public laws of the Fourteenth General Assembly, being \$100,000 for the year 1872, and \$122,000 for each of the years 1873, 1874, 1875, 1876, 1877, 1878, 1879, 1880, 1881 and 1882	1,350,000.00	
Chapter 68, local laws of the Fifteenth General Assembly.....	135,000.00	
Chapter 151, laws of the Sixteenth General Assembly	250,000.00	
Chapter 138, laws of the Seventeenth General Assembly	75,000.00	
Chapter 138, laws of the Seventeenth General Assembly, for lot and sewer	10,000.00	
Chapter 83, laws of the Nineteenth General Assembly	525,000.00	
Chapter 136, laws of the Twentieth General Assembly	361,000.00	
Chapter 136, laws of the Twentieth General Assembly, for paving and curbing the streets and putting down sidewalks around the capitol square	27,000.00	

SPECIAL APPROPRIATIONS

Chapter 75, section 32, laws of the Fifteenth General Assembly	600.00
Chapter 142, section 19, laws of the Sixteenth General Assembly.....	600.00
Chapter 170, section 20, laws of the Seventeenth General Assembly.....	600.00
	\$2,876,300.00

EXPENDITURES.

Expended on new capitol.....	\$2,624,189.48
Expended on repairs of first foundation	52,343.76
Expended on lot and sewer.....	10,000.00
Expended on boiler house.....	25,844.00
Expended on furniture.....	129,131.77
Expended for Twentieth General Assembly	208.55
Expended for adjutant-general's offices	3,021.01
Expended on capitol grounds.....	1,883.70
Expended on street improvements..	24,994.50
Expended on governor's settlement account	55.00
Cash unexpended and turned over to Governor William Larrabee.....	1,612.54
Street paving and sidewalk appropriation in the state treasury undrawn	3,005.41
	\$2,876,300.00

STATUARY.

Beginning with north of library door: History, Science, Law, Fame, Literature, Industry, Peace, Commerce, Agriculture, Victory, Truth, and Progress.

The first door to the left as you enter the senate chamber is the entrance to the stairway leading to the dome.

All the rooms on third floor are committee rooms, of which there are twenty-nine in number.

The dome is covered with a gold leaf, at a cost of \$3,500.

DESCRIPTION OF PAINTING "WESTWARD" AT THE HEAD OF THE GRAND STAIRWAY IN THE IOWA STATE CAPITOL

BY EDWIN HOWLAND BLASHFIELD, THE ARTIST.

"The main idea of the picture is a symbolical presentation of the Pioneers led by the spirits of Civilization and Enlightenment to the conquest by

cultivation of the Great West. Considered pictorially the canvas shows a 'Prairie Schooner' drawn by oxen across the prairie. The family ride upon the wagon or walk at its side. Behind them and seen through the growth of stalks at the right come crowding the other pioneers and later men. In the air and before the wagon are floating four female figures; one holds the shield with the arms of the State of Iowa upon it; one holds a book symbolizing Enlightenment; two others carry a basket and scatter the seeds which are symbolical of the change from wilderness to plowed fields and garden that shall come over the prairie. Behind the wagon and also floating in the air, two female figures hold respectively a model of a stationary steam engine and of an electric dynamo to suggest the forces which come with the later men.

"In the right hand corner of the picture melons, pumkins, etc., among which stand a farmer and a girl, suggest that here is the fringe of cultivation and the beginning of the prairie. At the left a buffalo skull further emphasizes this suggestion.

"Considered technically, the dominant motive of the composition of the picture is the festoon or Roman garland. This is carried out by the planes of light color, commencing at the left with the group of spirits, carried downward by the white bodice of the girl, gathering flowers, onward through the mass of light in the center, to the white overdress of the girl leading the child and finally toward the right and upward, in the figures of the farmer girl and the spirits of Steam and Electricity. The dark accents in the composition are furnished by the three men grouped together and the skirt of the flower-gathering girl.

"The hour chosen for the subject is the late afternoon, since Westward suggests into the setting sun. The scheme of color of the picture is based upon his choice of hour, being in the main made up of orange-pink sunset light and its natural complement bluish shadows, with a few spots of dark blue and red-brown given as aforesaid by the costumes of the men and the skirt of the kneeling girl. For the sake of preserving the integrity

of the composition certain liberties have been taken with average probabilities. Thus the driver of the oxen is upon the side which is not conventionally correct, because had he been placed in the correct place in that corner of the canvas he would have thrown the composition out of balance. Advantage was therefore taken of the fact that he might momentarily leave his place. Again, a very small child would not often hurry along keeping up with striding men and women, but on the other hand the children at times undoubtedly did wish and need for exercise sake to run along awhile with the procession. From the point of view of composition, a small mass or figure was needed just at the point where the child was introduced, a dog would have made a spot of about the right height, but two dogs were already in the picture and a figure of a small child therefore served the purpose better.

"These remarks about the ox-driver and the small child are added to bring to the notice of the layman the fact that the artist's first duty to his client is to make his picture artistically good, good that is in composition, drawing and color. For the sake of his composition, he may, and indeed should, take advantage of anything which is possible, avoiding only those things which would seem unreasonable to both common sense and imagination."

DESCRIPTION OF LUNETTES, IN ROTUNDA OF IOWA STATE CAPITOL.

BY KENYON COX, THE ARTIST.

The first function of a decorative painting being to decorate—that is to beautify the building in which it is placed—the first consideration with the artist is a scheme of color and line which shall answer this end. The Rotunda having twelve equal arches, four of them pierced and the others containing the spaces to be painted, the first thought was to avoid monotony and accent the importance of the open arches by placing a single large figure in each lunette, backed against and, as it were, buttressing the open arch, each pair of figures thus establishing a garlanded curve and the whole series making a continuous rhythm of

line about the rotunda. As the statues between the arches, though over life size, looked small, and as a solid figure always looks larger than one of the same size painted on a flat surface, it was determined that the painted figures must be on a large scale. They would measure nine feet high, if standing. These preliminary decisions considerably limited the subsequent choice of treatment; and very little action could be depicted. The depth of the mouldings and richness of shadow in the architecture led to the feeling that considerable force of light and shade and pictorial effect could be properly employed, and that a certain amount of realism in the treatment of backgrounds would apparently enlarge the rotunda and give it space and air without interfering with the sense of stability. In color the effort was to produce a band of beautiful hues which would harmonize with all the surrounding colors while enlivening the general effect; which should have as much variety as possible; and should, at the same time, be unified and, as it were, tied together by certain recurring notes. To this end each of the lunettes takes up and intensifies some one of the colors used in the general scheme of decoration, and reds being most frequently caught up in this way, but the gold and purple and dark blue be accented also. The blue and white of the sky and the green of the landscape are carried through all the lunettes as the unifying notes, and the rather vivid greens were particularly relied on as a contrast to and relief from the dominance of warm tones.

Such being the decorative scheme the choice of subject and treatment was dependent on it. The need for reclining figures and powerful colors in the draperies at once negated historical or realistic subject and suggested allegory, while a certain amount of freedom of composition and of realistic accessory was permitted. "The Resources of the State of Iowa" was considered, but it was finally determined to embody in the paintings an allegory of "The Progress of Civilization" in any country, some attention to the special conditions of the state determining the treatment in particular cases, but the subject being universal in its application. The series begins at the right

of the entrance of the library and continues from left to right around the rotunda. The individual subjects are as follows:

HUNTING.

In an open glade of the forest, against a rock and under a pine, reclines the type of primitive man, living by the chase. He holds a lance in his hand and bears a quiver of arrows, and is clothed only in a wolf skin with a scalp down over his head. At his feet sits a wolfish, half-wild dog, man's earliest companion, and a dead wild goose at his side shows his success in hunting. While the figure is necessarily in repose the tenseness of his muscles and the alertness of his glance is intended to convey the impression of instant readiness for action and the same feeling is marked in the listening attitude of the dog.

HERDING.

Here the effort has been to combine an illusion to the classic associations of the pastoral life with something of breeziness of vigor essentially modern and western. The herdsman, holding the pan-pipes and pastoral staff, and clothed with the pastoral cloak and hat, looks sharply off over his right shoulder at something which has attracted his attention. Whatever it is that interests him, interests also the cow and the swine, beyond the brow of the hill, who throw up their heads to gaze at it. The scene is a rough hill pasture, with great trees in the distance. The background is a windy blue sky with drifting clouds.

AGRICULTURE.

Golden-haired Ceres, sickle in hand, sits in a stubble field and contemplates the harvest. In the foreground are thrown down a rustic cloak and gourd water-bottle. The foliage above her head is rusty and limp with heat, and in the distance is a corn field with Indian corn in shocks, brilliantly illuminated by the afternoon sun. Beyond it white thunder heads loom into a blue sky. In placing a wheat sheaf behind the principal figure and a crown of oats upon her head an intentional liberty has been taken with the suc-

cession of crops in order to suggest that more than one staple is produced in the state.

THE FORGE.

The industrial age, the age of coal and iron, is typified in its most simple form by the muscular figure of a young man seated before a rustic forge and sturving a working drawing, pinned to a board, of the object he is about to make. This figure is painted entirely nude for delight in the beauty of the masculine figure. It is intended to be purely ideal and in no way to represent a state of society in which men actually went naked. The same thing may be said, generally, of the costume, or lack of costume, in the other panels.

COMMERCE.

Commerce is typified by a female figure in gold and white with winged head-dress and Caduceus of Mercury, God of trade. She leans upon a pile of sacks of grain and directs the Genius of Transportation, in the form of a child, where he shall carry the sack which he bears upon his shoulders.

EDUCATION.

Seated upon a bank a mother teaches her child to read from a great book which she holds open before him. In the tranquil landscape beyond, as elsewhere in the series, the artist has felt at liberty to introduce some features of the landscape he best knows and loves, that of his own country home in New England, but he has so simplified it as to approximate the abstract or universal.

SCIENCE.

In this composition the attempt has been made to typify the life of the intellect—thought in general, rather than scientific thought in the stricter sense. The scene is the parapet of a house by moonlight. The lamp of truth burns brightly and a single planet shines in the quiet sky. In the left corner is a terrestrial globe, emblem of the world-wide nature of the studies in which the figure is engaged. At the right in a pile of folio volumes—the records of the wisdom of the past.

The figure, a stalwart man in draperies of dim blue, is sunk in brooding contemplation.

ART.

The culmination of the series, representing the highest form of energy displayed at the zenith of civilization in all ages is "Art." A violoncello stands for music, a palette and brushes for painting, a part of a classic building with statues on its sky line for architecture and sculpture, thus symbolizing the four greatest of the fine arts. The figure is a nobly formed young woman with a face in which the artist has endeavored to combine innocence and purity with power. She is partially draped in glowing gold and crimson, wears a golden wreath, and holds aloft a mirror of polished metal which reflects to man the light of the sky. This panel has been made as brilliant as possible, in contrast with the grave tone of the "Science." The necessary note of green is supplied by a clump of laurels, the plant of Apollo.

The original design for the main cornice and the domes, was to make them of cast and sheet iron, but with the consent of the general assembly these were changed to stone, covering only the hemispherical portion with metal, and this is of very heavy copper which is as durable as time.

The partitions are all of brick or other fire-proof material, and the floors are made with iron beams and brick arches with either an encaustic tile or wood covering.

The rooms are all warmed with steam, with both direct and indirect radiation, from a battery of seven large boilers located in a building across the street on the north side, and the rooms are ventilated by exhausting and air ducts built in the walls.

The roof is made of iron frame work, covered with porous terra cotta and slate laid in cement mortar.

The corridor floors are all made of encaustic tile laid in very rich pattern, and the wainscotings of the corridors and all the principal rooms of both office and second story are made of domestic and foreign marble. The large columns in the house and senate and those in the upper part of the dome are made of Scagliola, not because it is a

cheap imitation of marble, but because it is an imitation as good as marble and better suited to places where used.

The grand stairway is made of marble on an iron frame work, while the other stairways are all of iron.

The legislative portion of the building was completed and dedicated to its future use on the 17th day of January, 1884, and the Twentieth General Assembly held its deliberations in the spacious halls provided for this purpose.

A short time after this the valuable collection of books in the State Library were moved into the large rooms provided for them, and Governor Sherman occupied temporary quarters in two of the committee rooms on the second floor.

There are 398 steps from the ground up to the dome platform or lookout.

There are 787 yards of carpet in the senate chamber and 994 yards in the house of representatives.

There are twenty-nine kinds of marble in the building.

The kinds of wood employed in the building are: Ash, red oak, white oak, black walnut, butternut, chestnut, cherry, mahogany, poplar, yellow pine, white pine and catalpa.

Cost of the building to July 1, 1885, \$2,615,170.87.

Cost of furniture to July 1, 1885, \$82,789.89.

SOLDIERS' AND SAILORS' MONUMENT.

This ground was occupied by the old state house, now by the soldiers' and sailors' monument, described as lots 11 and 12, block 6, Scott's addition, deeded by the Capitol Building Association, October 24, 1864. There is built on the ground and completed the soldiers' and sailors' monument, and the grounds are all sodded and finished. The shaft is all of gray granite, ornamented by bronze castings. The total height is about 145 feet, and the total cost was about \$150,000.

The six "Dielmann mosaics" in the grand stairway located over the Blasfield painting, are the largest and most carefully wrought mosaics in America. The six panels are each about six feet wide by fourteen feet high. The manner of making

and placing these mosaics is little understood and interesting. A brief history of them follows:

Frederick Dielmann, the noted artist (several years president of the National Academy of Design of New York) made perfectly finished oil paintings of the subjects, one-third of the actual size of these mosaics. He also made outline drawings on paper the actual size of the panels. He then took the small painting and large drawings to the "Venetian Murano Co.," in Venice and had these mosaics made. In making them the artisans placed the large drawings on tables and stood the small paintings before them. Then out of thousands of little pigeon holes around the room, the workmen selected the bits of mosaics and laid them in the large outline on the table, copying the small painting in this manner. These mosaics are made of glass to imitate marble. When the mosaics were all laid, brown paper was pasted over the entire surface. The brown paper surface was then divided into sections, as a state is divided into counties. These sections were then numbered in order, and the paper cut on these section lines. The sections were lifted, placed in boxes and sent to Des Moines. Signor Grandi, who superintended the laying of the mosaics, came with them and placed them on the wall where they are likely to remain for centuries. The wall was given a coat of Portland cement, and the different sections were set in their places. After a few days when the cement had hardened, the brown paper that was pasted over their faces while in Italy, was wet and removed, leaving the mosaic pictures exposed to view for the first time in an upright position.

The reason for using mosaics instead of paint was to get as much of an architectural feeling in these panels as possible, and to avoid conflict or rivalry between them and the Blasfield painting below. Another reason was to give the Dielmann mosaics carrying power enough to overcome the extra distance from the spectator. It will be observed that the mosaics have been made to take up the color and feeling of the architecture about them, while the Blasfield painting in the more conspicuous panels below is more pronounced in color.

Mr. Dielmann has made a picture of the west front of the state house as background for the four central panels, while in the left hand panel called "Defense," he has shown a portion of the state historical building, and in the background of the right hand panel, called "Education," he has shown a part of the old state house at Iowa City, which is now the administration building of the state university.

The six subjects representing the functions of government, from left to right are:

First. "Defense," represented by two youths leaving their work in the field in answer to a call to arms.

Second. "Charities," represented by a standing female figure, holding a helpless child in one arm while she gives relief to a crippled beggar who kneels at her side.

Third. "The Executive" and fourth, "the Legislative" branch of government, etc.

Fifth. "The Judiciary," typified by?

Sixth. "Education," typified by a standing female figure, in academic robe, with a wreath of laurel about her head.