

NATIONAL REGISTER OF HISTORIC PLACES  
INVENTORY - NOMINATION FORM

(Type all entries - complete applicable sections)

STATE: District of Columbia	
COUNTY:	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

1. NAME

COMMON:  
Arts and Industries Building, ~~Smithsonian Institution~~ Smithsonian Institution

AND/OR HISTORIC:  
National Museum

2. LOCATION

STREET AND NUMBER:  
900 Jefferson Drive, S.W.

CITY OR TOWN:  
Washington

STATE District of Columbia	CODE	COUNTY:	CODE
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3. CLASSIFICATION

CATEGORY (Check One)	OWNERSHIP	STATUS	ACCESSIBLE TO THE PUBLIC
<input type="checkbox"/> District <input checked="" type="checkbox"/> Building <input type="checkbox"/> Site <input type="checkbox"/> Structure <input type="checkbox"/> Object	<input checked="" type="checkbox"/> Public <input type="checkbox"/> Private <input type="checkbox"/> Both	Public Acquisition: <input type="checkbox"/> In Process <input type="checkbox"/> Being Considered	<input checked="" type="checkbox"/> Occupied <input type="checkbox"/> Unoccupied <input type="checkbox"/> Preservation work in progress
PRESENT USE (Check One or More as Appropriate)			
<input type="checkbox"/> Agricultural <input type="checkbox"/> Commercial <input type="checkbox"/> Educational <input type="checkbox"/> Entertainment	<input type="checkbox"/> Government <input type="checkbox"/> Industrial <input type="checkbox"/> Military <input checked="" type="checkbox"/> Museum	<input type="checkbox"/> Park <input type="checkbox"/> Private Residence <input type="checkbox"/> Religious <input type="checkbox"/> Scientific	<input type="checkbox"/> Transportation <input type="checkbox"/> Other (Specify) _____ _____ _____
Yes: <input checked="" type="checkbox"/> Restricted <input type="checkbox"/> Unrestricted <input type="checkbox"/> No			

4. OWNER OF PROPERTY

OWNER'S NAME:  
Smithsonian Institution

STREET AND NUMBER:  
1000 Jefferson Drive, S.W.

CITY OR TOWN: Washington STATE: District of Columbia CODE: \_\_\_\_\_

5. LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC.:  
Recorder of Deeds

STREET AND NUMBER:  
6th and D Streets, N.W.

CITY OR TOWN: Washington STATE: District of Columbia CODE: \_\_\_\_\_

6. REPRESENTATION IN EXISTING SURVEYS

TITLE OF SURVEY:

DATE OF SURVEY:  Federal  State  County  Local

DEPOSITORY FOR SURVEY RECORDS:

STREET AND NUMBER:

CITY OR TOWN: STATE: CODE:

SEE INSTRUCTIONS

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7. DESCRIPTION

CONDITION

(Check One)

Excellent  Good  Fair  Deteriorated  Ruins  Unexposed

(Check One)

Altered  Unaltered

(Check One)

Moved  Original Site

DESCRIBE THE PRESENT AND ORIGINAL (if known) PHYSICAL APPEARANCE

(The description and history of The Arts and Industries Building have been based on notes provided by James Goode, Smithsonian Institution for this study and evaluation.)

The Arts and Industries Building is almost perfectly square, of one story construction, with brick walls and roofs of steel framework and slate covering. It is more picturesque than dignified. It consists basically of four large naves centered around a large rotunda in the shape of a Greek cross, with ranges and covered courts filling in the remaining space. The building was originally rather well lighted since the ranges have large windows and the naves and courts both have skylights and clerestory windows. The addition of galleries to the building (balconies) some fifteen years after it was erected, reduced the amount of lighting to the ground floors.

The building is located south east of the original Smithsonian Institution Building. It sits only fifty feet from the Smithsonian Building on its west side while its south side is immediately adjacent to Independence Ave. The main part of the building is 300 feet square and one story high throughout, although of different elevations. The building is symmetrical. In the center of each facade, at the sides of the entrances, are two tall towers. At the corners are large pavilions, which project about thirteen feet from the principal walls, making the extreme linear dimensions of the building about 325 feet. The amount of space covered is 97,786 square feet or 2 1/4 acres.

The interior of the building consists of six major features: rotunda, naves, ranges, courts, pavilions, and balconies (added later). Four naves or great exhibit halls radiate from the central rotunda toward the towers on the outer walls of each facade to form a Greek cross. A series of eight ranges, two on each side of the building, follow the outer walls and extend from the naves to the pavilions (which are located on each corner of the building). Four courts, inclosed by the naves and ranges, are roofed over and form parts of the actual building. There are thus a total of 17 various halls in the building for exhibit purposes: 1 rotunda, 4 naves, 8 ranges, and 4 courts (formed by the naves and ranges). The halls are separated by heavy brick walls with many broad arched openings reaching nearly to the ceiling. Most of these arched openings were filled in with exhibit cases but the great halls or naves connecting to the rotunda were always kept open.

The central rotunda has the greatest height. The walls of the rotunda are octagonal, with a maximum diameter of 65 feet, surmounted by a 16 sided polygon, 67 feet in diameter, which contains a tier of large windows, and covered with a slate roof rising to a central lantern. The rotunda walls are 77 feet high. The distance from the floor to the top of the lantern finial is 108 feet. The measurements of the four naves are: length - 117 feet, width - 65 feet, height to the top of the side walls - 44 feet, and the height to the ridge of the roof - 56 feet. Courts measure: 63 feet square and the same wall height as the naves. Ranges measure: width - 50 feet, length - 89 feet (on north and south sides) and 63 feet (on east and west sides). The east and west ranges are smaller due to extensions from the adjoining pavilions, height - 26 1/2 feet at the outer walls and 31 feet at the inner

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**SIGNIFICANCE**

PERIOD (Check One or More as Appropriate)

- |  |                                       |  |                                       |
|--|---------------------------------------|--|---------------------------------------|
| <input type="checkbox"/> Pre-Columbian | <input type="checkbox"/> 16th Century | <input type="checkbox"/> 18th Century            | <input type="checkbox"/> 20th Century |
| <input type="checkbox"/> 15th Century  | <input type="checkbox"/> 17th Century | <input checked="" type="checkbox"/> 19th Century |                                       |

SPECIFIC DATE(S) (If Applicable and Known) 1879

AREAS OF SIGNIFICANCE (Check One or More as Appropriate)

- |  |   |  |  |
|--|---|--|--|
| <input type="checkbox"/> Aboriginal              | <input type="checkbox"/> Education              | <input type="checkbox"/> Political           | <input type="checkbox"/> Urban Planning        |
| <input type="checkbox"/> Prehistoric             | <input type="checkbox"/> Engineering            | <input type="checkbox"/> Religion/Philosophy | <input type="checkbox"/> Other (Specify) _____ |
| <input type="checkbox"/> Historic                | <input checked="" type="checkbox"/> Industry    | <input type="checkbox"/> Science             | _____  |
| <input type="checkbox"/> Agriculture             | <input type="checkbox"/> Invention              | <input type="checkbox"/> Sculpture           | _____  |
| <input checked="" type="checkbox"/> Architecture | <input type="checkbox"/> Landscape Architecture | <input type="checkbox"/> Social/Humanitarian | _____  |
| <input checked="" type="checkbox"/> Art          | <input type="checkbox"/> Literature             | <input type="checkbox"/> Theater             | _____  |
| <input type="checkbox"/> Commerce                | <input type="checkbox"/> Military               | <input type="checkbox"/> Transportation      | _____  |
| <input type="checkbox"/> Communications          | <input type="checkbox"/> Music                  |  |  |
| <input type="checkbox"/> Conservation            |   |  |  |

STATEMENT OF SIGNIFICANCE

The Arts and Industries Building of the Smithsonian Institution, constructed in 1879, is the best preserved example in the United States of 19th-century "world's fair" or "exposition" type architecture, in spite of the fact that it was not constructed as part of a fair. It was built to house the international exhibits left over from the Philadelphia Centennial Exhibition of 1876, and was designed intentionally in the manner of the Philadelphia Centennial buildings by the architectural firm of Cluss and Schulze. It reflects the three principal requirements of this type of architecture: to enclose and cover a very large area; to present a tasteful, dramatic, and pleasing exterior; and to be inexpensive to construct. Beginning with the Crystal Palace Exhibition of 1851 in London, exhibition architecture provided a proving ground throughout the late-19th century for structural and stylistic innovations which were often subsequently adopted into the architectural mainstream. Being temporary in nature, very few of these structures have outlived the celebration that created them. The Arts and Industries Building has survived because it was built as an addition to a museum facility with an ongoing function.

The Arts and Industries Building of the Smithsonian Institution was erected between 1879 and 1881 on the Mall on the East side of the original Smithsonian Institution Building. After the Philadelphia Centennial exhibition closed at the end of 1876, a Permanent Exhibition Company was formed to keep open the main building there covering 18 acres of exhibits in 1877. This company was forced to close after a couple of years of existence, however. Most of the foreign exhibits were sent to the Smithsonian Institution. They were immediately stored in the D.C. Armory Building, at the corner of what is now Independence Avenue and 7th Street, S.W. Thirty-three of the forty nations which had exhibits at Philadelphia gave their entire exhibits to the U.S. government. They expected the United States to place their gifts on permanent display in Washington.

The Board of Regents of the Smithsonian requested funds from Congress in January 1877 to erect a new museum building to house this collection. Accompanying the original bill were architectural plans for the new building designed by Gen. Montgomery Meigs, similar in style to those used at the Philadelphia Exhibition. The building was to be fireproof - with concrete floors and walls of brick with a steel skeleton. The bill authorizing the building was passed by Congress in early 1879. The final plans were drawn by the Washington architectural firm of Cluss and Schulze, based on the 1877 plans submitted by Meigs. Gen. Meigs was appointed

SEE INSTRUCTIONS

9. MAJOR BIBLIOGRAPHICAL REFERENCES

Minutes and Correspondence (unpublished) of the Building Committee for the National Museum, 1879-1881. Smithsonian Archives. Rathburn, Richard, "The United States National Museum: An Account of the Buildings Occupied by the National Collections, "Report of the U.S. National Museum Under the Direction of the Smithsonian Institution, for the Year Ending June 30, 1903, Washington, D.C., Government Printing Office 1905.

10. GEOGRAPHICAL DATA

LATITUDE AND LONGITUDE COORDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY				O R	LATITUDE AND LONGITUDE COORDINATES DEFINING THE CENTER POINT OF A PROPERTY OF LESS THAN TEN ACRES							
CORNER	LATITUDE		LONGITUDE		LATITUDE		LONGITUDE					
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds			
NW	0	'	"	0	'	"	38°	53'	13"	77°	1'	29"
NE	0	'	"	0	'	"						
SE	0	'	"	0	'	"						
SW	0	'	"	0	'	"						

APPROXIMATE ACREAGE OF NOMINATED PROPERTY: 2.25 acres

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE:	CODE	COUNTY	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE

11. FORM PREPARED BY

NAME AND TITLE:  
W. Brown Morton III, Architect, Historic Sites Survey

ORGANIZATION: O.A.H.P., National Park Service DATE: 4/6/71

STREET AND NUMBER:  
801 19th Street, N. W.

CITY OR TOWN: Washington STATE: District of Columbia CODE:

12. STATE LIAISON OFFICER CERTIFICATION

NATIONAL REGISTER VERIFICATION

As the designated State Liaison Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service. The recommended level of significance of this nomination is:

National  State  Local

Name \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

I hereby certify that this property is included in the National Register.

\_\_\_\_\_  
Chief, Office of Archeology and Historic Preservation

Date \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
Keeper of The National Register

Date \_\_\_\_\_

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 (Number all entries)

7. Description Continued page 1

walls (they are covered with lean-to roofs).

The four facades of the building are basically symmetrical. The north or main facade has a central entrance, bordered by a tall arched framework of Ohio sandstone. Above this main entrance is the 55 foot high gable end of the north nave, with a stone plate with the inscription "National Museum, 1879" and surmounted by an allegorical group of statuary representing "Columbia" protecting "Science" and "Industry." The central female figure stands with her arms outstretched; below her are two seated females. The left seated female is "Arts and Sciences" - reading a book while a large owl sits at her feet. The right seated female is "Science" holding a hammer and surveying instrument. The north tower rises 85 1/2 feet (to the top of the finial).

The pavilions on the four corners of the building are about 40 feet square and 36 1/2 feet high. The roofs of the pavilions are rather flat while the tower roofs (center of each outer wall) are very steep. The pavilions consist of three stories plus a basement. The first two floors are each lighted by four large arched windows while the third floor has three small windows grouped in the center of each side. A large lantern skylight crowns the roof of each pavilion.

The top of the building consists of a maze of angles and slopes formed by the various roofs. The highest roof is that of the dome of the rotunda. Next in height are the roofs of the courts and great halls or naves. The roofs of the courts are mounted with large square lanterns while the nave roofs have plain hip roofs the same height as the courts - with elongate lantern skylights in the middle. The lowest pitched roofs are those covering the ranges. The roof line is even more varied due to the erection of additional small skylights and ventilators. Most of these were installed to provide additional light after the balconies were constructed in 1890's.

The poor quality of roof construction was the worst feature of the building since corners were cut to conserve funds. The roofs of the ranges were covered with tin - while the rest of the surface was covered with slate. The slates were nailed to small pieces of wood and fitted into L shaped pieces of iron and laid directly on the framework. The interior of the roofs were then plastered directly. The entire interior framework of the roof was left uncovered for economy. The roofs were supported by iron trusses which resulted in many leaks due to contraction and expansion of the iron beams. By 1900 the weak iron trusses had to be reinforced with steel rods.

The erection of balconies in the building, 1896-1902, provided an additional 25,828 square feet of floor space. The balconies were of simple construction, with plain iron pillars and girders, brick archways and cement floors. The width of the balconies vary from 10 to 14 feet. Their height is 16 feet above the floor. These galleries were erected after Congress failed

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to provide a new building for the Smithsonian Institution in 1896.

The main details of the exterior walls consist of Victorian brickwork. The walls consists of red brick laid in black mortar. There are numerous courses of black brick and a quantity of cream colored bricks laid in courses and designs to relieve the monotony. Another design was laid in blue bricks which were later painted black. The base of the exterior walls consists of a course of granite. The window sills, copings and other details are of gray Ohio sandstone. The blue bricks have since been restored and cleaned.

The building was erected with sparse interior decorations. The walls were originally painted gray. In 1883 the first 12 feet of the interior were painted maroon since it was felt that color would best harmonize with mahogany exhibit cases. In 1902 the first 15 feet of the interior walls were painted a light red. The upper walls were then also painted a deep ivory and the ceilings a lighter ivory. The only original painted decoration in 1881 were stenciled figures on the walls of the rotunda and over the archways at the inner ends of the main halls. In 1902 the decorations of the rotunda consisted of olive on the bottom half of the walls and ivory above. The upper half of these rotunda walls was decorated with stencil decorations.

In the center of the rotunda was placed an octagon shaped granite fountain base, 20 feet in diamter. The original plaster cast of Crawford's "Freedom" statue was placed in the center of the basin on a low pedestal. This statue did not come to the Smithsonian until December 1890, when it was found in the basement to the Capitol Building.

The building originally had four entrances, one on each side. Today the main entrance remains on the north side, facing the Mall. The east entrance is now used for deliveries. The other two entrances are now closed. A small door in the N.W.

A basement under the main building was not built due to lack of funds. Small cellars were constructed under three of the pavilions however - S.W. pavilion for heating equipment, and N.W. and N.E. pavilions for storage. In 1901 an underground tunnel was constructed connecting the A and I Building with the Smithsonian Institution Building. This passageway is still used today by the staff.

The lighting of the building was probably its most advanced feature. The need to have numerous windows to light exhibits resulted in the maze of towers and projections on the roof. The ranges adjacent to the outer walls are lined with tall windows. The higher inner courts and naves have both skylights and clerestory windows. The naves also receive light from the large windows between the central towers. The towers and pavilions are also well lighted. All of the windows originally consisted of glazed double panes of glass - to retain heat in the winter. In the summer, ventilation was provided by pivoting sash windows and roof ventilators. Electric lights were installed in the

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7. Description

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lecture hall (N.W. Range) in 1881 for evening meetings. The building was not completely wired for electric lights until 1901-1903.

Due to the lack of a basement in the building, numerous members of the Smithsonian staff became ill with severe colds during the 1880's. In 1888 an investigation was undertaken after 10 staff members working in the building had died. The complete replacement of all wooden floors in the 1890's helped to correct the dampness which had been common in the 1880's.

Few if any major changes have been made to the Arts and Industries Building since 1902. During the late 1960's and during 1970 the N.W. Pavilion was restored on the interior to its original appearance of 1881. Both the first and second floors were refitted with wooden interior shutters and with Victorian furniture and carpets. Most of the original woodwork in this pavilion was also refinished and restored.

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8. Significance Continued page 1

consulting engineer for the building.

Ground was broken for the building on April 17, 1879. The following progress in the construction of the building was made: the roof was finished April 1880, plaster work finished July 1880, wooden floors were laid in 1880 in the ranges of the building, and marble tile floors were laid in the rotunda in 1881.

The final report of the Building Committee of the National Museum Building, in which served the Secretary of the Smithsonian, Spencer F. Baird, M.C. Meigs, Wm. T. Sherman, and Peter Parker, in January 1882, gives the total cost of the building as \$315,400. The cost of construction was less than three dollars per square foot - the cheapest building ever erected by U.S. government of a permanent nature.

Part of the building was in use by the Smithsonian in 1880. The first public use of the unfinished building was for the inaugural ball of President Garfield on March 4, 1881. It soon became apparent that the major fault of the building was the poor construction of the roof. The roof covering caused constant leaks and the roof framework warped under the weight of heavy snows. The wooden floors had to be replaced with cement floors in the ranges. Between 1897 and 1902 Congress authorized \$31,000 for the erection of balconies throughout much of the building (and skylights) in order to enlarge the exhibit areas. An extensive "Balcony" was erected in the S.E. corner of the building to form an actual second floor, which is today used for office space. The last of the wooden floors were replaced between 1891 and 1900 by cement and terrazzo pavement which consisted of small irregular pieces of marble laid in cement.



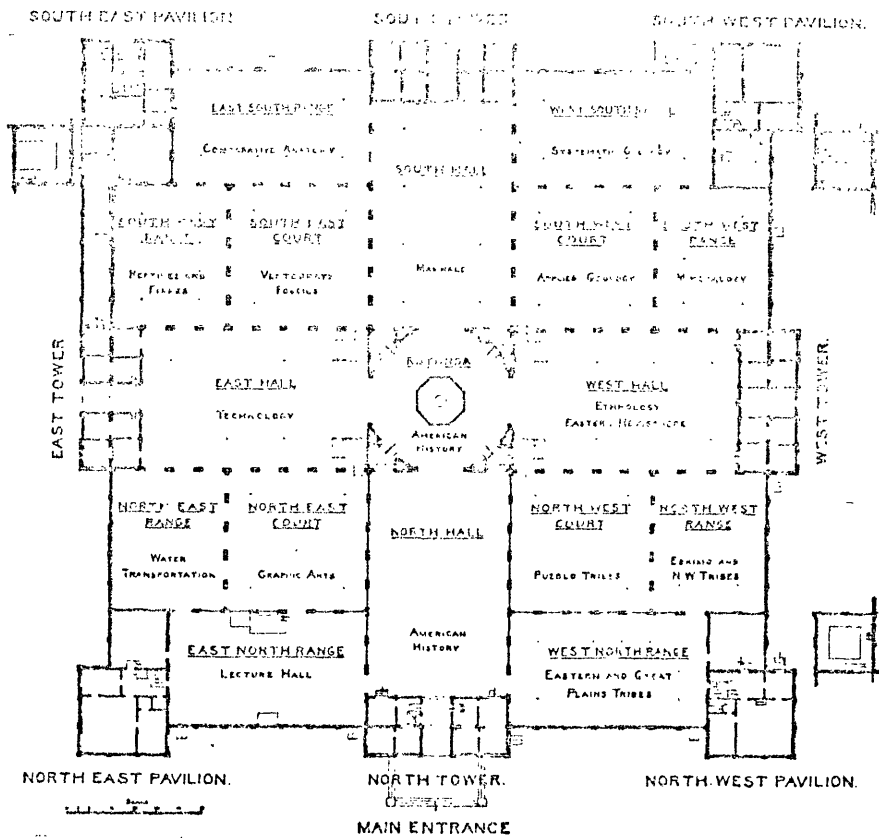
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**Arts and Industries Building of the Smithsonian Institution  
Ground Floor Plan**



PLAN OF MAIN FLOOR, NATIONAL MUSEUM BUILDING.