Theme: Americans at Work 1 Invention

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UNITED STATES DEPARTM COF THE INTERIOR NATIONAL PARK SERVICE

#### NATIONAL REGISTER OF HISTORIC PLACES **INVENTORY -- NOMINATION FORM**

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#### SEE INSTRUCTIONS IN HOW TO COMPLETE NATIONAL REGISTER FORMS TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

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## **1** NAME

HISTORIC JAMES HALL'S OFFICE

AND/OR COMMON

Suns	hine School						
2 LOCATION	J						
STREET & NUMBER							
	Lincoln Park		NOT FOR PUBLICATION				
CITY, TOWN			CONGRESSIONAL DISTRICT				
	Albany	VICINITY OF					
STATE	New York	CODE <b>36</b>	Albany				
3 CLASSIFIC			Arbany	<u> </u>			
CATEGORY	OWNERSHIP 🛷	STATUS	PRES	INTUSE			
DISTRICT			AGRICULTURE				
STRUCTURE	вотн	WORK IN PROGRESS		PRIVATE RESIDENC			
SITE	PUBLIC ACQUISITION	ACCESSIBLE	ENTERTAINMENT	RELIGIOUS			
OBJECT	IN PROCESS	XYES: RESTRICTED	GOVERNMENT	SCIENTIFIC			
	BEING CONSIDERED	YES: UNRESTRICTED	INDUSTRIAL	TRANSPORTATION			
		N0	MILITARY	OTHER:			
NAME STREET & NUMBER City CITY, TOWN	of Albany Hall		STATE				
Albar	ıy	VICINITY OF	New York				
COURTHOUSE.	<b>I OF LEGAL DESCR</b> ETC. Albany County Cou						
STREET & NUMBER	Eagle Street betw	een Columbia and P	ine Streets				
CITY, TOWN			STATE	·····			
	Albany		New York				
<b>5 REPRESEN</b>	TATION IN EXIST	ING SURVEYS					
TITLE							
TITLE None		FEDERALS					
None		FEDERALS	STATECOUNTYLOCAL				
DATE None		FEDERALS	STATECOUNTYLOCAL				



# 7 DESCRIPTION

CONDITION CHECK ONE	CHECK ONE
EXCELLENTDETERIORATEDUNALTERED XGOODRUINS X_ALTERED FAIRUNEXPOSED	X_ORIGINAL SITE MOVED DATE

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The building which functioned as James Hall's office is located in Albany's Lincoln Park. The building was constructed in approximately 1852. The architects were Andrew Jackson Downing and Calvert Vaux. The building is a one story brick Italianate villa that distinctly resembles the building of the same style in Downing's <u>The Architecture of Country</u> <u>Houses</u> (New York, 1969, p. 286). As far as is known James Hall's Office is one of a very limited number of extant buildings that were definitely designed by Downing and Vaux during their brief period of collaboration from 1850 to Downing's death in 1852. The building thus possesses considerable architectural merit.

The data of paleontology and geology consists of rocks and fossils. Any paleontologist requires extensive facilities for his collections. James Hall was no exception. As a leading 19th century paleontologist he collected fossils from numerous sources. The majority came from New York while others came from the Midwest and far West. By 1850 his collection had grown to the point that he required space for its storage and an office for himself and his assistants. In 1851 or 1852 Hall built such a building. It was, in the words of his biographer, ". . . a red brick retreat in which he assembled all the personnel and paraphenalia of his work."<sup>1</sup> After completing the office Hall's family moved into another dwelling on the property. In the 1880's he built an elaborate house near the office. Geology however was apparently his entire life. He devoted literally all his time to the subject and this may have been the reason for his estrangement from his family. In any case, during many years, according to John Clarke, who was an assistant to Hall, the red brick office was his real home. "Here he worked and slept and here his associates labored."<sup>2</sup> In Hall's time the office consisted of one large room with galleries for his collections and thousands of drawings. There was also a study framed in books. Just off the large library or office was Hall's bedroom, which was little more than a cell with an iron cot, wash hand stand, looking glass, a small table with a spirit lamp and teakettle, and a shotgun on the wall."<sup>3</sup>

The office was the center of Hall's life from 1852 to 1885, when the State government insisted that he move into an official government building. Nevertheless Hall retained the office and continued to work there until his death in 1889.

Sometime between 1898 and 1916 the city of Albany acquired ownership of the building. In 1916 the Geological Survey of American placed a plaque on the (continued)

<sup>1</sup>John M. Clarke, James Hall of Albany, (Albany, 1921), p. 236. <sup>2</sup><u>Ibid</u>., p. 237. <sup>3</sup><u>Ibid</u>., p. 411.

## 8 SIGNIFICANCE

PERIOD	AR	EAS OF SIGNIFICANCE CH	IECK AND JUSTIFY BELOW	
PREHISTORIC	ARCHEOLOGY-PREHISTORIC	COMMUNITY PLANNING	LANDSCAPE ARCHITECTURE	RELIGION
1400-1499	ARCHEOLOGY-HISTORIC	CONSERVATION	LAW	SCIENCE
1500-1599	AGRICULTURE	ECONOMICS	LITERATURE	SCULPTURE
1600-1699	ARCHITECTURE	EDUCATION	MILITARY	SOCIAL/HUMANITARIAN
1700-1799	ART	ENGINEERING	MUSIC	THEATER
<u>X</u> 1800-1899	COMMERCE	EXPLORATION/SETTLEMENT	PHILOSOPHY	TRANSPORTATION
1900-	COMMUNICATIONS	_INDUSTRY	POLITICS/GOVERNMENT	OTHER (SPECIFY)
		INVENTION		
SPECIFIC DAT	ES 1852-1898	BUILDER/ARCH	HITECT Calvert Vaux a Andrew Jackson	

#### STATEMENT OF SIGNIFICANCE

From approximately 1830 to 1860 the major interest of American science was laying out the natural history map of the United States. In three short decades, George Daniels writes, "The major geological formations were discovered, most of the flora and fauna were classified, points of latitude and longitude were determined, and the basic meterological and climatic data were made known."1 The principal institutional instruments employed in drawing the map were geological surveys sponsored by both the federal government and the States. New York furnished the model for the State geological surveys when in 1821, Amos Eaton surveyed Rensselaer County. In 1835 New York decided to survey the entire State. One of the geologists chosen for this task was an energetic and ambitious young man named James "Within ten years," two historians of American geology wrote, Hall. "James Hall became the survey's chief surveyor and was launched on a career that would make him one of the most influential, the most hated, and most admired of American scientists."<sup>2</sup> By the time of his death in 1898, James Hall had become a patriarch of American geology.

#### Life

James Hall was born September 12, 1811, in Hingham, Massachusetts. His family was poor. Unable to attend one of the better private schools, Hall received his education in the local public schools. Fortunately a teacher recognized Hall's potential talents and by means of private instruction he prepared Hall to enter the Rensselaer School (later Rensselaer Polytechnic Institute) at Troy, New York. At Rensselaer Hall came under the influence of Amos Eaton, one of the country's leading geologists and an enthusiastic exponent of the value of a scientific education. In addition to Eaton, a young instructor named Ebenezer Emmons, who would later become a nationally recognized geologist, was also on the Rensselaer faculty. Both men were responsible for Hall's decision to make geology his lifework. While a student, Hall spent the summers on field excursions with Emmons and by the time he graduated in 1832 he had mastered the basics of his chosen discipline.

(continued)

 <sup>1</sup>George H. Daniels, <u>Science in American Society</u> (New York, 1971), p. 205.
<sup>2</sup>Carroll L. Fenton and Mildred A. Fenton, <u>The Story of Great Geologists</u>, (New York, 1945), p. 150.

# 9 MAJOR BIBLIOGR. HICAL REFERENCES

Clarke, John M. James Hall of Albany, Geologist and Palaeontologist, (Albany, 1921).	
Daniel, George M. Science in American Society, A Social History, (New York, 1971).	
Fenton, Carroll L. and Mildred A. Fenton, The Story of Great Geologists,	
(New York, 1945).	
Merrill, "James Hall," Dictionary of American Biography, 8, (New York, 1932).	
Merrill, George P. One Hundred Years of American Geology, (New York, 1969).	

## **10 GEOGRAPHICAL DATA**

ACREAGE OF NOMINATED PROPERTY <u>less than one a</u>cre UTM REFERENCES

VERBAL BOUNDARY DESCRIPTION

					* #
LIST A	LL STATES AND COU	NTIES FOR PROPER	TIES OVERLAPPING	STATE OR COUNT	Y BOUNDARIES
STATE		CODE	COUNTY		CODE
STATE		CODE	COUNTY		CODE
	REPARED BY	7			
NAME / TITLE	James Sheire,	Historian			
ORGANIZATION				DATE	
	Historic Site	s Survey, Nat:	ional Park Serv	vice	7/9/76
STREET & NUMBI				TELEPHO	NE 202-523-5464
CITY OR TOWN				STATE	
	Washington, D	.C. 20240			
2 STATE H	IISTORIC PR	ESERVATIC	N OFFICER (	CERTIFICA	TION
			F THIS PROPERTY WI		
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hereby nominate criteria and proce		ision in the National	Register and certify the		6 (Public Law 89-665), I aluated according to the
TITLE		<u>, , , , , , , , , , , , , , , , , , , </u>		DATE	an a
R NPS USE ONL I HEREBY CER		PERTY IS INCLUDE	D IN THE NATIONAL F	REGISTER	
				DATE	
	FICE OF ARCHEOLO	GY AND HISTORIC I	PRESERVATION		
DIRECTOR, OF TEST:	THEE OF ANGLEDED			DATE	



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CONTINUATION SHEET James Hall's officeTEM NUMBER 7 PAGE 2

building pointing out that the office had been an "influential and active centre of geological science in this country." This plaque is still on the building. Sometime between 1916 and the present the office became a school, which function it still performs.

The original building is still extant, but major alterations have been made. The building has been extended on one side through the addition of two classrooms. During the summer of 1976 a new addition will be attached to the structure. This addition will cover approximately one half of the original front facade. It may compromise the integrity of this historic resource.

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After graduation Hall faced a problem common to young scientists of the period. He needed a job. Unfortunately, the market for geologists was very limited in 1832. To support himself Hall took a job in the library at the Rensselaer school. He then served as an assistant to Emmons while all the time waiting for an opportunity to employ his true talents. The opportunity came when Amos Eaton, through the influence of his patron Stephen Van Rensselaer, succeeded in obtaining for Hall a minor position with the newly organized geological survey of New York. At first Hall worked as an assistant to his friend Emmons (with whom he soon quarreled and ended the friendship). In 1836 when another geologist withdrew from the survey, Hall received his position. The appointment marked the beginning of an association with the geology of New York which would last for the rest of Hall's life.

In order to survey New York the State was divided into four districts. Hall was the youngest geologist on the survey and he was given the fourth district, because his superiors thought that this district was the least geologically interesting part of the State. Hall proved them wrong. Although the area was sparsely settled, and although exposures were rare and poor, Hall through sheer determination and hard work covered it entirely. From 1836 to 1841 the fourth district consumed all his energies and attention. In addition to the stratigraphy of the region and the nature of its rocks and minerals, Hall also studied its fossils. His exertions paid off. When Hall's report on the fourth district was published in 1843, it established his reputation as one of the country's leading stratigraphers and paleontologists. "It is right to say," Hall's principal biographer wrote, "that his five years of work on the fourth district constituted the dominating influence of his career and gave birth to the most excellent piece of field work he ever did."<sup>3</sup>

In 1843 the State of New York commissioned Hall to prepare a report on the paleontology of the State. State officials envisioned a thorough report, but little did they realize that the paleontology of the State would become Hall's major interest for the rest of his life and that his report would not be completed until 1894. Between 1843 and 1894 Hall produced eight volumes in thirteen parts on the paleontology of New York. The work is viewed as one of the classics in the history of American paleontology and geology.

From 1843 to 1898 Hall lived and worked in Albany. Because of his relationship with the New York geological survey and because of his outstanding work in (continued)

<sup>3</sup>John M. Clarke, James Hall of Albany, (Albany, 1921), p. 67.



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stratigraphy and paleontology, Hall attained a position of nationwide influence. Thanks to his expertise in conducting State geological surveys, other States called on him for advice and assistance. From 1855 to 1858 he served as State geologist of Iowa and from 1857 to 1860 he held a similar position with Wisconsin. Neither survey was successful. Neither Iowa nor Wisconsin appropriated adequate funds and, although Hall used his personal funds to support the surveys, the reports were disappointing. As a leading paleontologist Hall was called on to study fossils collected throughout the United States and especially those collected by federally sponsored geological surveys in the west.

In 1866 Hall was appointed director of the New York State Museum, and in 1893 the position of state geologist of New York was especially created for him. From 1843 to the 1870's he was active in geological circles and organizations. He was a founding member of the Association of American Geologists (1840) and he was active in the creation of the American Association for the Advancement of Science, which grew out of the Association of American Geologists and Naturalists in 1847. He served as the first president of the Geological Society of America and was vice-president of the International Congress of Geologists at Paris in 1878, at Bologna in 1881, and at Berlin in 1885. He functioned as president of the American Association for the Advance of Science in 1852. Hall was a charter member of the National Academy of Sciences, but he was not active in the Academy's affairs. Among his awards and honors were the Hayden Medal of the National Academy of Sciences of Philadelphia and the Wollaston Medal of the Geological Society of London. Among the honors Hall most treasured was his corresponding membership in the French Academy. At the time he was the only American so honored. He was also elected to other foreign scientific organizations.

In Hall's later years he gradually withdrew from public affairs and concentrated his energies on paleontology. The last years of his life were apparently lonely as he was estranged from his wife and four children. Hall worked to the last day of his life, dying August 7, 1898.

Work

In the history of geology in the United States James Hall is remembered for his work in stratigraphy, of which he is often called the father, and invertebrate paleontology. According to George P. Merrill, Hall's lifework lay almost wholly in these domains.<sup>4</sup>

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<sup>4</sup>George P. Merrill, "James Hall," <u>Dictionary of American Biography</u>, (New York, 1932), p. 136.



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Hall authored two major works in these fields. The first, <u>Geology of</u> <u>New York: Part Four, Comprising the Geology of the Fourth Geological</u> <u>District</u>, was published in 1843. This work, according to two of his admirers, ". . . set up what was known as the New York system and gave the first clear, logical account of America's early formations."<sup>5</sup> The work was essentially descriptive. It consisted of describing the stratigraphy of the area as well as the fossil remains. In the work Hall made a major contribution to the cataloguing and labeling of the geological structure of North America and it was this empirical data foundation which allowed later geologists to turn to more theoretical questions concerning the origin of the earth, its age, how it evolved, and the like.

Hall's major work is entitled <u>New York State Natural History: Paleontology</u>. The work consisted of eight volumes which were actually published in thirteen separate volumes. The study was published as each volume was completed between 1847 and 1894, a labor of 45 years. According to George P. Merrill, who wrote the definitive history of 19th century American geology, "His quartos on the New York paleontology are his monument. The casual observer is liable to see in him a biologist rather than a geologist, but until his later years he was a geologist. His studies were from the standpoint of one seeking to determine relations between the physical and biological conditions in order to solve problems of correlation. The great problems of geology, not those of biology, were uppermost in his mind."<sup>6</sup>

Not only was Hall's work of a consistently high quality but also he produced at a prodigious rate. In its entirety his collected works consist of fifteen quarto volumes comprising 4,539 pages and 1,081 page plates of fossils. As Merrill points out this is ". . . a record which never has been, and presumably never will be, surpassed in the annals of American geology."<sup>7</sup>

In addition to his work in stratigraphy and paleontology Hall also made another lasting contribution to American geology. He helped educate numerous men who in their later careers made lasting contributions to geology. According to all those who at one time or another worked as a Hall assistant, he was a demanding, highly contentious, and often simply cranky taskmaster. Nevertheless, he was an outstanding teacher who imparted to his assistants all he knew of the discipline. The list of the men who throughout the second half of the nineteenth century spent time working in the red brick office in Albany reads like the geology committee of the National Academy of Sciences.

5Fenton and Fenton, p. 151. 6George P. Merrill, One Hundred Years of American Geology (New York, 1969), p. 234. 7<u>Ibid</u>, p. 235.

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The list included men like Fielding Meek, the first student and later outstanding paleontologist, and Ferdinand Hadwen, the explorer of the West with the United States Geological Survey. It encompasses Charles Emmerson Beecher, O.C. Marsh's successor at Yale and an outstanding paleontologist, C.S. Processor, Charles Schuchert, distinguished Yale paleontologist, and Charles D. Walcott, among other accomplishments director of the United States Geological Survey and Secretary of the Smithsonian Institution. All agreed that, if the student could endure Hall's personality and style, and if he could live with Hall's obsession for priority in identifying fossils, he received an excellent training.

James Hall's life covered most of the 19th century. He personally witnessed the transition of American science from natural history to highly specialized physical and biological sciences. He knew personally all the great names of the period, men like Eaton and Agassiz. Perhaps the greatest compliment he ever received came from James Dwight Dana, America's greatest 19th century geologist. In the copy of his <u>Manual of Geology</u> which Dana sent to Hall, the former wrote, "To James Hall, without whom the geological history of the North American continent could not have been written."<sup>8</sup>

<sup>8</sup>Clarke, <u>James Hall of Albany</u>, p. 551.