Form No. 10-300 (Rev. 10-74) NATIONAL HISTORIC LANDMARK UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

Science & Invention

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NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

DATE ENTERED

		COMPLETE APPLICAE		
NAME				
HISTORIC JO	oseph Henry House			
AND/OR COMMON				
	Joseph Henry House			
LOCATION	I			
STREET & NUMBER	Princeton U nive rsi	ty Campus		
			NOT FOR PUBLICATION	
CITY, TOWN	inceton	VICINITY OF	CONGRESSIONAL DISTR 5	ici
STATE		VICINITY OF	COUNTY	CODE
	w Jersey	34	Mercer	21
CLASSIFIC				
CATEGORY	OWNERSHIP	STATUS	PRES	ENTUSE
DISTRICT		XOCCUPIED	AGRICULTURE	MUSEUM
HUILDING(S)	X PRIVATE	UNOCCUPIED	COMMERCIAL	PARK
STRUCTURE	вотн	WORK IN PROGRESS	EDUCATIONAL	X_PRIVATE RESIDE
SITE	PUBLIC ACQUISITION	ACCESSIBLE	ENTERTAINMENT	RELIGIOUS
OBJECT	IN PROCESS	YES: RESTRICTED	GOVERNMENT	SCIENTIFIC
	BEING CONSIDERED	YES: UNRESTRICTED	INDUSTRIAL	TRANSPORTATIC
		_ _x NO	MILITARY	OTHER.
NAME	F PROPERTY	versity		
]	Nassau Hall			
CITY, TOWN			STATE	····
Pri	nceton —	VICINITY OF	New Jersey	الواصير المراجع المراجع المراجع المراجع المراجع
LOCATION	OF LEGAL DESCR	IPTION		
COURTHOUSE. REGISTRY OF DEEDS,	ETC.			
STREET & NUMBER	Mercer County Co	ourthouse		
	Market Street			
CITY, TOWN			STATE	
	Trenton		New Jersey	
REPRESEN	TATION IN EXIST	ING SURVEYS		
None				
DATE				
		FEDERAL	STATECOUNTYLOCAL	
		FEVERAL _	_STATECOUNTYLOCAL	
DEPOSITORY FOR	······			
DEPOSITORY FOR SURVEY RECORDS		FEUERAL _		



	CONDITION	CHECK ONE	CHECK ON	ie
X_EXCELLENT	DETERIORATED	UNALTERED	ORIGINAL SI	TE
GOOD	RUINS	XALTERED	XMOVED	DATE
FAIR	UNEXPOSED			

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The Joseph Henry House is located on the campus of Princeton University, just southwest of the intersection of Nassau and South Tulane Streets. The two story brick house has a gable roof and a five bay facade. The central doorway with transom and sidelights, is framed by a simple portico. On the north and south ends of the house there are a pair of porches which are slightly recessed from the front facade and which extend slightly past the rear facade, which supports a pent porch roof for the length of the second story.

The spacious house is used as the residence of the dean of men, and is enclosed by hedges on the east and west sides and is flanked by the Student Center on the south, and by Nassau Street on the north. The house has been moved three times from its original site.



PERIOD	AREAS OF SIGNIFICANCE CHECK AND JUSTIFY BELOW			
PREHISTOPIC	ARCHEOLOGY-PREHISTORIC	COMMUNITY PLANNING	_LANDSCAPE ARCHITECTURE	RELIGION
1400-1499	ARCHEOLOGY-HISTORIC	CONSERVATION	LAW	X_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)
		X_INVENTION		

SPECIFIC DATES 1797-1878

BUILDER/ARCHITECT

STATEMENT OF SIGNIFICANCE

An American scientist of the first rank, Joseph Henry produced a series of major inventions in the field of electromagnetism, including the electromagnet, the first electric motor, and the telegraph. In addition to his influence as an inventor, as the first secretary of the Smithsonian Institution, Henry established the Institution as a major scientific center in American and abroad.

The Joseph Henry house has been moved to the campus of Princeton University, where Henry taught for 14 years. The two-and-a-half story brick house serves as the residence of the dean of students.

HISTORY

Henry's scientific ability manifested itself quite sometime after his birth in Albany New York, on December 17, 1797. When about sixteen, the young Henry exhibited a keen interest in the stage. So attracted was he by the theater, that he became the leader of some local amateur thespians and wrote two plays. Fate, in the form of an accident, forced him to remain home for some time, however, and it was then that he read a book owned by a roomer, Lectures on Experimental Philosophy, Astronomy and Chemistry Intended Chiefly for the Use of Young People. That book, as Henry said, "opened to me a new world of thought and enjoyment."¹ Abandoning drama, Henry enrolled in the Albany Academy. After his graduation, he became a professor of mathematics and natural philosophy at the school in 1826. Harriet L. Alexander became his bride four years later, by whom Henry was to have six children.

When he became a teacher at the Albany Academy, Henry undertook the investigation of electro-magnetism. His independence of thought is shown by this step, for almost nothing had been done in electricity since the era of Benjamin Franklin. The mysteries of magnetism claimed his attention for some time, when one night he abruptly announced to a friend, "Tomorrow I shall make a famous experiment."² True to his word, Henry the next day devised the electromagnet that is so widely used today. An electromagnet contains a core of soft metal, around which are wrapped numerous coils of insulated wire. Henry's contribution to the magnet, the insulated wire and more than a single coil of wire, so improved the magnet that it could lift 600 pounds with the current of only one cell. In 1830, Henry produced an induced current by using his magnet, almost a year before Michael Farady's famous experiment.

9 MAJOR BIBLIOGRAPHICAL REFERENCES

S. Sydney Bradford, "Joseph Henry House," National Survey of Historic Sites and buildings, 3/23/64.
bullatings, 5/23/64.
Roger Burlingame, March of the Ironmen (New York, 1940).
Thomas Coulson, Joseph Henry: His Life and Work (Princeton, 1950).
Donald Egbert, Dictionary of American Biography (Princeton, 1947).
Bernard Jaffe, Men of Science in America (New York, 1958).

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY <u>less than 1 acre</u> UTM REFERENCES

A 1 18 5 2 8 9 7 0	4 14 6 16 31 81 0	в	
ZONE EASTING	NORTHING	ZONE EASTING	NORTHING

VERBAL BOUNDARY DESCRIPTION Beginning at the walkway to the west of the Henry House and the campus fence which runs parallel to Nassau Street on the southern side of the street, proceed south along said walkway 250', thence east 100', thence north 250', thence west 100' to the point of origin.

These boundaries enclose the Henry House with the limits of lawn and grounds which are immediately contingent with the residence.

LIST ALL STATES AN	ID COUNTIES FOR PROPER	TIES OVERLAPPING ST	ATE OR COUNTY BOUNDA	RIES
STATE	CODE	COUNTY		CODE
STATE	CODE	COUNTY		CODE
FORM PREPARE	D BY			
NAME / TITLE				
Richard	d Greenwood, Histor	cian, Landmark R	eview Task Force	
ORGANIZATION Historic	Sites Survey		DATE 6/5/75	
STREET & NUMBER			TELEPHONE	
1100 L. S	Street, NW.	2	02-523-5464	
CITY OR TOWN		······································	STATE	
Washing	ton		D.C.	
NATIONAL	ALUATED SIGNIFICANCE O STA	TE	LOCAL	
As the designated State Historic hereby nominate this property criteria and procedures set forth FEDERAL REPRESENTATIVE SIGN	for inclusion in the National by the National Park Service	Register and certify tha		
TITLE	1.ANDMA	EKC)	DATE	
OR NPS USE ONLY I HEREBY CERTIFY THAT TH	IS PROPERTY IS INCLUDE	IN THE NATIONAL RE	GISTER DATE HZ	1/20
DIRECTOR OFFICE OF ARCI	Laborely		DATE SUNC 1	5,197
KEEPER OF THE NATIONAL	RECTREM ONAL HISTOR	IC		

LANDMARKS)

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The importance of Henry's electromagnet was recognized by the inventor, but he did not pursue its application. He did build an electric motor, the world's first, which incorporated his magnet, but he looked upon that invention as only a toy. Similarly, he developed an electric telegraph, both at Albany and later at Princeton, but he also failed to exploit its commercial possibilities. Samuel F.B. Morse, with Henry's help, made the telegraph a practical thing, as Henry admitted in later years.

Henry's failure to capitalize on his inventions, both while at Albany and subsequently, conformed to his general character. He never regarded anything in science or invention as his own. A much broader view governed him; and as he said at one time:

I have sought, . . . , no patent for inventions, and solicited no remuneration for my labors, but have freely given their results to the world; expecting only in return to enjoy the consciousness of having added by my investigations to the sum of human knowledge.³

Fame he also ignored. A tireless experimenter, with a simplicity of manner, a receptiveness to new ideas, and a genuine desire to cooperate with other scientists, Henry in his unique way contributed more to the world's knowledge of electricity than any other American.

This unusual American was called to Princeton University, then the College of New Jersey, in 1832. Henry taught there for the next fourteen years becoming a popular instructor. At the same time, he continued his own work, as one author says, without collaborators and without generous support from a foundation. The lack of assistants and foundation support did not impede his work, for while at Princeton he produced the electromagnetic relay (which really made the electric telegraph possible), paved the way for the development of the electrical transformer and discovered the self-induced current. Electricity only took part of his time, for he also studied problems concerning solar physics, the sun, metals and the velocity of projectiles. In the summer of 1844, for example, he spent most of his time blowing soap bubbles in an attempt to unlock the secrets of films and surface tension.

Despite Henry's concentration on his investigations, his fame spread in both America and Europe. It was no surprise then, when he was chosen as the first secretary of the new Smithsonian Institution on December 3, 1846. In accepting the job, Henry knew his own work would suffer, but he felt the call of duty and the desire to stimulate American scientific effort. For the next thirty-two years

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he headed the Smithsonian, making it a scientific institution of the first rank. He not only concerned himself with the institution's development in America, but sought to make it an active force in the international scene. As leader of the Smithsonian, for example, he urged scientific bodies to catalog their papers. Thus, when the Royal Society of London produced its first catalog in 1864, the Society attributed the work to Henry's urging of the publication of such catalogs.

When Henry died on May 13, 1878, he had put the Smithsonian Institution on a sound basis. Because of that accomplishment and his host of inventions, Henry rightfully occupies a leading position in the ranks of famous American scientists.

¹ Quoted in Bernard Jaffe, <u>Men of Science</u>, (New York, 1958), 186.

² Quoted in ibid, 188.

³ Quoted in ibid., 197.