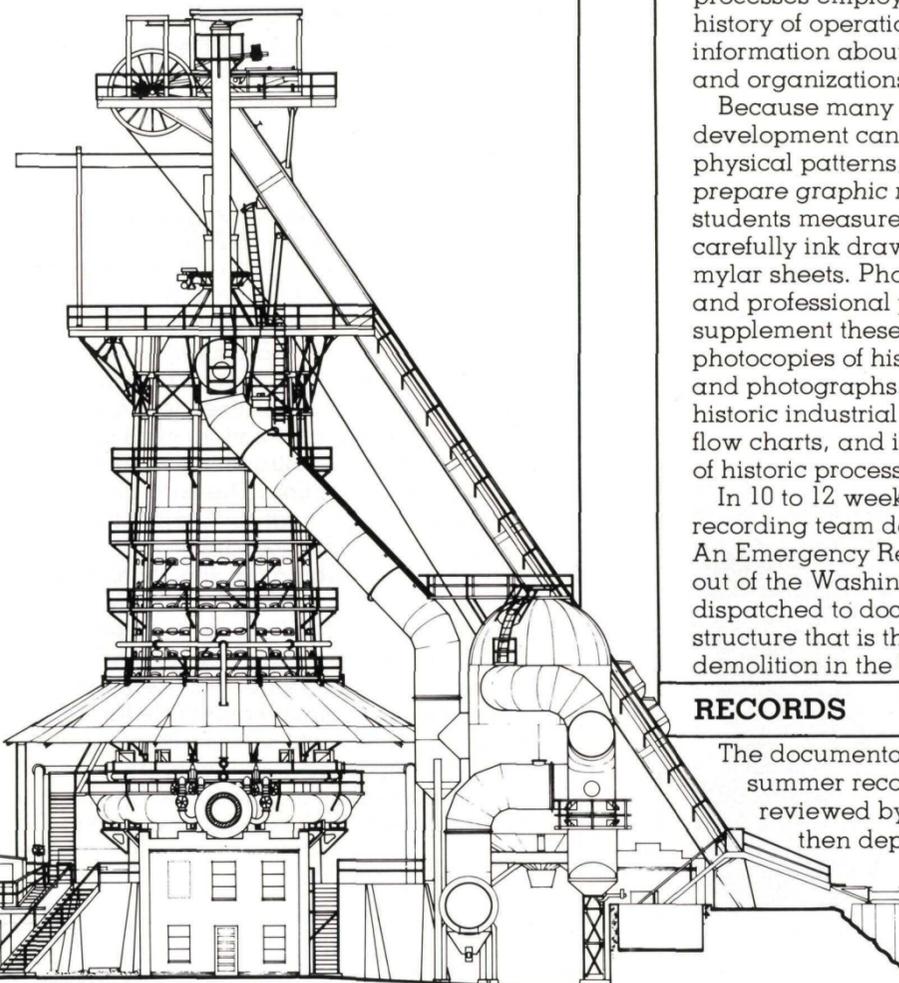


Gloss Blast Furnaces, Birmingham, Alabama, 1902, 1927-31, 1942-64, J. Boucher, photographer



Gloss Blast Furnaces: elevation of Furnace # 1 looking northeast, J. Y. Hunt, delineator



Recording Project

The HAER staff in Washington reviews each completed inventory and then organizes summer recording projects to more fully document those sites deemed of greatest historical interest. Operating on a shared-funds basis with state or local organizations, summer recording projects are conducted by field teams staffed by professional and student historians, architects, and engineers. The historians and engineers prepare historical reports on each site using a variety of primary and secondary sources, including the physical structure itself. Reports include a description of the processes employed in construction, a history of operation, and relevant information about important individuals and organizations.

Because many aspects of technological development can be seen in changing physical patterns, it is also important to prepare graphic records. Architectural students measure the structure and then carefully ink drawings of the structure on mylar sheets. Photogrammetric plates and professional photographs supplement these drawings, as do photocopies of historical maps, drawings, and photographs. HAER documents historic industrial processes by producing flow charts, and in some instances, films of historic processes still in use.

In 10 to 12 weeks, a HAER summer recording team documents 10 to 15 sites. An Emergency Recording Team works out of the Washington office and can be dispatched to document a site or structure that is threatened with demolition in the United States.

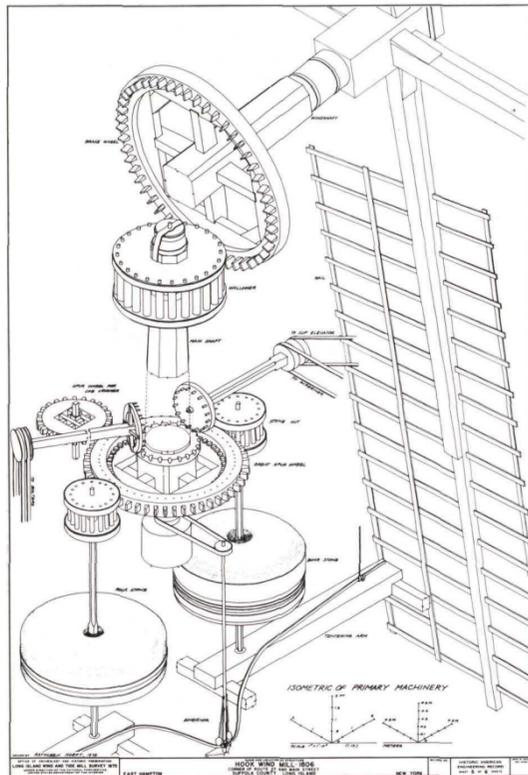
RECORDS

The documentation produced by summer recording teams is edited and reviewed by the Washington staff and then deposited in the Division of

Prints and Photographs at the Library of Congress. A duplicate set is provided to the cosponsor of a project. These records are completely reproducible and are as permanent and durable as possible.

The public is encouraged to utilize these records. They may be published without restriction, although the courtesy of a credit line is requested. Copies of new records not yet deposited in the Library of Congress may be obtained from the Historic American Engineering Record, Heritage Conservation and Recreation Service, U.S. Department of the Interior, Washington, D.C. 20240.

HAER cooperates with organizations planning to assemble special exhibits. It will loan photographs and drawings to museums, libraries, universities, and professional groups.



Hook Windmill, East Hampton, New York, 1806, K. Hoelt, delineator



Smithfield Street Bridge, Pittsburg, Pennsylvania, 1883, 1891, J. Boucher, photographer

PUBLICATIONS

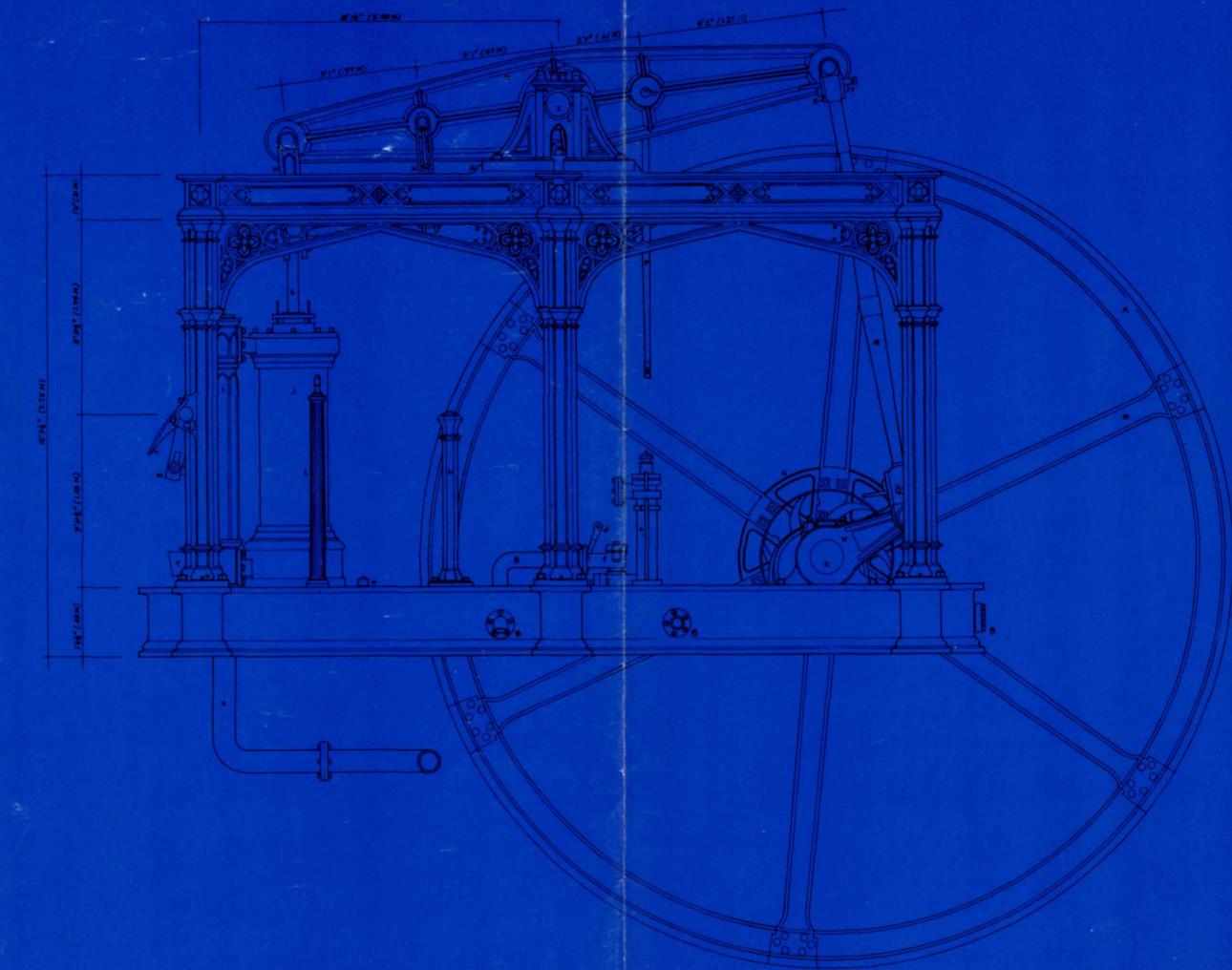
Engineering and technology have made important contributions to America's development. The HAER collection in the Library of Congress and inventory files in HAER's Washington office are open to all who wish to use them. HAER also believes it is important to publish and widely distribute the results of its work whenever funds are available. Besides a catalogue of HAER collections, the office publishes the results of both its inventory and recording projects. Inventories are printed in an inexpensive format and distributed to the project cosponsor; they are also available to interested individuals. Recording project publications, which include most of the written and graphic materials developed by these summer projects, are published by HAER or by established private presses, and are available for purchase.

THIS LEAFLET WAS PREPARED BY THE OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION

U.S. DEPARTMENT OF THE INTERIOR HERITAGE CONSERVATION AND RECREATION SERVICE WASHINGTON, D.C.

Historic American Engineering Record

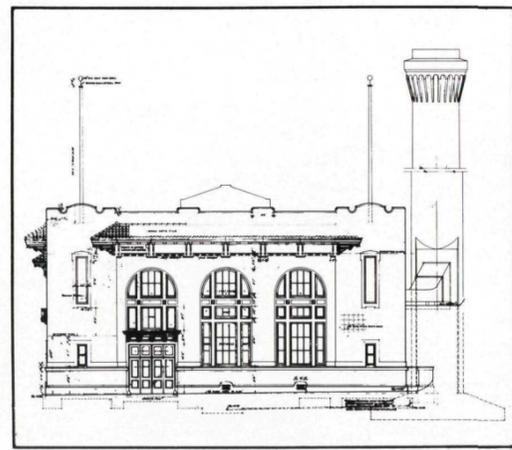
Hacienda Azucarera La Esperanza Sugar Mill Engine, Puerto Rico, 1861, R. Freeman, delineator



Historic American Engineering Record

America's vast distances, abundant natural resources, and varied climates have helped foster an extraordinarily rich and diverse history of technical invention and innovation. The surviving physical structures represent this history and stand as a testimony to the industry, creativity, and imagination of America's engineers and builders. These structures vividly illustrate the physical development of the United States and document its common technological heritage.

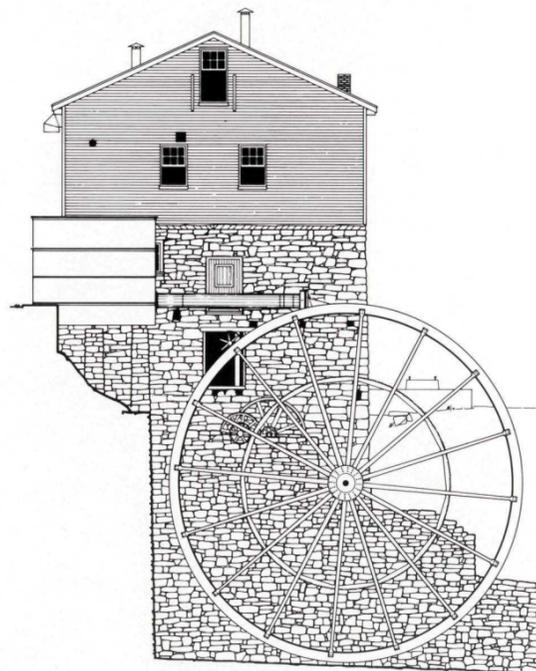
Historians have long recognized the impact of technology on American life, but only since the passage of the Historic Preservation Act of 1966 have preservationists, historians, architects, engineers, and the general public shown a deep interest in the engineering heritage of the United States. Despite this increasing interest, the survival of historical sites, structures, and objects related to engineering is threatened by neglect and by technological change. Once rendered obsolete or



San Francisco Fire Department Pumping Station 2: original drawing, transverse section at the condenser pit, San Francisco, California, 1912

uneconomical, these historic resources usually are altered, destroyed, or simply abandoned and left to decay.

To meet this problem, the Historic American Engineering Record (HAER) was established in 1969 by a tripartite agreement among the National Park Service, the American Society of Civil Engineers (ASCE), and the Library of Congress. In 1978, HAER and other programs in the Office of Archeology and Historic Preservation left the National Park Service to become part of a new Heritage Conservation and Recreation Service within the Department of the Interior. HAER reflects the Federal Government's official recognition of our technological heritage and commitment to document, understand, and preserve the engineering and industrial structures that are part of our past. Combining skills of historians, architects, engineers, and industrial archeologists, the program concentrates on historic engineering and industrial sites and structures. HAER



Shepherd's Mill, East elevation, Shepherdstown, West Virginia, circa 1739, Belmont Freeman, delineator.



Part of New York Grain Elevator Terminal, Jersey City, New York, 1922, D. Sharps, photographer

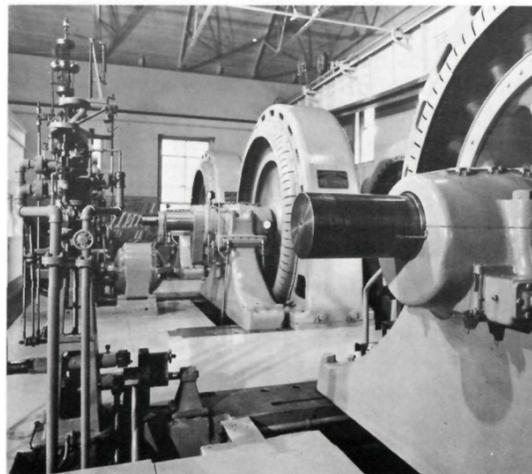
prepares archival documentation on important structures and industrial processes throughout the United States and its territories, both to encourage their preservation and to make sure that if they are lost, a permanent record will remain. Engineering and other professional societies provide counsel and some financial assistance on selected projects. The Library of Congress houses and maintains the records and makes them available to the general public as research material.

THE PROGRAM

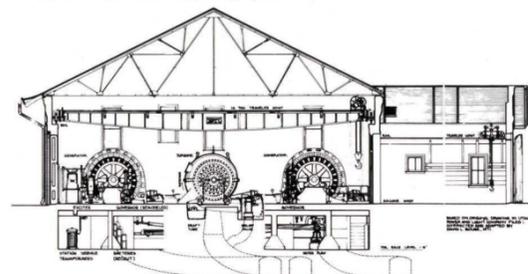
HAER is a division of the Office of Archeology and Historic Preservation, Heritage Conservation and Recreation Service, United States Department of the Interior. Staffed by engineers, architects, and historians, HAER conducts its nationwide program of documentation and publication in cooperation with state and local governments, historical agencies, professional societies, universities, and preservation groups. Documentation projects and publications focus on individual sites or systems, usually organized by geographic and political area or by industrial type. HAER thus records individual sites and structures—for example, a particular dam, factory, or lighthouse—as well as technological networks. The latter might be a railroad or canal that may include

many structures spread over a large area.

Highest priority is given to sites of major significance that are in danger of demolition. In many cases this documentation by HAER may be the only lasting record of a site's existence.



Telluride Power Company: Olmsted Hydroelectric Plant, interior, Orem, Utah, 1903-04, J. Boucher, photographer



Telluride Power Company: Olmsted Hydroelectric Plant: transverse section, D. I. Bouse, delineator

CRITERIA FOR SELECTION

The historic engineering and industrial sites documented by HAER provide firsthand evidence of the processes that have helped to shape American society.

To qualify for HAER documentation, a site or system must meet certain criteria. It must be:

- An engineering invention or innovation of importance to the economic or industrial development of an area, a

region, or the nation.

- Significant in the history of a particular branch of engineering.
 - Designed or built by famous engineers, mechanics, architects, or master builders.
 - Typical of an early engineering or industrial structure commonly used throughout an area for a specific purpose.
 - The sole remaining example or a representative example of a specific type.
- Because HAER documents sites of both local and national importance, it captures the variety and vitality of American technology. It documents a small town's windmill or early iron bridge, as well as a large city's mammoth textile mills or steel plants. In all projects, emphasis is placed on process as well as on structure, and those sites that retain original machinery are usually given preference.

DOCUMENTATION

HAER documents sites and structures on two levels. The HAER INVENTORY locates and identifies systems and sites in a given geographic area. Inventory projects thus provide a comprehensive method of site identification and a context within which to determine the historical



Mountain Dell Dam, Salt Lake City vic., Utah, 1916, 1925, J. Boucher, photographer



Lowell Canal System: construction of Pawtucket Dam, Lowell, Massachusetts, photocopy of photograph owned by proprietors of the Locks and Canals on Merrimack River

significance of a site. The RECORDING PROJECT prepares extensive documentation for sites selected from the inventory that are judged significant to the engineering and industrial history of the area.

Inventory

An inventory is the first step in the documentation process. HAER joins with state and local organizations to conduct a review of an area's historic industrial and engineering resources. Agencies or individuals, under HAER supervision, complete a standardized card for each site located. This card is used to record basic descriptive information, such as location, date of construction, ownership, and physical condition. The card also carries several photographs and a short paragraph, with bibliographic references, describing the site, its history, and its significance. Inventory cards completed in the field are kept in the HAER office and included in the HAER computerized data retrieval system; all inventory materials are available for public use. Duplicate sets of inventory cards are deposited with inventory project cosponsors and with the appropriate State Historic Preservation Office.