

**Guide to the Warren E. Hill Specifications Book and Plans,  
1862-1865  
MS0423**

**The Mariners' Museum Library  
at  
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Processed by Jay Moore, 2011

## DESCRIPTIVE SUMMARY

**Repository:** The Mariners' Museum Library  
**Title:** Warren E. Hill Specifications Book and Plans  
**Inclusive Dates:** 1862-1865  
**Catalog number:** MS0423  
**Physical Characteristics:** 1 specifications book and two ship plans  
**Language:** English  
**Creators:** Hill, Warren E., d. 1908; Continental Works (Brooklyn, N.Y.)

## BIOGRAPHICAL SKETCH

Warren E. Hill was a draftsman, engineer, and long-time assistant to Thomas Fitch Rowland, owner of Continental Works in Green Point, Long Island (now part of Brooklyn, NY). Hill oversaw the construction at Continental Works of John Ericsson's first floating steam battery, later named *Monitor* by Ericsson, in 1861-1862. The specification book in this collection indicates that he may have also worked on the ironclads of the *Passaic* class and on the light-draft monitor *Cohoes* for the Union Navy. When the business was incorporated in 1887 as the Continental Iron Works, Hill was named one of its vice-presidents. Warren Hill became president of Continental Iron Works after the retirement of Thomas F. Rowland and served in that capacity until his death in 1908.

Little is known of Hill. He was married and lived on Washington Street in Brooklyn. He had at least one daughter, Ethel, who was married in October 1899 to Tracy Peck, Jr., of New Haven, CT. Professionally and socially active, Hill was a member of the New England Society in the City of Brooklyn, the Brooklyn Urban League, the American Society of Mechanical Engineers, and the Society of Naval Architects and Marine Engineers. He was the author of at least one publication, an 1894 article on welded steel steam pipes. Hill was also a collector of paintings, having lent several of his artworks to the Brooklyn Union League for an art show in 1893. A sale of paintings from his estate in January 1911 was the subject of a story in the *New York Times*.

## SCOPE AND CONTENT

The collection is comprised of two blueprint copies of presentation plans and a notebook, entitled "Specification of an Iron Clad Shot Proof Steam Floating Battery to be constructed with Steam Machinery and Turret complete and ready for Service by J. Ericsson and Associates." The notebook is signed inside the front cover "Warren E. Hill, Continental Works Green Point or 15 Cranberry Street, Brooklyn". It is dated June 1, 1862. The plans are of U.S. Steam Battery *Monitor*.

Despite the fact that the dust cover names the notebook, "U.S.S. 'Monitor' Specifications," the descriptive details of the specifications themselves pertain not to *Monitor*, but rather to ironclads of the *Passaic* class, some of which were also built at Continental Works. Pasted onto first page of the book is a small linen plan showing the outline of a *Passaic*-class hull line and armor belt. The vessels to which the specifications applied are noted on p. 65 of the notebook: *Passaic*, *Montauk*, *Kaatskill*, *Patapsco*, and

*Weehawken*. The specifications are dated March 28, 1862, and correspond with the issuance of a contract to Ericsson and his associates on March 14 for 6 more ironclads. The sections of the specifications are as follows: General dimensions; Keel; Stem; Stern post; Frames, Vertical Cross, Floors, etc.; Stanchions; Fore and Aft center keelsons; Fore and Aft floor stringers; Athwartship bulkheads; Engine keelsons; Deck-beam knees and shelves; Plating of hull; Thickness of iron; Armor shelf; Anchor well; Propeller well; Riveting; Caulking; Bulwarks or armor timbers; Deck; Deck hatches; Deck plating; Rope stanchions and ringbolts; Anchor and capstan; Rudder and stern arrangement; Motive machinery; Vacuum engine; Boilers; Smoke pipe; Turrets; Pilot house; Steering wheel; Side armor; Fresh water condenser; Propeller & stern arrangements; and Spare articles, tools, etc.

Also present in the notebook are extracts from the specifications for the light-draft ironclad *Cohoes*, built by Continental Works in 1865 but never commissioned.

Though *Monitor* is not the subject of the specifications, it is present throughout as a reference point to the builders. On page 43, for example, the specifications make clear that the “arrangement of the motive engine, condenser, air-pump & other parts will be exactly as in the U.S. Gunboat Monitor.”

The collection is organized into 2 series: Specifications Book; and Plans. It is arranged by material type.

## **ADMINISTRATIVE INFORMATION**

### **Accession Number**

A2007.01

### **Accession Date**

2007

### **Restrictions**

The collection is open to all researchers.

### **Publication Rights**

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### **Preferred Citation**

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### **Other Finding Aids**

The blueprints in the collection are more fully described in the Plans database, maintained by the Archives department.

## RELATED MATERIALS

The Thomas F. Rowland Collection, 1861-1910, MS0376, consists of an important body of 47 plans for US Steam Battery *Monitor*, the contract between the Battery Associates and Continental Works for the building of *Monitor*, a patent for a lathe to bore holes in turrets, and a 1903 photo album depicting the facilities of the Continental Iron Works. As Rowland was the owner of the Continental Works, this collection is related by provenance to the present collection. The originals for Hill's blueprint plans of *Monitor* are located in MS0376.

## SERIES DESCRIPTION

### **Series 1: Specifications Book, 1862-1865.**

Organized into a single box. The series contains the specifications book for several ironclads of the *Passaic* class constructed by Continental Works in 1862. The book also includes extracts from the specifications for the light-draft monitor *Cohoes*, built at the Works in 1865.

### **Restrictions**

Due to its extreme fragility, physical access to the specifications book is restricted. It is to be accessed only in extraordinary circumstances. Physical access, when warranted, must be overseen by archives staff.

Researchers will generally have access only to the electronic reproduction in pdf format.

### **Series 2: Plans, 1862.**

Organized into polyester sleeves. The series consists of 2 blueprint plans of US Steam Battery *Monitor*: a general plan, and a transverse section through the turret.

## FILE GUIDE

**BOX 1** Specifications book, 1862-1865

### **FILE DRAWER A43:A1**

**Sleeve 1** Plans, 1862  
General plan for US Steam Battery *Monitor*, Scale: 3/8" = 1 ft.  
[MS00423.01]

**Sleeve 2** Plans, 1862  
Transverse section through turret of US Steam Battery *Monitor*, Scale: 1/2"  
= 1 ft. [MS00423.02]

## SOURCES CONSULTED

Baxter, James Phinney, III. *The Introduction of the Ironclad Warship*. 1933. Classics of Naval Literature. Annapolis, MD: Naval Institute Press, 2001.

- “The Continental Iron Works.” MarineLink.com: *Maritime Reporter* and *Marine News* Magazines Online. <http://www.marinelink.com/history/the-continental-iron-works> (accessed Jan. 12, 2012).
- “Unusual Sale of Paintings: Canvases by American and Foreign Artists from Private Collections.” *New York Times*, January 15, 1911. <http://query.nytimes.com/mem/archive-free/pdf?res=F00E12F93C5517738DDDAC0994D9405B818DF1D3> (accessed January 12, 2012).
- Loan exhibition of paintings, Union League Club, December 14th, 15th and 16th, 1893.* Union League Club of Brooklyn (New York, N.Y.). New York: Union League Club, 1893. An exhibition catalog.
- “Peck-Hill.” *New York Times*, October 28, 1899. <http://query.nytimes.com/mem/archive-free/pdf?res=F30B13FC3E5414728DDDAF0A94D8415B8985F0D3> (accessed January 19, 2012).
- Hill, Warren E. “Welded Steel Steam Pipes.” *Journal of the American Society for Naval Engineers* 6, no. 4 (1894): 731-735.

## **SUBJECTS**

Monitor (Ironclad : 1862)  
Passaic (Ironclad : 1862)  
Cohoes (Ironclad : 1865)  
Armored vessels-Specifications  
Naval architecture-Designs and plans