

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

PHO 677175

FOR NPS USE ONLY
RECEIVED MAR 28 1979
DATE ENTERED MAY 29 1979

NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY -- NOMINATION FORM

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

1 NAME

HISTORIC

Staats Mill Covered Bridge

AND/OR COMMON

Tug Fork Covered Bridge

2 LOCATION

SR 40

STREET & NUMBER

Route 40

NOT FOR PUBLICATION

CITY, TOWN

Staats Mill

VICINITY OF

CONGRESSIONAL DISTRICT

Third

STATE

West Virginia

CODE

54

COUNTY

Jackson

CODE

035

3 CLASSIFICATION

CATEGORY

- DISTRICT
- BUILDING(S)
- STRUCTURE
- SITE
- OBJECT

OWNERSHIP

- PUBLIC
- PRIVATE
- BOTH
- PUBLIC ACQUISITION**
- IN PROCESS
- BEING CONSIDERED

STATUS

- OCCUPIED
- UNOCCUPIED
- WORK IN PROGRESS
- ACCESSIBLE**
- YES: RESTRICTED
- YES: UNRESTRICTED
- NO

PRESENT USE

- AGRICULTURE
- COMMERCIAL
- EDUCATIONAL
- ENTERTAINMENT
- GOVERNMENT
- INDUSTRIAL
- MILITARY
- MUSEUM
- PARK
- PRIVATE RESIDENCE
- RELIGIOUS
- SCIENTIFIC
- TRANSPORTATION
- OTHER:

4 OWNER OF PROPERTY

NAME

West Virginia Department of Highways

STREET & NUMBER

1900 Washington Street, East

CITY, TOWN

Charleston

VICINITY OF

STATE

West Virginia

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE,
REGISTRY OF DEEDS, ETC.

Jackson County Courthouse

STREET & NUMBER

Court Street

CITY, TOWN

Ripley

STATE

West Virginia

6 REPRESENTATION IN EXISTING SURVEYS

TITLE

DATE

FEDERAL STATE COUNTY LOCAL

DEPOSITORY FOR
SURVEY RECORDS

CITY, TOWN

STATE

7 DESCRIPTION

CONDITION

CHECK ONE

CHECK ONE

EXCELLENT

DETERIORATED

UNALTERED

ORIGINAL SITE

GOOD

RUINS

ALTERED

MOVED DATE _____

FAIR

UNEXPOSED

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The Staats Mill Covered Bridge, constructed in 1887 across the Tug Fork of Big Mill Creek in Jackson County, West Virginia, is an impressive and historically significant example of a late 19th century timber covered bridge constructed on the patented Long truss system.

Constructed by H. T. Hartley, a prominent local builder of the era, the Staats Mill Covered Bridge has a total length of 97 feet, excluding the overhang of the eaves, and has a clear span between abutments of 85 feet 11 inches. The main structure of the Covered Bridge consists of two large timber trusses framed on the system patented by Stephen Long in 1830. The distinctive feature of Long trusses are the "X" braced diagonals in each of the panels. In the case of this covered bridge, there are 11 such panels; each 8 feet 7 inches long and 14 feet 3 inches deep. The timber work on the trusses is beautifully executed and is probably the most noteworthy part of the entire structure.

The bridge floor was originally framed with transverse timber floor beams supported at the panel points of the truss. These beams carries longitudinal timber stringers surmounted by a timber deck. Throughout the years the bridge has undergone a number of modifications. The latest, and most extensive, was carried out in 1971 when the entire deck was cut away and a new three span steel girder bridge was constructed inside the original truss work. During this modification two steel bents were also added in mid-stream to support the three span steel girders. A laminated 2 by 4 inch timber deck was installed on the steel floor beams and provided with an asphalt overlay as a wearing course.

Like most 19th century timber bridges, the Staats Mill bridge is, of coarse, covered. Vertical siding covers the entire truss work on both sides of the bridge except for a space under the eaves which acts as a clerestory to provide light to the inside of the bridge. The bridge was apparantly painted, until recently, a traditional barn red. The Staats Mill Bridge is covered with a simple pitched roof sherardized with a standing seam metal surface supported on timber girters and rafters. Because of the large exposed side area, a horizontal truss was usually incorporated in the roof structure of covered bridges to resist lateral wind loads. These trusses traditionally consisted of transverse timbers and diagonal cross bracing firmly secures by wooden pegs, called "treenails," and wedges. It is practically certain that such a bracing was part of the original Staats Mill Covered Bridge structure. However, all that remains today are loosely fastened diagonals that serve little purpose for resisting lateral loads. This lack of horizontal stiffness at the level of the eaves has caused the main trusses to lean somewhat out of the vertical.

The abutments consist of full height cut stone, done locally, which supports both the original trusses and the new steel girders. This masonry work is a handsome adjunct to the timber trusses, vertical siding and pitched roof of the bridge.

The Staats Mill Covered Bridge is an excellent example of 19th century covered bridges, planned and executed locally to serve the transportation needed of a growing agricultural area.

8 SIGNIFICANCE

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW				
<input type="checkbox"/> PREHISTORIC	<input type="checkbox"/> ARCHEOLOGY-PREHISTORIC	<input type="checkbox"/> COMMUNITY PLANNING	<input type="checkbox"/> LANDSCAPE ARCHITECTURE	<input type="checkbox"/> RELIGION	
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> ARCHEOLOGY-HISTORIC	<input type="checkbox"/> CONSERVATION	<input type="checkbox"/> LAW	<input type="checkbox"/> SCIENCE	
<input type="checkbox"/> 1500-1599	<input type="checkbox"/> AGRICULTURE	<input type="checkbox"/> ECONOMICS	<input type="checkbox"/> LITERATURE	<input type="checkbox"/> SCULPTURE	
<input type="checkbox"/> 1600-1699	<input checked="" type="checkbox"/> ARCHITECTURE	<input type="checkbox"/> EDUCATION	<input type="checkbox"/> MILITARY	<input type="checkbox"/> SOCIAL/HUMANITARIAN	
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> ART	<input checked="" type="checkbox"/> ENGINEERING	<input type="checkbox"/> MUSIC	<input type="checkbox"/> THEATER	
<input checked="" type="checkbox"/> 1800-1899	<input type="checkbox"/> COMMERCE	<input type="checkbox"/> EXPLORATION/SETTLEMENT	<input type="checkbox"/> PHILOSOPHY	<input checked="" type="checkbox"/> TRANSPORTATION	
<input type="checkbox"/> 1900-	<input type="checkbox"/> COMMUNICATIONS	<input type="checkbox"/> INDUSTRY	<input type="checkbox"/> POLITICS/GOVERNMENT	<input type="checkbox"/> OTHER (SPECIFY)	
		<input type="checkbox"/> INVENTION			

SPECIFIC DATES 1887 BUILDER/ARCHITECT H. T. Hartley, Builder

STATEMENT OF SIGNIFICANCE

The Staats Mill Covered Bridge is an excellent example of that unique American development, one of the great American contributions to structural engineering; the covered timber bridge.

When the Staats Mill Covered Bridge was constructed in Jackson County, West Virginia in 1887, it was only the latest of many such wooden structures to dot the countryside of West Virginia and the United States. Today, however, the Staats Mill Bridge, indeed, covered bridges in general, are rapidly becoming an "endangered species." In the past 25 years West Virginia has witnessed the disappearance of more than 40 covered timber bridges. Of this once plentiful, even common, genre of structures, only 18 remain in this state.

The Staats Mill community of Jackson County, West Virginia, was founded by the Staats family. Abraham Staats (1750-1826) and his wife Ann King Staats (1755-1811) were the progenitors of the Staats family in Jackson County. Abraham served in the Revolutionary War. Their son Cornelius served in the War of 1812 and married Ann Carney. They were the parents of Issac Staats, who built the first water powered mill on Tug Fork of Big Mill Creek at the site that came to be known as Staats Mill. The present covered bridge was built adjacent to the mill and near the store, both owned by Enoch Staats, the son of Issac Staats. Thus, the bridge site has played an important role in the history and development of Jackson County since the 18th century.

In 1887 the Jackson County Court, under the presidency of George W. Shinn, appointed Shinn, George I. Walker, and S.M. Rader to select a site for the proposed bridge over Tug Fork of Big Mill Creek. The bridge at Hardesty's Mill over Tug Fork was adopted as a model and the stone work was built by Quincy and Grim, local masons, at a cost of \$710.40. The wood superstructure was constructed by local builder H. T. Hartley for \$903.95, and Enoch Staats made the dirt fills for the approaches for the sum of \$110.00. The total cost of the Staats Mill Covered Bridge was \$1,788.35.

The bridge was constructed according to the Long System, patented by Stephen Long in 1830. For spans up to 100 feet Queen, King and multiple King Post trusses were popular in the Virginias. For longer spans the familiar Burr arch-truss system was the usual solution employed by the craft-trained bridge builders of the 19th century. However, several notable bridges were constructed with Long trusses and for spans over 100 feet these trusses were often combined with an arch to reduce deflections caused by loads, creep and shrinkage of the wood and movement of the joints.

It is not known why H. T. Hartley selected the Long system for the Staats Mill

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Bridge. In addition, he framed the bridge without the use of stiffening arches, despite the fact that the span was nearly 100 feet. The result was and is an outstanding example of a pure Long Truss covered bridge of notable span, executed by craftsmen of considerable skill. It's architectural beauty, as well as it's utility in providing transportation for the region, made the Staats Mill Covered Bridge a source of pride for the people of Jackson County and West Virginia.

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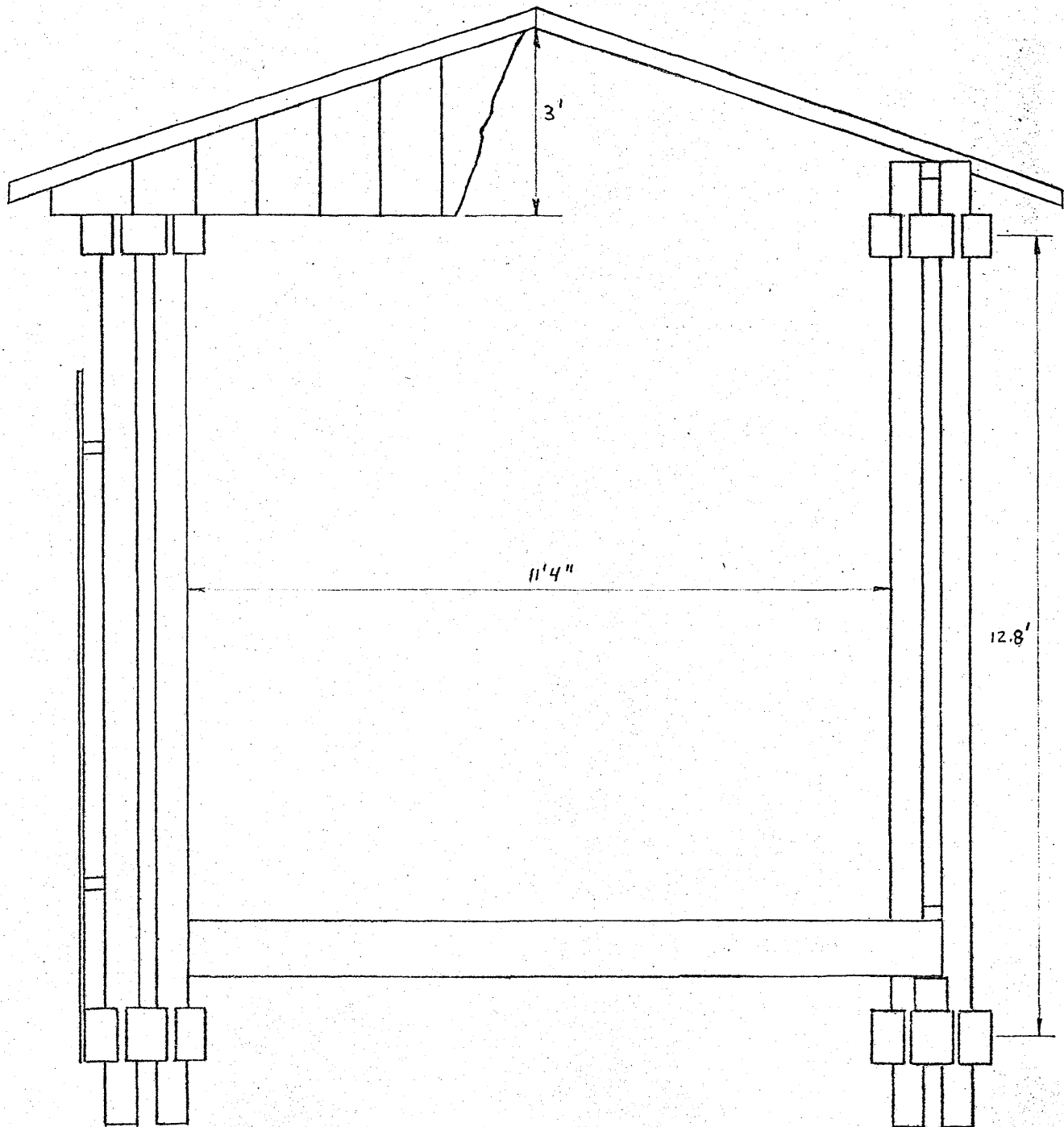
STAATS MILL COVERED BRIDGE, STAATS MILL, JACKSON COUNTY

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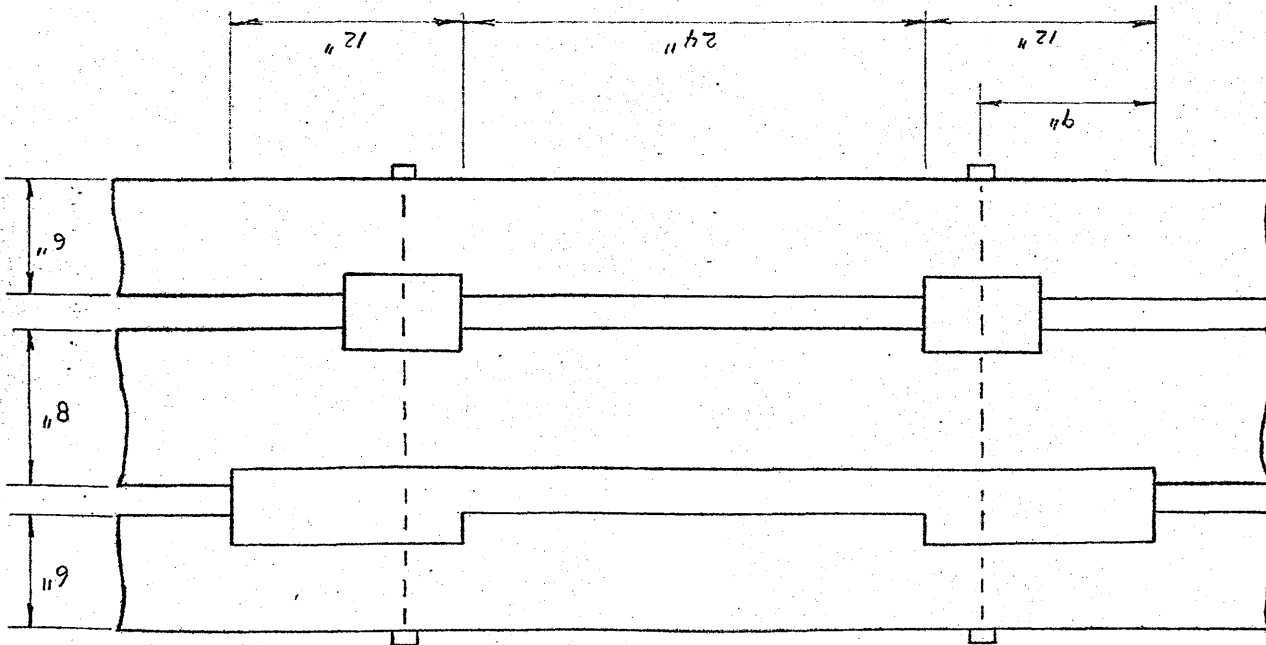
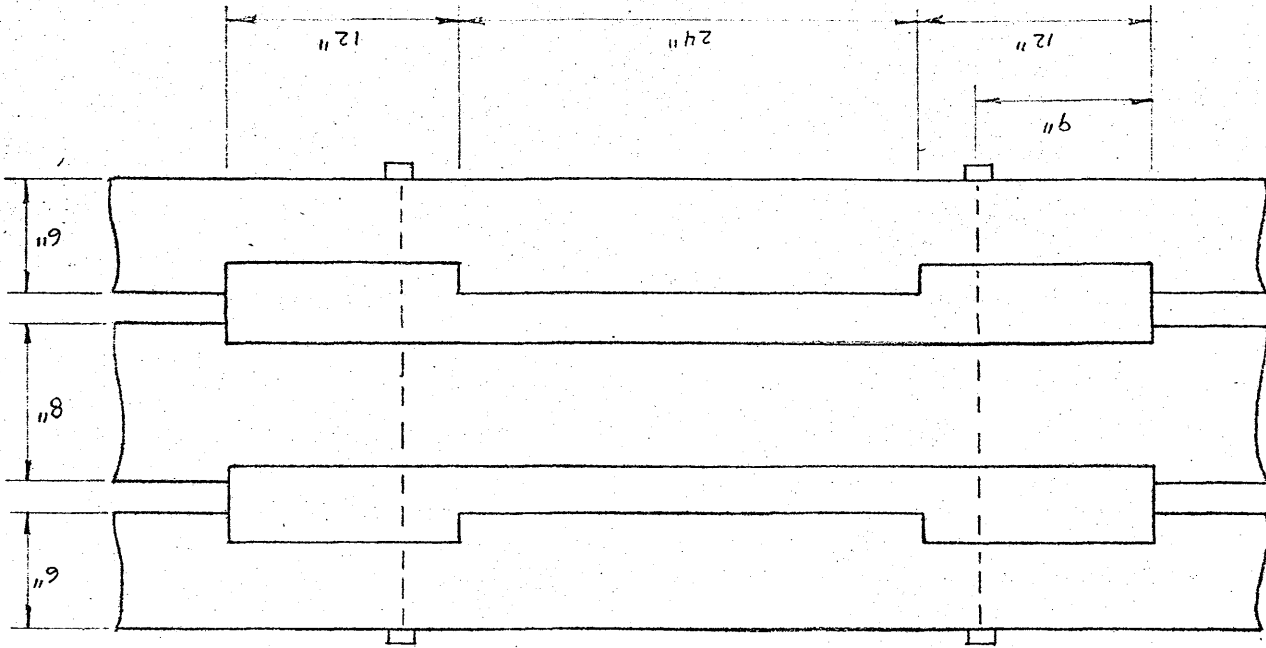
Maintaince Reports, Staats Mill Bridge, West Virginia Department of Highways.

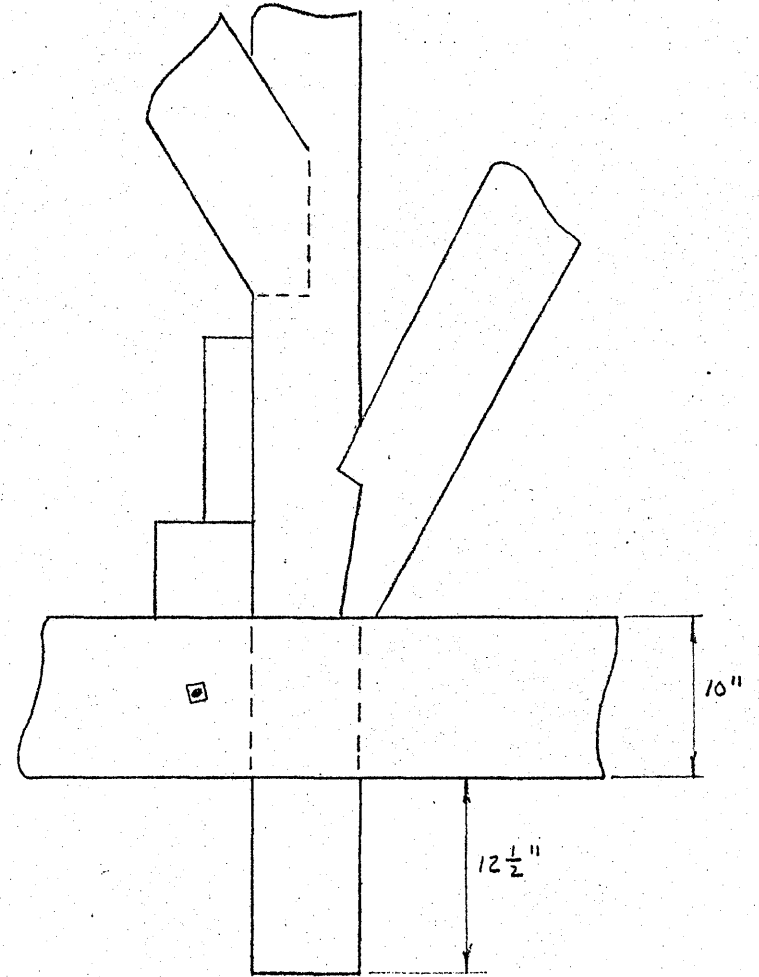
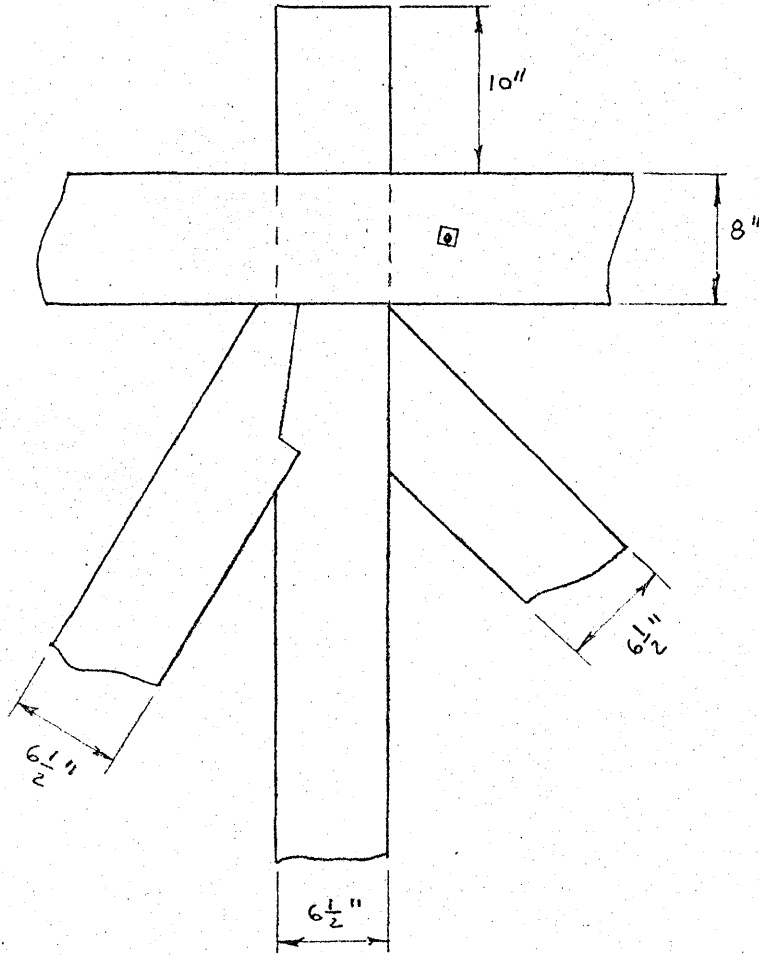
Report on Staats Mill Covered Bridge, U.S. Soil Conservation Service, 1978



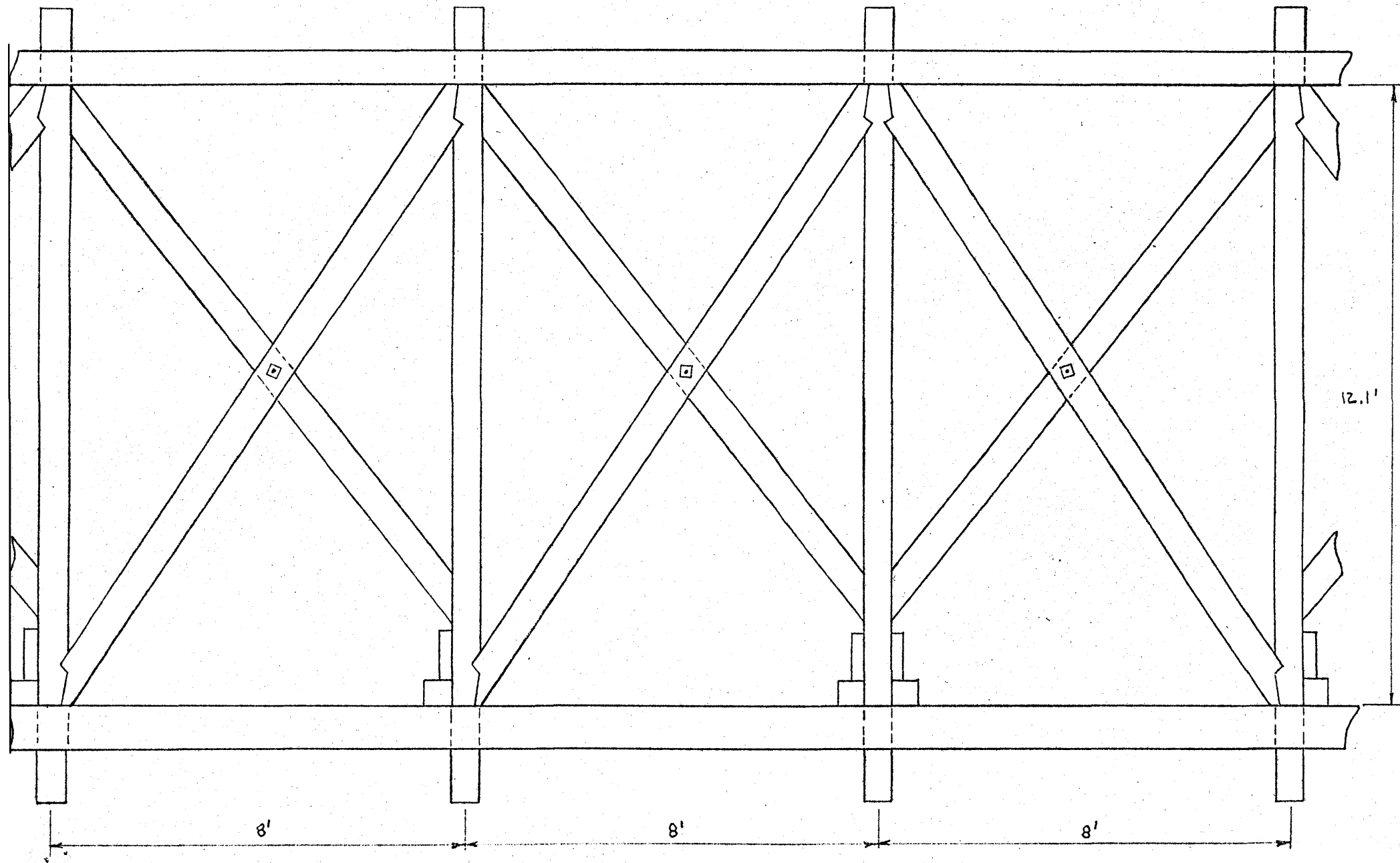
11. STAATS MILL COVERED BRIDGE

11. STAIRS WITH COVERED BRIDGE

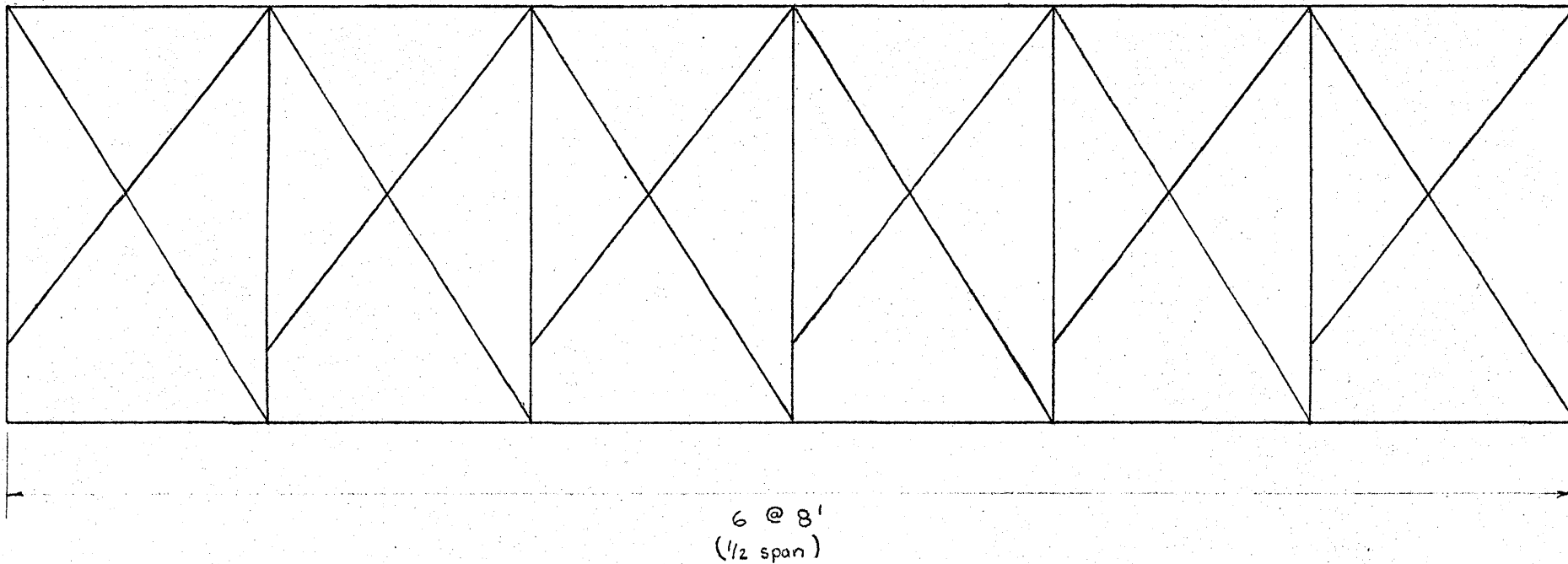




11. STAATS MILL COVERED BRIDGE



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