

PHO 689 475

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**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 Interlaken Mill Bridge

AND/OR COMMON

2 LOCATION

STREET & NUMBER Spanning^s the Pawtuxet River south-
of the Arkwright Mill complex in the village of Arkwright
in the northeastern corner of Coventry

CITY, TOWN

Coventry

VICINITY OF

#2 Honorable Edward Beard

STATE

Rhode Island

CODE

44

CONGRESSIONAL DISTRICT

COUNTY

Kent County

CODE

005

3 CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE
<input type="checkbox"/> DISTRICT	<input type="checkbox"/> PUBLIC	<input type="checkbox"/> OCCUPIED	<input type="checkbox"/> AGRICULTURE
<input type="checkbox"/> BUILDING(S)	<input checked="" type="checkbox"/> PRIVATE	<input type="checkbox"/> UNOCCUPIED	<input type="checkbox"/> MUSEUM
<input checked="" type="checkbox"/> STRUCTURE	<input type="checkbox"/> BOTH	<input type="checkbox"/> WORK IN PROGRESS	<input type="checkbox"/> COMMERCIAL
<input type="checkbox"/> SITE	PUBLIC ACQUISITION	ACCESSIBLE	<input type="checkbox"/> EDUCATIONAL
<input type="checkbox"/> OBJECT	<input type="checkbox"/> IN PROCESS	<input checked="" type="checkbox"/> YES: RESTRICTED	<input type="checkbox"/> ENTERTAINMENT
	<input type="checkbox"/> BEING CONSIDERED	<input type="checkbox"/> YES: UNRESTRICTED	<input type="checkbox"/> GOVERNMENT
		<input type="checkbox"/> NO	<input type="checkbox"/> INDUSTRIAL
			<input checked="" type="checkbox"/> TRANSPORTATION
			<input type="checkbox"/> MILITARY
			<input type="checkbox"/> OTHER:

4 OWNER OF PROPERTY

NAME

Arkwright Incorporated Attn.: Mr. Richard Bearse

STREET & NUMBER

Main Street

CITY, TOWN

Fiskeville, Cranston

VICINITY OF

STATE

Rhode Island 02823

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE,
REGISTRY OF DEEDS, ETC.

Coventry Town Hall

STREET & NUMBER

75 Main Street

CITY, TOWN

Coventry

STATE

Rhode Island

6 REPRESENTATION IN EXISTING SURVEYS

TITLE Coventry Preliminary Survey
Rhode Island Historical Preservation Commission
Historic American Engineering Record, R.I. Inventory

DATE

both surveys 1977-1978

FEDERAL STATE COUNTY LOCAL

DEPOSITORY FOR
SURVEY RECORDS

Rhode Island Historical Preservation Commission; Old Slater
Mill, Pawtucket, R.I.; HAER, Washington, D.C.

CITY, TOWN

STATE

7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
<input type="checkbox"/> EXCELLENT	<input type="checkbox"/> DETERIORATED	<input checked="" type="checkbox"/> UNALTERED	<input checked="" type="checkbox"/> ORIGINAL SITE
<input checked="" type="checkbox"/> GOOD	<input type="checkbox"/> RUINS	<input type="checkbox"/> ALTERED	<input type="checkbox"/> MOVED DATE _____
<input type="checkbox"/> FAIR	<input type="checkbox"/> UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The Interlaken Mill Bridge is located south of the mill buildings of Arkwright Incorporated on the Pawtuxet River in the northeastern corner of the town of Coventry. The bridge was built about 1885 to connect the new dye house and bleachery (1883) of the Interlaken Company on the north side of the river with the former Arkwright Mills (now demolished) on the south bank.

The Interlaken Mill Bridge is a Douglas and Jarvis Patent parabolic truss bridge. It is a pony, pin-construction, box-girder, lenticular truss bridge, consisting of a single span, 92 feet long, 18 feet, 9 inches wide, with a depth of truss of 11 feet, 3 inches. The term "lenticular" describes the bridge's distinctive lens-shaped appearance.

Each truss has six panels. The upper chord consists of sheet metal plates riveted together forming a box section. The lower chord consists of parallel wrought-iron bars pinned at 15-foot intervals from each other, to the vertical members and to hangers, with two bars located at each end panel.

The vertical members are lattice girders, pinned to the upper and lower chords. The diagonals are wrought-iron rods pinned to the upper and lower chords and tensioned by turnbuckles. The floor beams and plate girders are suspended from and pinned to the lower chord. The wooden deck rests upon lengthwise stringers placed upon the floor beams. The lower lateral bracing consists of six sets of two wrought-iron tie rods crossed diagonally forming an "X" shape connected at the pin locations. The bridge, resting on cut-stone abutments, carries a roadway as well as utility lines across the Pawtuxet River.

Although scaled down to one span, the Interlaken Mill Bridge replicates the principles and appearance of the five-span Aiken Street Bridge of 1883 in Lowell, Massachusetts, which is considered one of the finest late nineteenth century iron bridges in America.

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 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 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 c. 1885

BUILDER/ARCHITECT Berlin Iron Bridge Company

STATEMENT OF SIGNIFICANCE

The Interlaken Mill Bridge is the only lenticular truss bridge known to survive in Rhode Island.

The prefabricated metal truss bridge was an innovative engineering solution to the problem of spanning small rivers and streams during the last half of the nineteenth century. Such bridges were assembled from standard "shelf" components to match the specifications of local buyers. The lenticular or parabolic truss was designed and patented in 1878 and again in 1885 by William O. Douglas of New York.

The Interlaken Mill Bridge was built by the Berlin Iron Bridge Company of East Berlin, Connecticut, which had a virtual monopoly on this type of bridge. While the Berlin Iron Bridge Company held the patent rights to produce lenticular truss bridges, more than three hundred were erected all over the country--relatively few have survived.

The bridge was erected to connect the new dye house and bleachery of the Interlaken Company, on the north side of the Pawtuxet River, with the former Arkwright Mills on the south bank, which Interlaken, incorporated in 1883, had acquired. The Arkwright-Interlaken Company produced book cloths and Holland shades. They are now the country's largest producer of drafting cloth.

The bridge is in good condition, although in need of painting. It is not in use at present--the mills on the south bank have been demolished, as has the railway spur. Due to recent vandalism by motorcyclists, Arkwright Incorporated has erected gates at either end of the bridge preventing all access.

9 MAJOR BIBLIOGRAPHICAL REFERENCES

Plowden, David. The Spans of North America. 1974.

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY less than one

UTM REFERENCES

A	1,9	2,8,8	4,0,0	4,6	2,2	5,0,0	B						
	ZONE	EASTING		NORTHING			ZONE	EASTING		NORTHING			
C							D						

VERBAL BOUNDARY DESCRIPTION

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE	CODE	COUNTY	CODE
STATE	CODE	COUNTY	CODE

11 FORM PREPARED BY

NAME / TITLE

Vivienne Lasky, Consultant

ORGANIZATION

Rhode Island Historical Preservation Commission

DATE

October, 1978

STREET & NUMBER

150 Benefit Street

TELEPHONE

401-277-2678

CITY OR TOWN

Providence

STATE

Rhode Island 02903

12 STATE HISTORIC PRESERVATION OFFICER CERTIFICATION

THE EVALUATED SIGNIFICANCE OF THIS PROPERTY WITHIN THE STATE IS:

NATIONAL

STATE

LOCAL

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

STATE HISTORIC PRESERVATION OFFICER SIGNATURE

Richard R. Williams

TITLE

State Historic Preservation Officer

DATE

October 30, 1978

FOR NPS USE ONLY

I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER

Charles A. Brown
DIRECTOR, OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION

DATE

12-27-78

ATTEST:

Brian Alan Boyer
KEEPER OF THE NATIONAL REGISTER

DATE

12/21/78