

Henkin's Ford Bridge

CALD13

GENERAL DATA

structure no.:	181001.9	city/town:	3.0 miles east of Proctorville
county:	Caldwell	feature inters.:	Shoal Creek
		cadastral grid:	S8/9, T56N, R26W
		highway route:	County Road 181
		highway distr.:	1
		current owner:	Caldwell County

STRUCTURAL DATA

superstructure:	wrought iron, 10-panel, pin-connected Warren through truss, with steel stringer approach spans		
substructure:	concrete abutments and wingwalls; concrete-filled iron cylinder piers; pile bent piers at approach spans		
span number:	1	condition:	fair
span length:	125.0'	alterations:	replacement of abutments and approach spans
total length:	195.0'	floor/decking :	timber deck over steel stringers
roadway width:	14.0'	other features:	upper chord and inclined end post: 2 channels with cover and batten plates; lower chord: 2 punched rectangular eyebars; vertical: 2 looped round eyerods; diagonal: 2 channels with cover and batten plates, 22 looped square eyebars; strut: I-beam; floor beam: riveted plate girder, U-bolted from lower chord pins; guardrail: lattice

HISTORICAL DATA

erection date:	1887
erection cost:	\$2698.00
designer:	King Bridge Company, Cleveland OH
fabricator :	King Bridge Company, Cleveland OH
contractor:	King Bridge Company, Cleveland OH
references:	Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure Number 181001.9; <i>The Hamiltonian</i> , 13 May 1887, 22 July 1887, 13 January 1888; <i>History of Caldwell and Livingston Counties, Missouri</i> (St. Louis: National Historical Company, 1886), page 254; field inspection by Clayton Fraser and John Roberts, 14 October 1993.
sign. rating:	72
evaluation:	NRHP eligible (well-preserved example of early, rare truss type)

inventoried by: Clayton Fraser and Michelle Crow-Dolby 7 July 1993

HAER INVENTORY

Missouri Historic Bridge Inventory

NAME(S) OF STRUCTURE

Henkin's Ford Bridge
MHTD: 181001.9

CALD13

DATE(S) OF CONSTRUCTION

1887

LOCATION

County Road 181 over Shoal Creek; S8/9, T56N, R26W
3.0 miles east of Proctorville; Caldwell County, Missouri

USE (ORIGINAL / CURRENT)

roadway bridge / roadway bridge

RATING NRHP eligible (score: 72)

CONDITION

fair

OWNER

Caldwell County

span number: 1
span length: 125.0'
total length: 195.0'
roadway wdt.: 14.0'

superstructure: wrought iron, 10-panel, pin-connected Warren through truss, with steel stringer approach spans
substructure: concrete abutments and wingwalls; concrete-filled iron cylinder piers; pile bent piers at approach spans
floor/decking: timber deck over steel stringers
other features: upper chord and inclined end post: 2 channels with cover and batten plates; lower chord: 2 punched rectangular eyebars; vertical: 2 looped round eyerods; diagonal: 2 channels with cover and batten plates, 22 looped square eyebars; strut: I-beam; floor beam: riveted plate girder, U-bolted from lower chord pins; guardrail: lattice

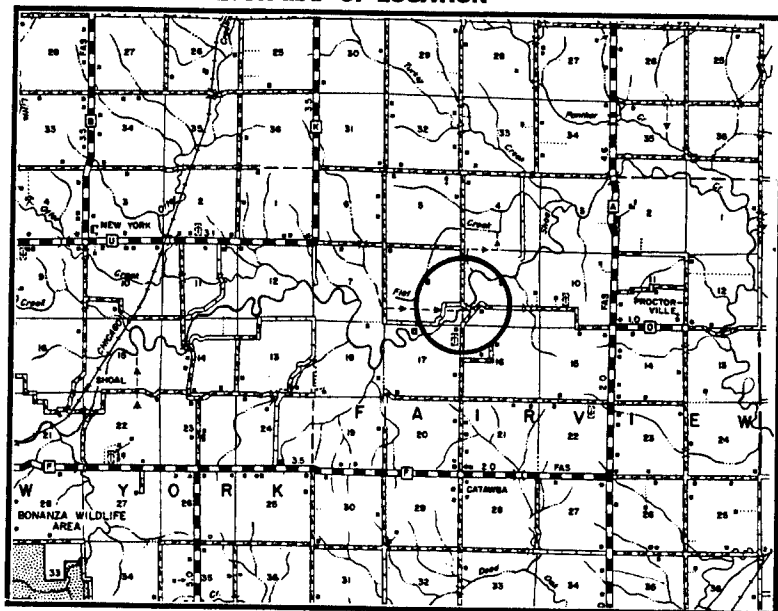
One of Caldwell County's earliest county road crossing sites was Henkin's Ford, located some three miles west of Proctorville in Fairview Township. In 1870 a 140-foot timber truss was built here - only the second major span built in the county. By the late 1880s, however, the timber span was showing signs of wear, and the county court moved to replace it. At their request, County Surveyor W.J. Boyd inspected the site and made estimates for a new structure in May 1887. Boyd solicited competitive proposals for the new span the following month, and in July a contract for its fabrication and erection was awarded to the King Bridge Company for \$2698.00. The Cleveland-based bridge giant used a pin-connected Warren truss configuration for the bridge, erecting the 125-foot span on iron tubular piers in 1887. In January 1888, King was paid for the completion of the Henkin's Ford Bridge across Shoal Creek and a shorter span over Mud Creek near Braymer [CALD14]. Since its completion, the Henkin's Ford Bridge has functioned in place, with the replacement of its abutments and approach spans as the most serious alterations to date.

The Pratt and Warren truss configurations were both developed in the 1840s, but it was the Pratt that received the most widespread use in the late 19th century. The reasons for this probably relate to the versatility of the pin-connected Pratt for different spans lengths and its easier erection using timber falseworks. Relatively few pinned Warren trusses were ever built in Missouri and only a couple remain in use today - both in Caldwell County - with the Henkin's Ford Bridge being the longer. Thus, this structure is distinguished as a well-preserved example of a rare 19th century truss type.

NAME(S) OF STRUCTURE

Henkin's Ford Bridge

PHOTOS AND SKETCH MAP OF LOCATION



LOCATION MAP

TAKEN FROM MISSOURI HIGHWAY AND TRANSPORTATION DEPARTMENT
GENERAL HIGHWAY MAP



SOURCES

Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure Number 181001.9; *The Hamiltonian*, 13 May 1887, 22 July 1887, 13 January 1888; *History of Caldwell and Livingston Counties, Missouri* (St. Louis: National Historical Company, 1886), page 254; field inspection by Clayton Fraser and John Roberts, 14 October 1993.

INVENTORIED BY

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AFFILIATION

Fraserdesign, Loveland CO

DATE

7 July 1993