

# HAER INVENTORY

Missouri Historic Bridge Inventory

**NAME(S) OF STRUCTURE**

Mill Creek Bridge  
MHTD: 264000.2

MILL10

**DATE(S) OF CONSTRUCTION**

c1925

**LOCATION**

County Road 264 over Mill Creek; S36, T39N, R15W  
2.2 miles southwest of Brumley; Miller County, Missouri

**USE (ORIGINAL / CURRENT)**

roadway bridge / roadway bridge

**RATING** NRHP non-eligible (score: 44)

**CONDITION**

fair

**OWNER**

Miller County

span number: 1	superstructure: steel cable suspension bridge
span length: 96.0'	substructure: concrete deadmen and spill-through tower pedestals
total length: 135.0'	floor/decking: corrugated steel deck over steel stringers
roadway wdt.: 11.1'	other features: towers: steel I-beams; single strand, straight cables in concrete deadmen; guardrail: none

The Mill Creek Bridge is a steel cable suspension bridge that crosses over Mill Creek some two miles southwest of Brumley in Miller County. The bridge was designed and built by Joseph A. Dice, a well-known regional bridge builder. A native of Warsaw, the county seat of nearby Benton County, Dice erected up to thirty-one bridges between circa 1896 and the mid-1930s. These included Dice's most notable spans, suspension bridges over the Osage River in Benton, Miller, and Saint Clair Counties. The 135-foot Mill Creek Bridge, supported by concrete abutments and spill through piers, features straight suspension wire, rather than the widely heralded twisted wire rope made famous by Washington Roebling's 1883 Brooklyn Bridge. Additionally, the structure consists of a non-rigid substructure owing to the lack of bolts to secure the floor beams to the stringer beams and the absence of bolts to secure deck flooring to the stringers. These unusual construction techniques were evidently employed by Dice in order to conserve the meager funds procured from nearby citizens and county coffers. Dice's atypical suspension bridge design also incorporated planked flooring, which was not anchored to the abutments, and a single-lane roadway. All these design elements contribute to the structural significance of Miller County's suspension bridges and to Dice's reputation as an innovative Missouri bridge builder.

County records contain little or no written documentation pertaining to Dice's suspension bridges in Miller County, which suggests that they were built for local road districts. Preferring to operate on a verbal and spatial basis, the prolific contractor apparently did not retain any written records either. The self-trained bridge builder never drew up any plans or specifications for the structures he erected, instead, relying solely on his memory. Dice illustrated this unorthodox practice by explaining, "with a ball of string to stretch across the river a couple of times, I could just sort of feel the correct measurements." The majority of the "swinging bridges" Dice designed were built by raising money through local subscription and were simply constructed using timber harvested from along stream and river banks. Since its erection circa 1925, the Mill Creek Bridge has functioned in place, although a recent renovation—in which the original towers and concrete pedestals were replaced and the steel cables reinforced with new cables—compromises the bridge's structural integrity substantially.

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Ten suspension bridges built by Missouri bridge builder J.A. Dice remain in central Missouri. As a group, these spans comprise the state's most important examples of vernacular bridge construction, designed and built without benefit of detailed structural analysis or computation and utilizing atypical construction techniques. The Mill Creek Bridge, with possesses the shortest span in the state, is as a representative example of an esoteric structural type.