

HAER INVENTORY

Missouri Historic Bridge Inventory

NAME(S) OF STRUCTURE

Glaize Bridge
MHTD: 274001.7

MILL11

DATE(S) OF CONSTRUCTION

1922

LOCATION

County Road 274 over Grand Auglaize Creek; S36, T39N, R15W
2.8 miles southwest of Brumley; Miller County, Missouri

USE (ORIGINAL / CURRENT)

roadway bridge / roadway bridge

RATING NRHP possibly eligible (score: 66)

CONDITION

good

OWNER

Miller County

span number: 1

span length: 414.0'

total length: 500.0'

roadway wdt.: 12.0'

superstructure: steel cable suspension bridge with steel cable towers

substructure: concrete tower pedestals abutments, wingwalls and piers

floor/decking: timber deck over timber stringers

other features: towers: 2 channels with lacing; single strand, straight cables in concrete deadmen;
guardrail: 3 angles

The Glaize Bridge is a steel cable suspension bridge that crosses over Grand Auglaize 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. The 414-foot Glaize Bridge features a single steel cable suspension span, supported by steel towers made up of members rolled in Pittsburgh by Bethlehem. The two main cables consist of parallel-strand galvanized wires, supported on each end by massive, tapered concrete deadmen. To each main cable are attached the wire suspender cables by means of simple wrapping and tying. The steel floor beams are similarly attached to the suspenders' other ends. Steel stringers, which carry the timber plank deck, bear directly on these floor beams.

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 in 1922, the Glaze Creek Bridge has functioned in place, with only maintenance-related repairs.

Missouri bridge builder J.A. Dice built over 30 suspension bridges between 1896 and 1940 in central Missouri, ten of which remain in place today. 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. Dice built his lightweight suspension bridges empirically using easily obtainable materials, and, as a result they cost substantially less than comparable steel truss spans. They were breathtakingly light, however, and have fared poorly in subsequent years. The Glaize Bridge, which is the oldest and longest of the Dice bridges still carrying traffic, is distinguished as one of the best-preserved among his remaining spans. It is a superlative example of an esoteric structural type—among Missouri's most important early vehicular spans.