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CHICAGO AND ALTON RAILROAD BRIDGE
I&M Canal National Heritage Corridor
Crossing South Fork of Chicago River
(South Branch)
Chicago
Cook County
Illinois

HAER No. IL-104

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Department of the Interior
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Washington, D.C. 20013-7127

HISTORIC AMERICAN ENGINEERING RECORD

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- NOTE: Photographs taken by Martin Stupich, HAER
 photographer, 1988
- IL-104-1 GENERAL VIEW OF BRIDGE, LOOKING NORTH; AT THE TOP
 OF THE PHOTOGRAPH ARE THE STEEL STRINGERS OF THE
 I-55 BRIDGE CROSSING THE SOUTH FORK OF THE SOUTH
 BRANCH OF THE CHICAGO RIVER
- IL-104-2 DETAIL OF COUNTERWEIGHT ATTACHED TO THE APPROACH
 SPAN, WHICH IS THE UNIQUE FEATURE OF PAGE BASCULE;
 LOOKING NORTH
- IL-104-3 VIEW OF WEST PORTAL OF APPROACH SPAN SHOWING THE
 BRIDGE TENDER'S HOUSE; LOOKING EAST
- IL-104-4 DETAIL OF BUILDER'S PLATE WHICH READS "BUILT 1906
 BY THE CHICAGO AND ALTON RY. CO.; G. H. KIMBALL
 CHIEF ENGINEER; W. M. HUGHES CONSULTING ENG'R;
 PAGE & SHNABLE PATENTEES"
- IL-104-5 DETAIL OF FLOOR BEAMS, LOOKING EAST

HISTORIC AMERICAN ENGINEERING RECORD

CHICAGO AND ALTON RAILROAD BRIDGE
I&M Canal National Heritage Corridor

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HAER No. IL-104

Location: I & M Canal National Heritage Corridor
Crossing the South Fork of the South
Branch of the Chicago River, east of
Ashland Avenue, north of I-55
Chicago, Cook County, Illinois

UTM: 16 E.444840 N.4632000
Quad: Englewood

Date of Construction: 1906

Designer: William M. Hughes

Builder: Substructure: Kelly & Atkinson Company
Superstructure: American Bridge Company

Present Owner: Unknown

Present Use: Railroad Bridge

Significance: The Chicago & Alton Railroad bridge was the first Page bascule erected for railroad use. Patented by John W. Page, a Chicago engineer, the Page bascule was not as extensively built as other patented systems such as the Strauss-Trunion bascule. This Chicago & Alton bridge may be the only one of its kind in existence.

Project Information: The Illinois and Michigan Canal was designated a National Heritage Corridor in 1984. The following year HABS/HAER embarked on an extensive inventory and documentation project of the 100 mile-long corridor. Field work for this project was concluded in 1988. Final editing of the documentation was completed in 1992.

Historians: Gray Fitzsimons, Frances Alexander, and John Nicolay, 1986; Carolyn Brucken, 1992.

Located near Chicago's stockyards, this Chicago & Alton Railroad bridge crosses the South Fork of the Chicago River's South Branch. The bridge was constructed in 1906 and replaced an 1880s "bob-tailed" swing span. This 1906 span was the first use of a Page bascule for a railroad bridge. William M. Hughes designed the span. Hughes worked on a number of bridge projects, including the Ashland Avenue Bridge (1902), with the Chicago firm of Page and Shnable. The Page bascule, patented by John W. Page, contained the counterweight in the approach span, which pivoted with the bascule span when raised for river traffic. It was not as widely used for bascule spans as other patented systems such as the Strauss-Trunion bascule. This Chicago & Alton bridge may be the only one of its kind in existence. The American Bridge Company of New York fabricated the steel for the superstructure, and the Kelly & Atkinson Company of Chicago served as contractors for the substructure.

The main span of this bridge is a single-leaf, Page bascule; the superstructure is a riveted steel Warren through truss, 150'-0" in length. The approach span is a riveted steel plate girder, 64'-0" in length. The bridge rests on concrete abutments. One nameplate reads: "BUILT 1906 BY THE CHICAGO AND ALTON RY. CO.; G.H. KIMBALL CHIEF ENGINEER; W.M. HUGHES CONSULTING ENG'R; PAGE & SHNABLE PATENTEES." A second nameplate proclaims: "American Bridge Co. of N.Y. (1906)." The bridge tender's cabin is located along the north approach. The cabin is a one-story brick building, measuring approximately 20' x 15', with a hipped roof and chimney. Casement windows provide the interior with natural light. The bridge is currently maintained by the Illinois Central Gulf Railroad.

SOURCES:

"The Ashland Avenue Bascule Bridge, Chicago," Engineering Record, v. 43 (April 27, 1901): 392-94.

"Bids for a Bascule Bridge for the Chicago & Alton R.R.," Engineering News, v. 52 (November 3, 1904): 405-406.

"The Elevation of the Chicago and Alton Bridge at Bridgeport, Chicago," Railway Age, (January 23, 1903): 122-125.

"Page Type of Bascule Bridge: Chicago, Ill.," Engineering News, v. 58 (July 18, 1907): 57-58.

J. A. L. Waddell, Bridge Engineering, v. 1 (New York: John Wiley