

NATIONAL BRIDGE COMPANY

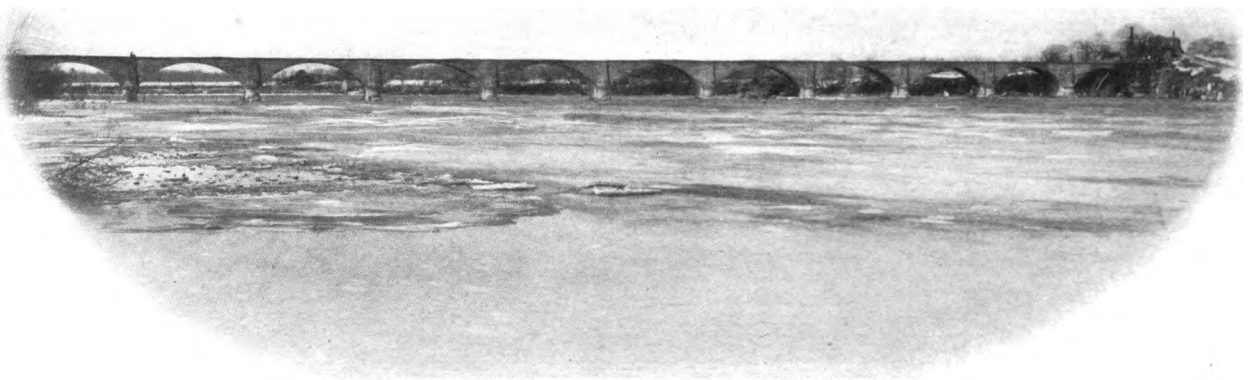
INDIANAPOLIS

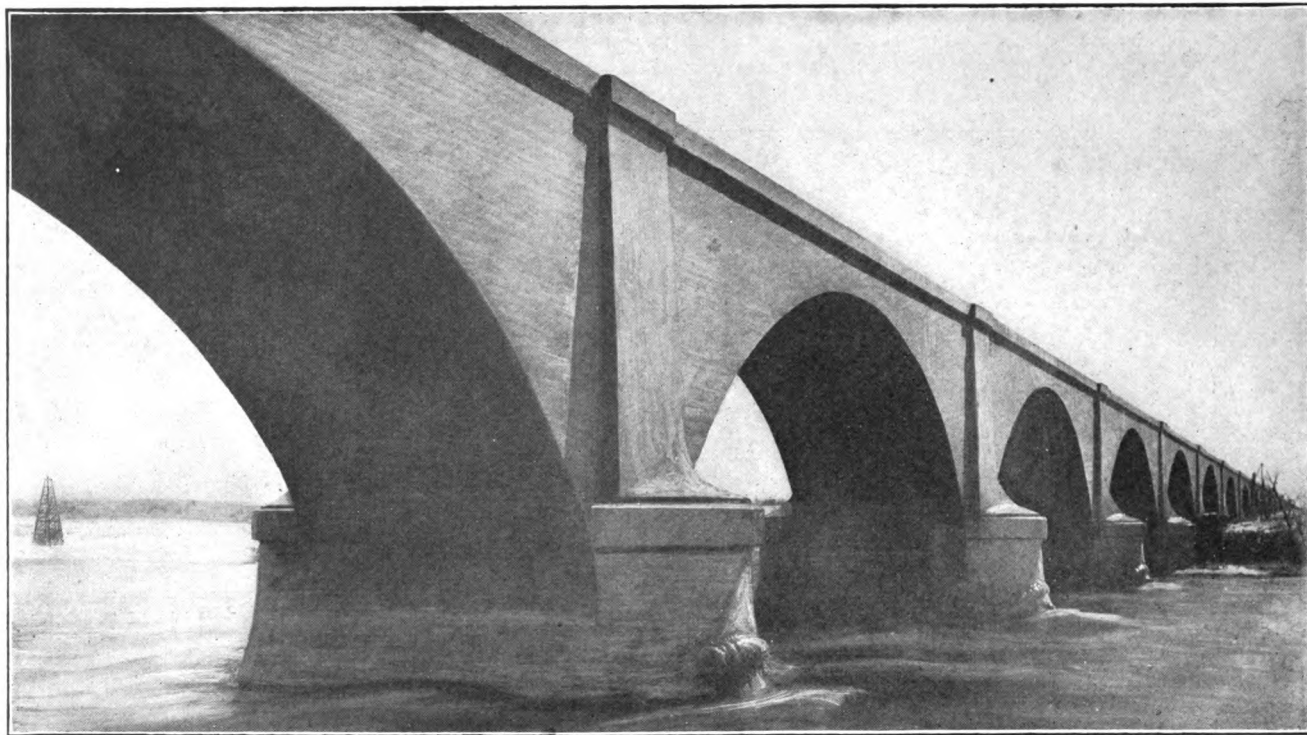
INDIANA

REINFORCED CONCRETE BRIDGES LUTEN PATENTS

**COPYRIGHT
1908
BY DANIEL B. LUTEN**

1908





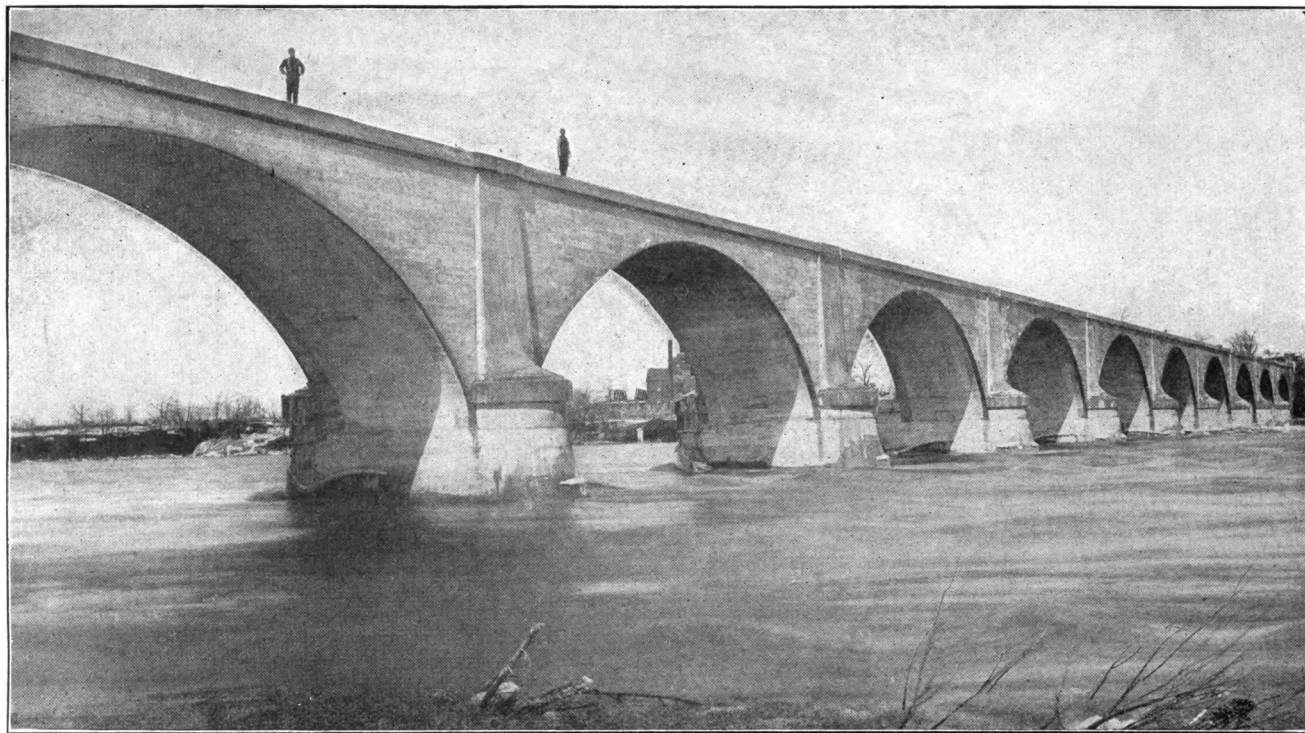
MAUMEE BRIDGE, WATERVILLE, OHIO

Twelve spans of 75 to 90 ft. each. Cross-section on page 96. See also pages 4, 11, and 80 to 85.

Erected for the Ohio Electric Railway Company, Cincinnati, O., by National Concrete Company.

Gaylord Thompson, Chief Engineer.

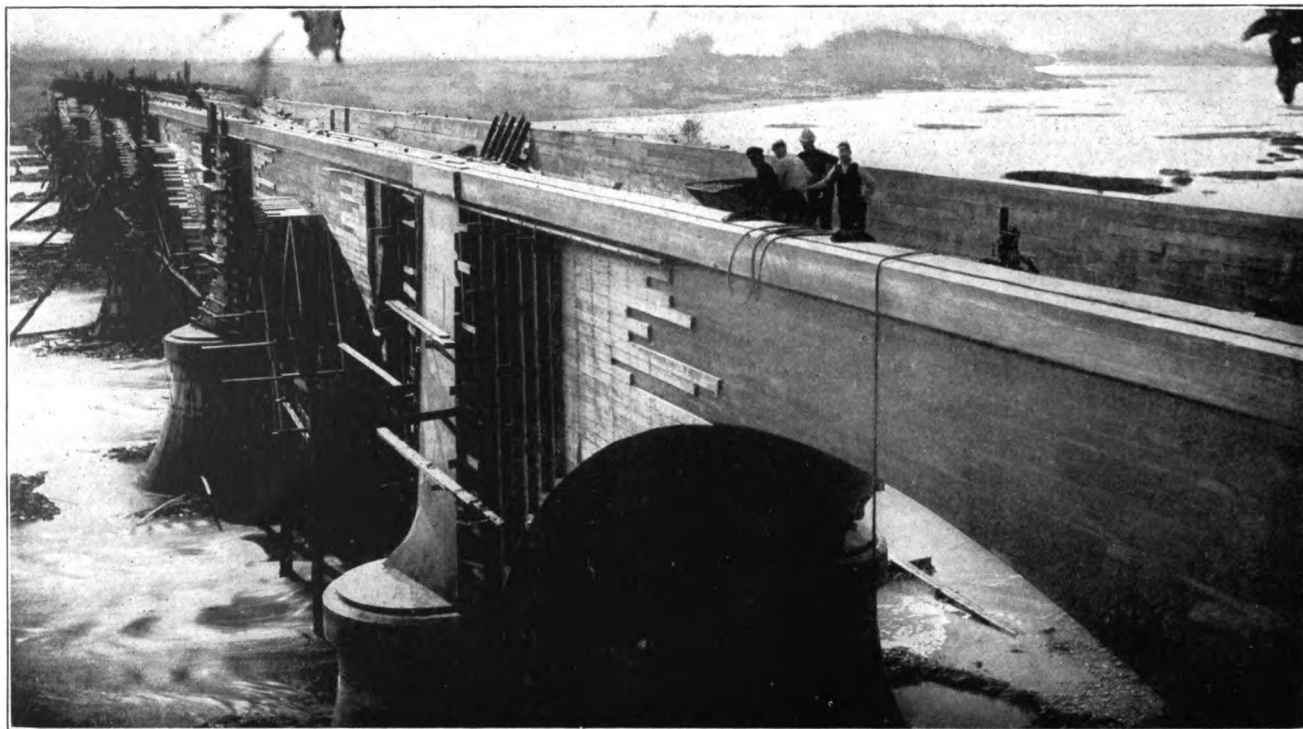
Designed by National Bridge Co.



MAUMEE BRIDGE, WATERVILLE, OHIO

(See also pages 4, 10, and 80 to 85.)

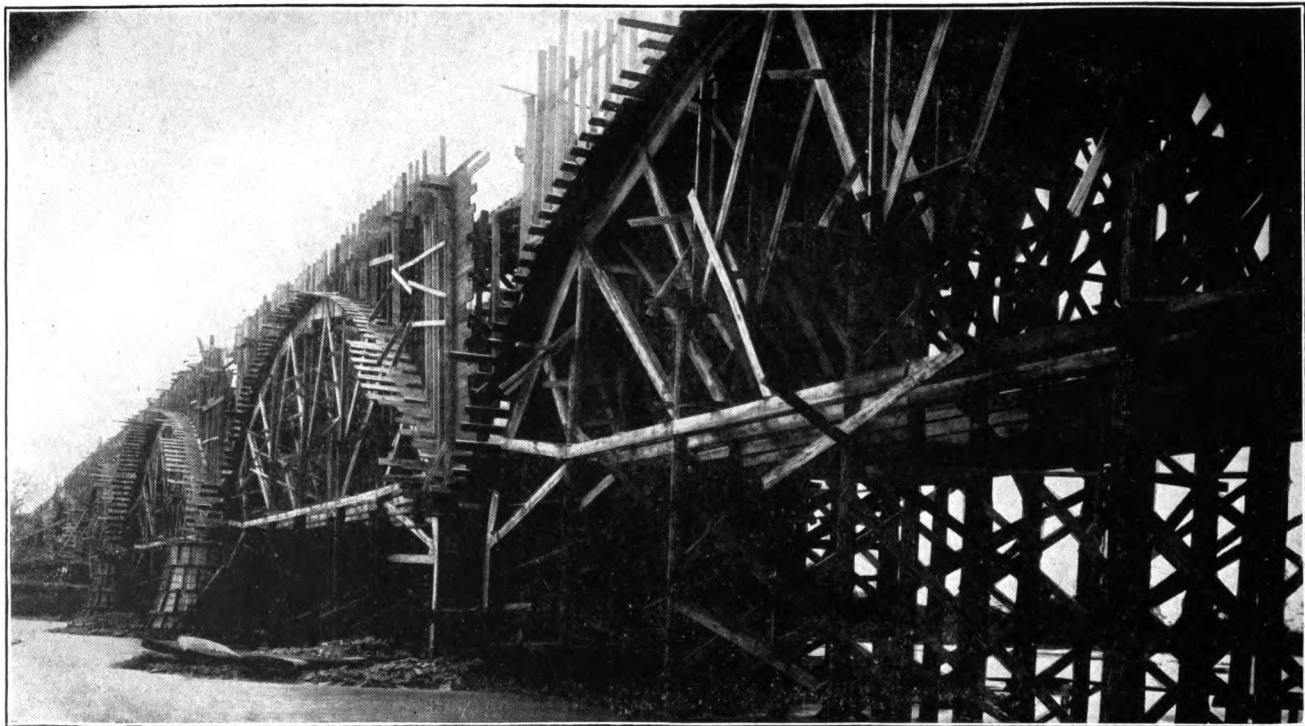
This view taken from down-stream on south shore of Maumee River. The view on the opposite page was taken from upstream on north shore, showing the island named Roche de Boeuf, directly opposite the fourth pier. Height of roadway above water 45 ft. Width of roadway 16 ft. clear.



MAUMEE BRIDGE, WATERVILLE, OHIO

(See also pages 4, 10, 11, and 81 to 85.)

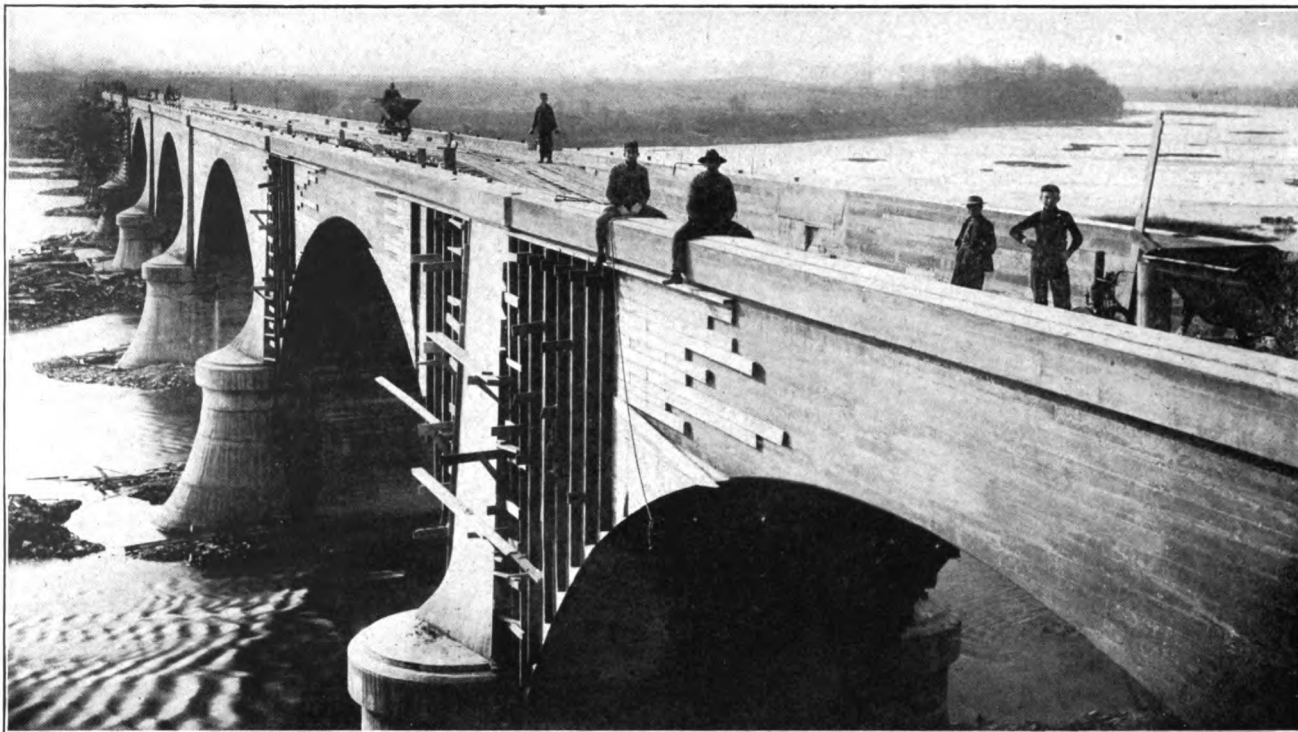
This view and views on pages 82 and 84 show progress of construction. This view was taken in September, 1907, showing first span completed in foreground and centers erected for seventh span in distance. Striking centers in second span.



MAUMEE BRIDGE, WATERVILLE, OHIO

(See also pages 4, 10, 11 and 80 to 85.)

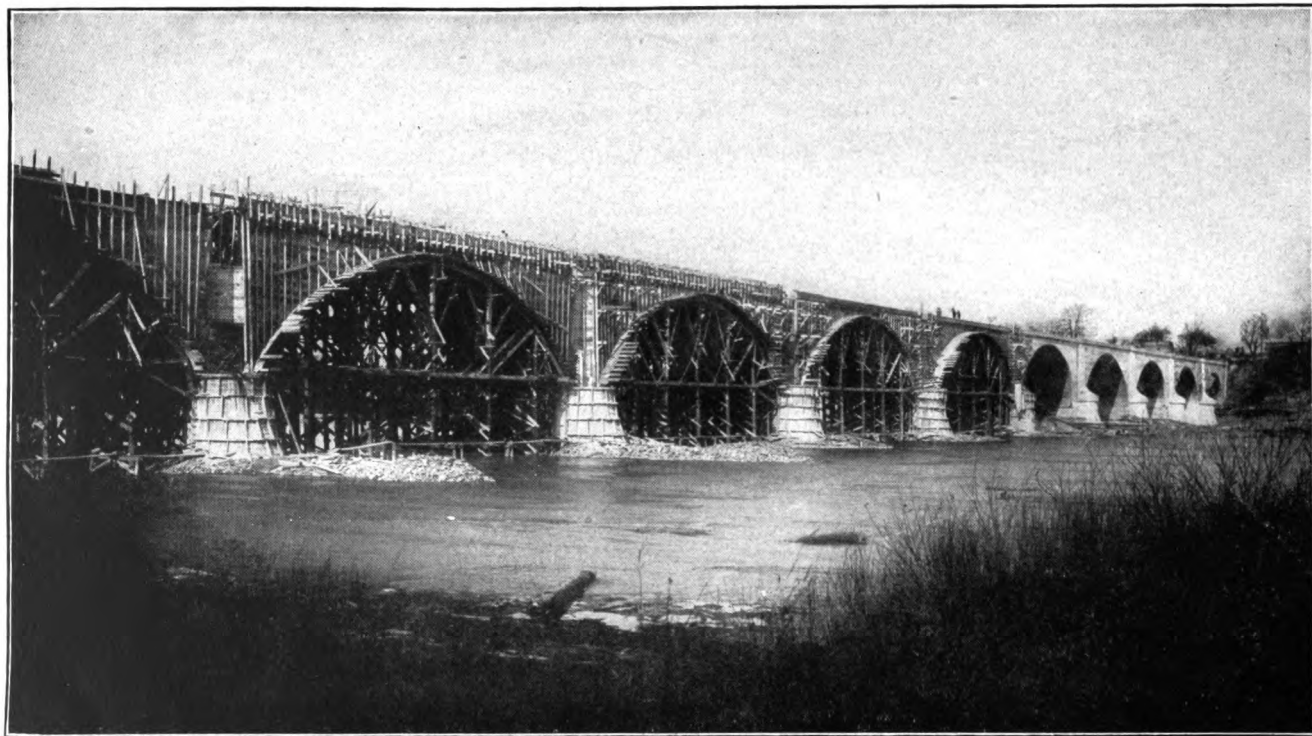
Up-stream view showing form erection, with eighth span in the foreground. Centers complete to this span, and concreting on arch rings in progress. Forms for spandrels erected ready for concrete with exception of posts over piers.



MAUMEE BRIDGE, WATERVILLE, OHIO

(See also pages 4, 10, 11, and 80 to 85.)

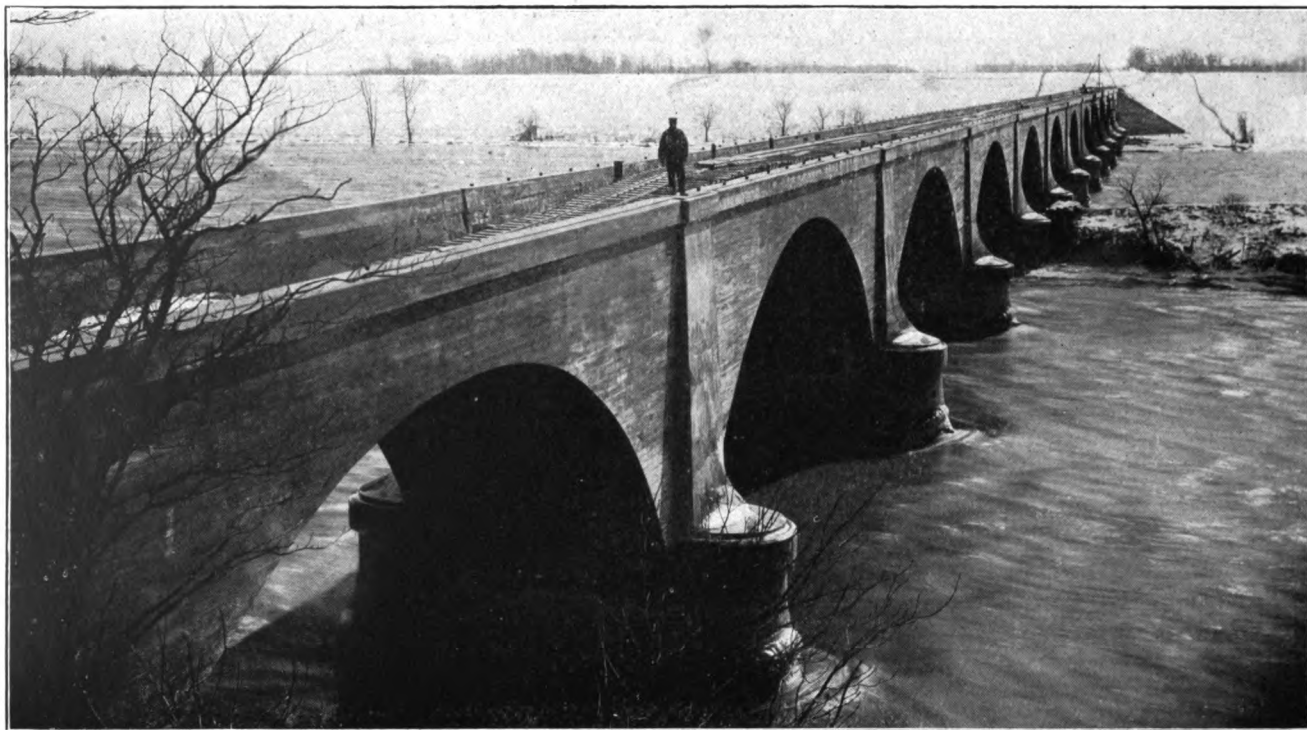
This view and views on pages 80 and 84 show progress of construction. This view was taken in November, 1907, showing centers removed from first five spans; centers erected for eleventh span. Completed arches are of 75, 80, 84, 87 and 89 ft. span.



MAUMEE BRIDGE, WATERVILLE, OHIO

(See also pages 4, 10, 11, and 80 to 85.)

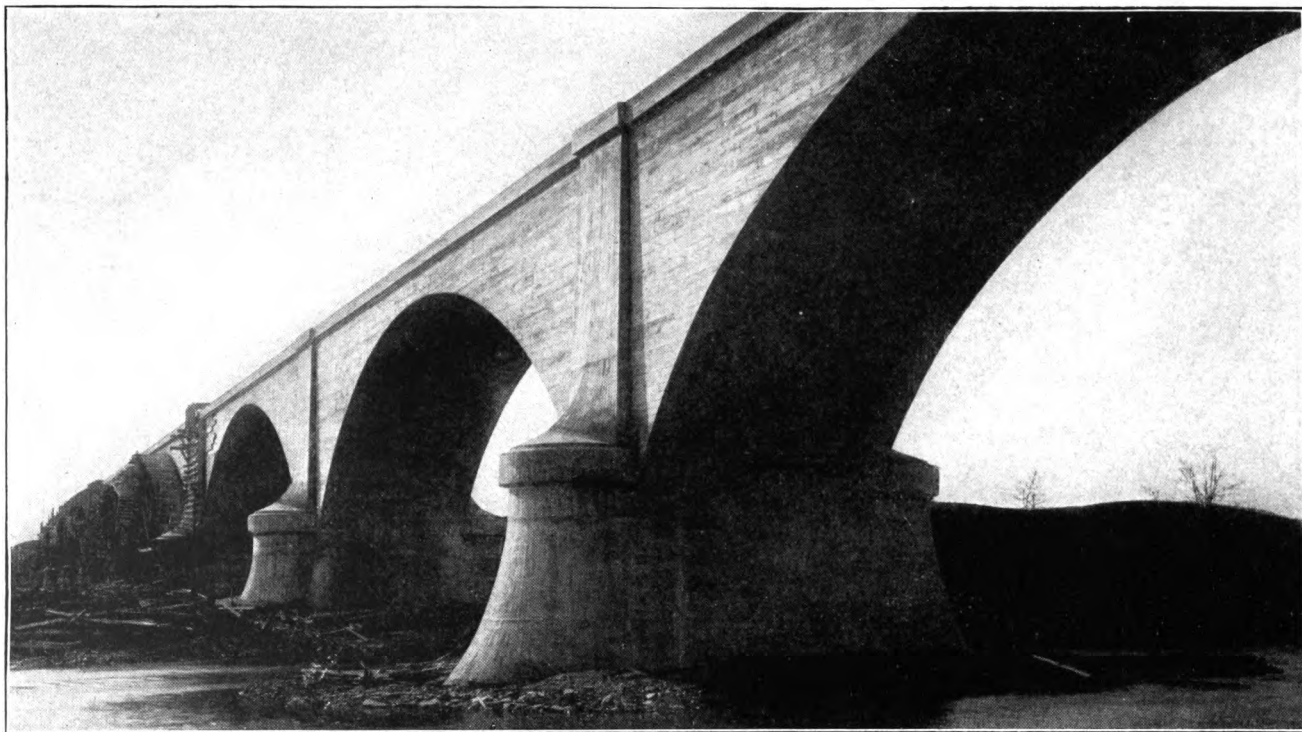
View from down-stream on South bank of Maumee River. Five spans completed. This view shows method of concreting spandrels continuous from end to end of one span, but leaving post over pier to be concreted afterwards.



MAUMEE BRIDGE, WATERVILLE, OHIO

(See also pages 4, 10, 11, and 80 to 85.)

This view and the views on pages 80 and 82 show progress of construction. Bridge completed, and all centers and forms removed. First span of 75 ft. in foreground, and twelfth span in distance. This view taken in January, 1908.



MAUMEE BRIDGE, WATERVILLE, OHIO

(See also pages 4, 10, 11, and 80 to 85, and 96.)

Down-stream view from foot of second pier, taken in October, 1907, and showing details of piers and ice breakers. Drainage from above piers is discharged through weep holes below low water level.