HAUPT TRUSS BRIDGE
PENNSYLVANIA RAILROAD

C. 1854

This recording project is part of the Historic American Engineering Record (HAER), National Park Service. It is a long-range program to document historically significant engineering and industrial works in the United States.

The Cast and Wrought-Iron Bridges Recording Project was co-sponsored in 1991 by the Historic American Engineering Record and the West Virginia University Institute for the History of Technology and Industrial Archaeology. Fieldwork, measured drawings, historical reports, and photographs were prepared under the general direction of Dr. Robert T. Kapach, Chief, HAER/HAER, Eric N. DeLony, Chief and Principal Architect, HAER, Emory Kemp, Director, Institute for the History of Technology and Industrial Archaeology; and Dean Herrin, HAER Staff Historian.

The recording team consisted of Christine Usaler, (Architecture Faculty, Lehigh University) Architect and Field Supervisor; Christine Theodoropoulos, (Architecture Faculty, California State Polytechnic University, Pomona) Engineer; Wayne Chang (University of Notre Dame), Monika Korals (Technical University of Budapest, Hungary, US/ICONOS), Architectural Technicians; Robert W. Hadlow (Washington State University), William Chamberlin, P.E., Historians, and Joseph E.B. Elliott (Muhlenberg College), Photographer. Documentation of this bridge began in 1988 with the historical report contributed by Victor C. Barnell. Field measurements were taken by Eric DeLony and Richard A. Anderson Jr., HAER Staff Architects.

Scale: \(\frac{1}{4}'' = 1'0'' \ (1:48)\)

The Pennsylvania Railroad Haupt Truss Bridge was one of a series of experimental bridges designed by Herman Haupt, chief engineer of the Pennsylvania Railroad from 1848 to 1856. As originally erected in Vanderbuilt, PA, ca. 1854, the iron structure was part of five sequential half-through spans consisting of three trusses carrying two rail lines. One span was moved to Thompontown in 1899 where it remained in service until 1984 when it was placed in the exhibition yard of the Railroaders' Memorial Museum in Altoona. The 102'-foot-long 18-panel Pratt trusses were fabricated by the PRR in Altoona of cast-iron web posts and top chords, wrought-iron diagonal braces and bottom chord bars. Each truss was connected to an arch pair consisting of cast-iron segments. Haupt proposed that arches be added to strengthen existing truss bridges and incorporated variations on arch-truss combinations in his bridge designs. This is a typical example of his work.

Scale: 1'' = 10 miles

Based on Barnes' Railroad Canal and County Map of Pennsylvania, New Jersey and Adjoining States (Philadelphia, 1865)