

# SOCIETY FOR INDUSTRIAL ARCHEOLOGY

## NEWSLETTER

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### THE TEXAS LENTICULARS: 1 DOWN, 8 SURVIVE

#### MINERAL SPRINGS BRIDGE Caldwell County, Texas

*Right:* The 40-ft. lenticular truss in 1985. *Tex. St. Dept. of Hwys. & Trans. photograph.*

*Below:* The c1890s Berlin Iron Bridge Co. structure this year, after Charlie Johnson (*L*) and Wayne Plant (*R*) starting working on it. *Luling (Tex.) Newsboy & Signal photograph.*



In Sept., a bulldozer finished off the diminutive Mineral Springs Bridge over Westfork Creek in Caldwell Co., Texas, near Austin. This 40-ft., c1890s pony truss, reportedly the victim of heavy June rains, was one of a rare cluster of lenticular trusses that have managed to survive, like an isolated flock of whooping cranes, in the Austin-San Antonio area of central Texas.

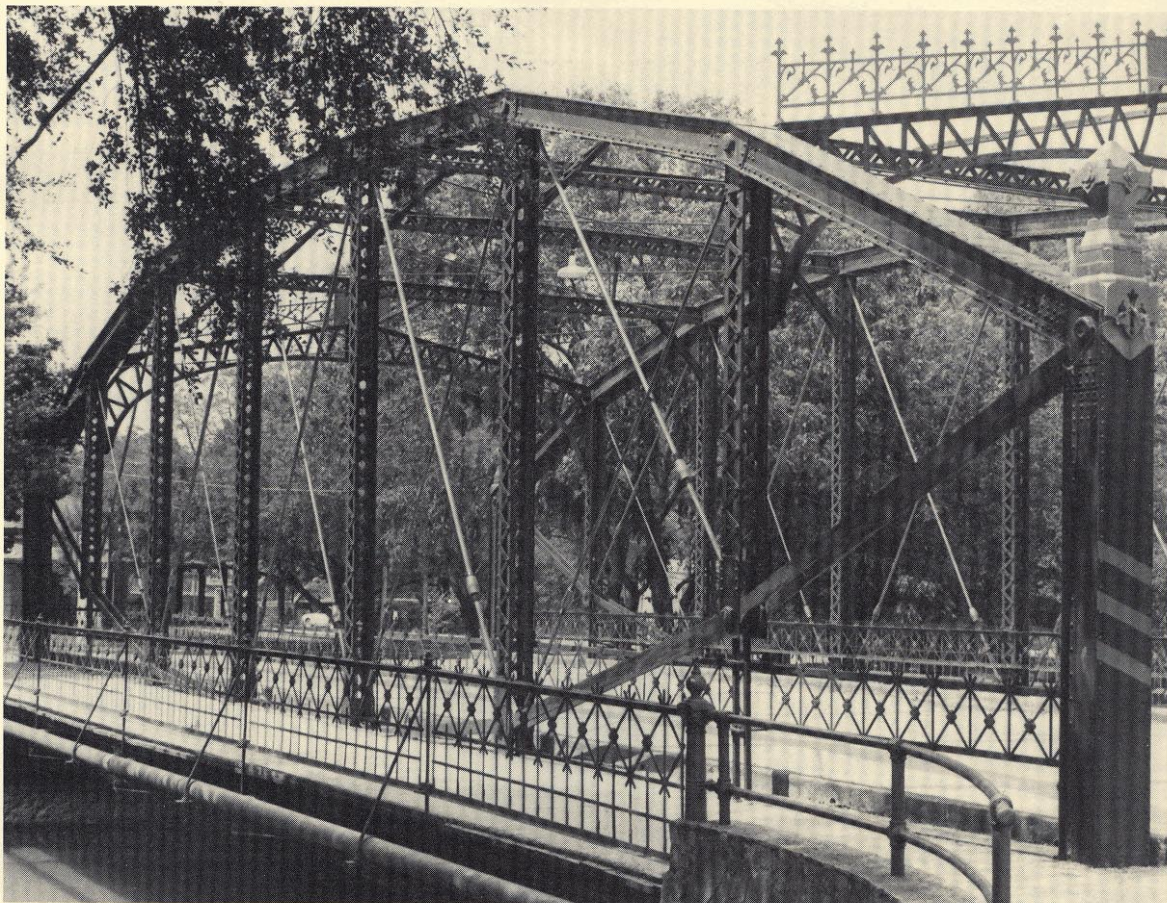
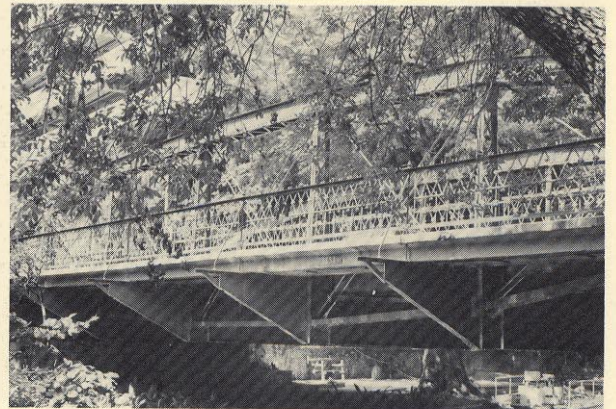
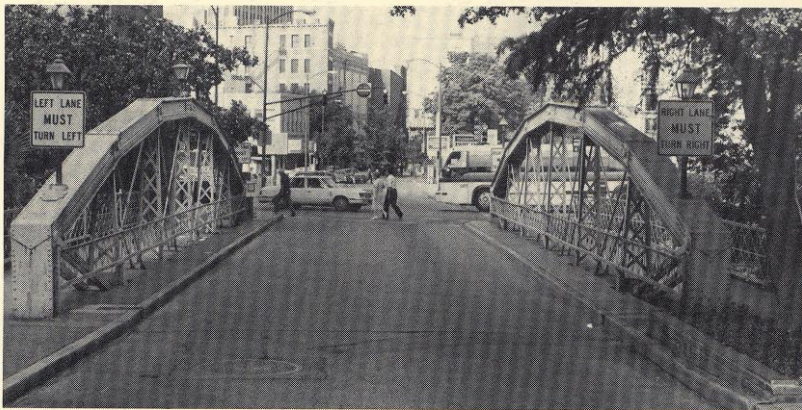
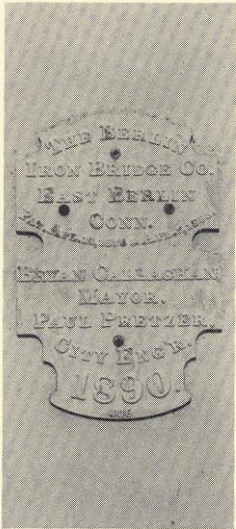
Most are familiar with the lenticular as the spectacularly undulating, 720-ft. Smithfield St. Bridge [NHL, HAER] in Pittsburgh, Pa., designed by Gustav Lindenthal and built 1879-83. In contrast, the Texas group consists of quite small, very angular, single-span structures, of which Mineral Springs was the shortest. Still standing are six pony trusses and two through trusses. Three are along the famous San Antonio River Walk. All were fabricated in the 1890s by the Berlin Iron Bridge Co. of East Berlin, Conn. Bridge historian Victor Darnell (author of the SIA's *Directory of American Bridge-Building Cos.*) believes that these are the only extant lenticular trusses west of the Mississippi.

The Mineral Springs demolition involved no federal funds, so the State Dept. of Highways & Public Trans. remained unaware of the loss until it was spotted in a newspaper article. The county engineer replaced the truss with an 89-ft. railroad flatcar, with the county's road administrator declaring, "This is a prototype and if it works then we can use it in other places." (He probably hadn't checked *SIAN* for Spring 1984, which carried a photo of a stream spanned by a defunct Great Northern cattle car.) For further info, contact Tom Eisenhour [SIA], SDHPT, Austin TX 78701-2483 (512-463-8790). *T.E.*



*Turn page for more bridges...*

# SPECTACULAR LENTICULAR!



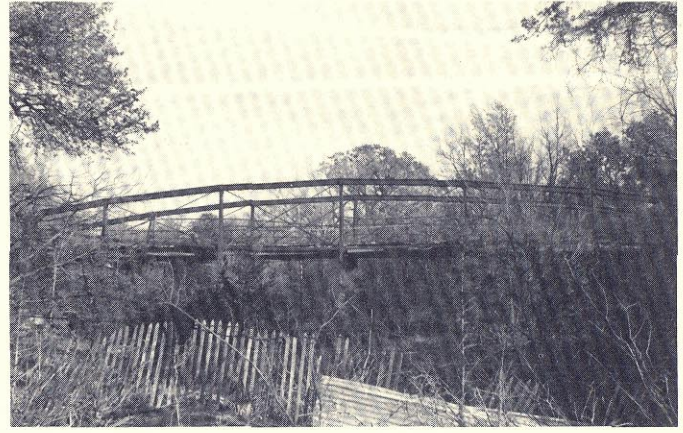
**SURVIVING LENTICULAR TRUSSES IN SAN ANTONIO, TEXAS.** All were built by the Berlin Iron Bridge Co. in the 1890s, and all cross the San Antonio River. The Augusta, Crockett, and South Presa bridges are along the city's famous River Walk (*Paseo del Rio*). *Tex. St. Dept. of Hwys. & Trans. photographs.*

*Top center:* Augusta Street Bridge (1890). This bridge has been rehabilitated. *At left* is the builder's plate. *At right* is a detail from the end post. The small "406" at the bottom is believed to be the contract number.

*Above left:* Crockett Street Bridge (1891), with its top-chord-mounted light standards.

*Above right:* South Presa Street Bridge (1890), showing the lower chord connections with the floor beams.

*Left:* Brackenridge Road Bridge (1890), with its extraordinary cresting. This is one of the state's two lenticular through-trusses.



TEXAS LENTICULAR TRUSSES OUTSIDE SAN ANTONIO. All were built in the 1890s by the Berlin Iron Bridge Co. *Above left:* Yancey Road Bridge over Hondo Creek, Frio County. This is one of the state's two lenticular through-trusses. *Above right:* County Road 133 Bridge at Dodds Creek, Coryell County, revealing the characteristic double-convex-lens profile created by the top and bottom chords. *Below left:* County Road 173 Bridge over Plum Creek, Caldwell County. *Below right:* End panel of County Road 230 Bridge over Plum Creek, Caldwell County. *Tex. St. Dept. of Hwys. & Trans. photographs.*



## DOUBLEHEADER PRESERVATION AWARDS

A unique two-part nationwide awards program to honor historic preservation efforts, marking 20 years under the Natl. Historic Preservation Act of 1966, seeks nominees. The program is jointly sponsored by the White House, the Advisory Council on Hist. Pres., and the Dept. of the Interior, under the auspices of the "Take Pride in America" public awareness campaign.

The first category, **President's Historic Preservation Awards**, will recognize private citizens whose achievements exemplify the contributions of free enterprise to historic preservation. The second category, **National Historic Preservation Awards**, will honor projects and programs that have been federally assisted in some way. Awards will be presented by the Sec. of the Interior and the Chair of the Advisory Council.

A range of disciplines will be eligible for consideration, including architecture, landscape architecture, community planning or revitalization, archeology, materials conservation, architectural history, rural preservation, maritime preservation, and preservation of historic engineering. Entries must have resulted in the preservation of specific, identifiable historic properties listed in or eligible for the Natl. Register. Projects must have been completed within the past ten years; programs must be currently in effect.

Nominations for both categories will be open until Feb. 19, 1988, with presentation ceremonies planned for mid-summer. The Advisory Council Chair has appointed a task force to oversee the program and to serve as a selection jury. Entry forms and further information are avail. from the Office of Executive Dir., Advisory Council, 1100 Pennsylvania Ave., N.W., #809, Wash. DC 20004 (202-786-0503).

In addition to the special awards program, the 20th anniversary of the NHPA is being celebrated with *Twenty Years of the National Historic*

*Preservation Act* (128 pp.), a special commemorative edition of the Advisory Council's *Report to the President & the Congress 1986*. Copies avail. free while supply lasts from Pubs. Office, Advisory Council, address above.

## GREAT FALLS HYDRO GOES ON STREAM

Erected in 1912-14 to harness directly the water power of the Great Falls of the Passaic River at Paterson, N.J., the Society for Establishing Useful Manufactures Hydroelectric Plant [NHL, HAER] was rededicated in June as an operating facility. The ceremony was significant enough to attract US Sen. Frank R. Lautenberg and Rep. Robert A. Roe. The plant is within the Great Falls Historic District, which encompasses the SUM's power canal system, designed originally by Pierre l'Enfant and dating to 1792-1846. This is the site of the first planned industrial development in the US, and had been encouraged by Alexander Hamilton.

Originally designed to produce 5,000 KW using four generators, it operated until 1969, when the low cost of fossil fuels and the high cost of replacing aging equipment forced it to close. Its refurbishing was financed by a \$1.3 million grant from the Federal Dept. of Energy and about \$13 million in loans and private investment. Today's capacity is 11,000 KW, which is being sold to the Public Service Electric & Gas Co. for transmission throughout N.J.