

SOCIETY FOR INDUSTRIAL ARCHEOLOGY

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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).



Turn page for more bridges...

SPECTACULAR LENTICULAR!













SURVIVING LENTI-CULAR 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 topchord-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.*



