Another truss configuration which received extensive use on Wyoming's highways and roads during the first three decades of this century was the Warren truss. Patented by two British engineers four years after the Pratt truss, the Warren trusses were generally overshadowed by the Pratt variations for vehicular bridges in the state until the 1920s. After that, Warren trusses - almost universally rigid-connected ponies - became the steel bridge of choice for spans in the 50'- 100' range. Like the Pratt design, several variations on the basic Warren configuration can be found among the surveyed bridges. The "pure" Warren truss featured a fairly straightforward design which transferred loads through triangulation of its members, with diagonals alternating between tension and compression and no verticals. Only three of this type exist, about which very little information can be found. A variation features straight top chords with verticals at alternating panel points. Five in this group remain in use in the county road systems, among them the oldest traceable Warren pony. The oldest and the longest for which data is available are included here.

* DMS Bridge over Cow Creek — Carbon County

erection date:	1915	contractor:	Petry-Moulton Contr. Co. Cheyenne Wy.
span length:	40'0"	abutments:	concrete full retaining
total length:	42'0"	piers:	none
roadway width:	15'1"	roadway:	steel stringers w/ concrete deck
span type:	simple	approaches:	none

Single-span, steel rigid-connected 6-panel Warren pony truss with verticals at alternating panel points.
top chords: two angles w/ cover plates; bottom chords: two angles w/ batten plates; verticals: two angles w/ batten plates; diagonals: two angles; lattice guardrails.

Carbon County Road CN6-303 — milepost: 2.6
7.1 miles north of Encampment — T16N, R84W, S36.
USGS Cow Creek Ranch 7½' quad. — UTM: 13.351150.4574530

EJE Bridge over Shell Creek — Big Horn County

erection date:	1920	contractor:	Midland Bridge Co. Kansas City Mo.
span length:	60'0"	abutments:	concrete retaining w/ sweptback wings
total length:	60'0"	piers:	none
roadway width:	15'7"	roadway:	timber stringers and decking
span type:	simple	approaches:	none

Single-span, steel rigid-connected 8-panel Warren pony truss with verticals at alternating panel points.
top chords: two channels w/ cover plates and lacing; bottom chords: two angles; verticals: two angles w/ batten plates; diagonals: two angles w/ batten plates; angle guardrails.

Big Horn County Road CN9-57 — milepost: 0.5
1.1 mile west of Shell — T53N, R91W, S34.
USGS Shell 7½' quadrangle — UTM: 13.277400.4934870

EFP (continued)

Camelbacks and Parkers had been built in the state during the first decades of this century, their attentuated long-span configurations have made them targets for county bridge replacement programs. The Owl Creek Bridge is one of only two pin-connected Camelback throughs left. An important early remnant.

EJE Bridge over Shell Creek

Big Horn County received only one bid for the erection of this bridge over Shell Creek, and therefore awarded the contract to the Midland Bridge Company of Kansas City for $4500 in 1920. A rigid-connected Warren pony truss with verticals at alternating panel points, it is the longest traceable example of its type - an excellent early example of a Warren variation.

EJP County Line Bridge

A joint venture between Big Horn and Washakie counties, the construction contract for this bridge was awarded in October 1917 to the Monarch Engineering Company. Big Horn County built the west abutment, Washakie the east and the counties each paid half for the bridge superstructure. Thought to straddle the border between the two counties, later surveys have revealed that this bridge lies entirely within Big Horn County. It is one of the earliest of five 100' rigid-connected Camelback ponies in use on the county and state road systems in Wyoming - the longest of its type in the state. As a classic example of its truss configuration and the only known instance of such collaboration between counties, it is one of the more significant roadway trusses in Wyoming.

EJZ Bridge over Shoshone River

This bridge was built in 1925-26 on Federal Aid Project 176A by contractors McGuire and Blakeslee of Lovell. It replaced an earlier bridge at this crossing of the Shoshone River on the Lovell-Cowley Road. Designed by Wyoming Highway Department, it is one of many Warren pony trusses with verticals and polygonal top chords erected in the state during the 1920s and 30s. This bridge is distinguished by its multiple spans - the second greatest number for a highway truss in the state. A significant example of later highway truss design.

ELS Bridge over Big Wind River

A juryrigged structure which combines an arched top chord with the simplistic bearing of a King Post truss, this modest two-span pony truss is unique for Wyoming. It appeard to be constructed from salvaged materials, including tunnel sets for the arches, and lacks construction sophistication. An interesting departure from standard form for a small vehicular truss.

ELY Wind River Diversion Dam Bridge

Erected on piers provided by the U.S. Reclamation Service and built integral with