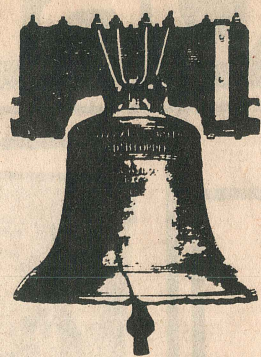
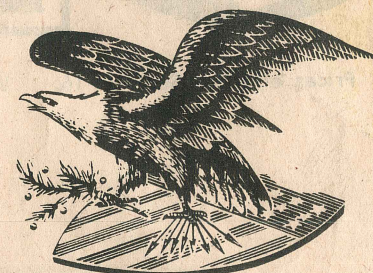


MADRID

AREA



BICENTENNIAL



1776-1976

"Remembrances of Days Gone By"

New Railroad Bridge Cost \$5½ Million

Work on the new Milwaukee Railroad Bridge began back in June of 1972 and was completed in December 1974. Jensen Construction Co. of Des Moines built the new single track bridge at a cost of \$5½ million.

Cement, concrete, reinforcing and structural steel, girders, and ballast pans are just a few of the ingredients used in making the bridge. There are 22,000 yards of concrete, 2,650,000 lbs. of reinforcing steel and 3,700,000 lbs. of restructural steel in the new structure. Cortense steel was also added as an additional reforcer and this substance does not need painting.

Twenty-two piers were used in making the 2,526 ft.

bridge. The girders that rest on these piers have a span of 110 feet and after the piers were completed, piling and footing was added around the supporters.

There is 66,800 ft. of piling and a steel or concrete pole driven vertically at the bed of the river for support. After completion of the piling, the footing, or part of the structure in contact with the ground was covered with concrete for added strength.

Dirt was used to build up the abutments, the restraining piers supporting the shore ends of the bridge. It will take 400,000 yards of dirt to build up the ends and a layer of riprap was added to prevent erosion. Seeding was also recently completed.



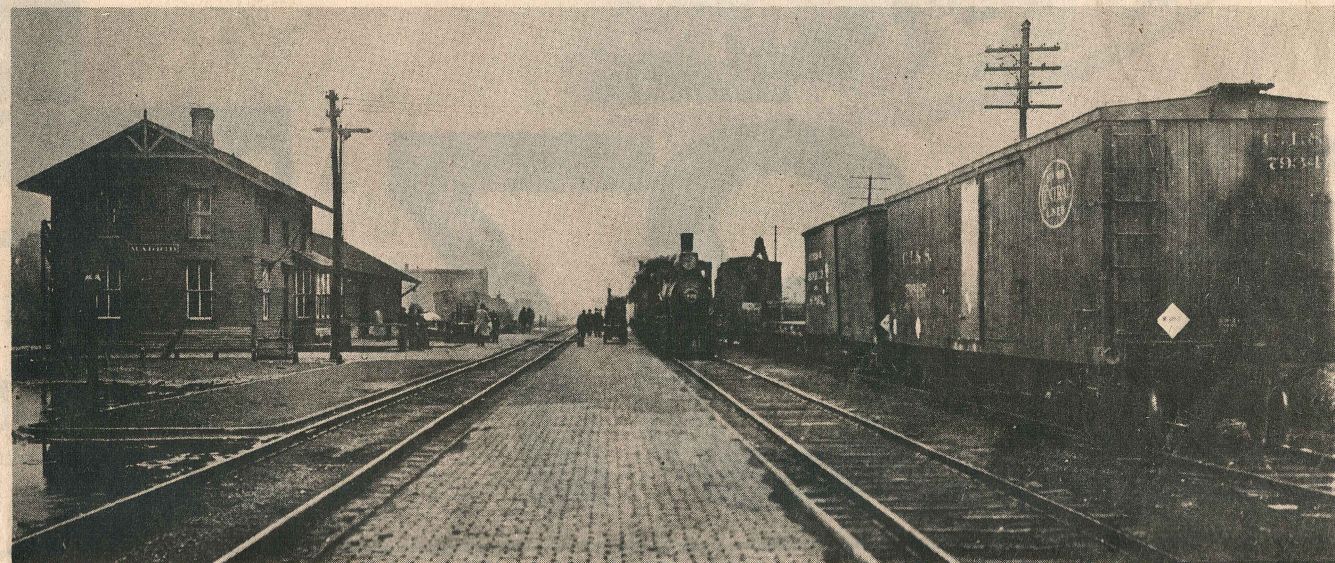
This photo shows the finished railroad bridge as it looked upon completion back in June of 1973. The old railroad bridge, eventually destroyed by DEMEX Co. of Oklahoma is shown in the background. The new bridge is composed of 22 piers and is 120 feet high. About 45 men were used in building the structure.



This picture is an aerial view of the south end of town down by the railroad depot as it looked around 1920. Trains were still running through town at this time, and continue to do so today. The grain elevator in the background was then owned by Soderlund Bros.



The Madrid depot is shown here as it looked back in the 1920's. The horse drawn team on the loading platform is waiting for the train to arrive so it can take the passenger's luggage to the Airy Hotel, a prominent Madrid hotel of the time.



This is another view of the Madrid depot that was one time extensively used by the Chicago, Milwaukee and St. Paul Railroad. The people can be seen on the loading platform waiting for their train to arrive.

Destruction of Old Railroad Bridge

The new bridge is approximately the same height as the old structure, 120 feet, and all twenty-two piers were completed by November of 1972. Each pier weighs 2,000 tons and with the steel and concrete added they weigh almost 2,100 tons. The piers are anchored in natural limestone, found at the base.

The main reason for the construction of the new bridge was that the old bridge couldn't withstand the water that will be added from the Saylorville Lake project. The sub-structure was not built to withstand the water and ice and deterioration would have happened very quickly.

In building the old bridge back in 1912, steam engines and donkey power was used while diesel engine was used in erecting this structure.

Approximately 500 men were employed back in 1912 but only 45 men were needed to raise the new single track structure.

Ballast pans made in Zeoring were added for the track to rest upon and a walkway was built underneath the bridge so curious onlookers can get a first hand view of it.

Before construction began, scientists tested the land to see if it was strong enough to support this enormous structure. The top of the embankment contains brown, sandy clay while the middle is composed of coarse, fine gravel. Limestone and shale are found on the bottom.

The steam engine is heading for the depot in this photo taken in 1926. The passenger cars are shown in the background as Madrid was one time a stop as trains traveled from Chicago to Omaha.

Following the dedication service of the new main line Chicago, Milwaukee, St. Paul and Pacific railroad bridge, west of Madrid the old railroad bridge was demolished.

The new structure was dedicated Friday morning, Dec. 7, 1973 with a plaque displayed to mark completion of the new bridge. Col. Walter H. Johnson, District Engineer of the Rock Island District, Corps of Engineers presented the bronze dedication plaque to B. J. Worley, vice-president and Chief Engineer, Milwaukee Railroad at the bridge site.

The replaced viaduct was built in 1912 and was originally built as a double track structure and at the time was one of the highest and longest railroad structures in the country. The downstream track was abandoned in 1934 with the advent of centralized traffic control and a portion of the superstructure was removed.

Demolition of the old Chicago, St. Paul and Pacific Railroad viaduct occurred at 1 p.m. on December 11. The demolition and removal was performed by X-DEMEX, Incorporated of Tulsa, Okla. Precision explosion devices were used and the first demolition was the two 156-foot deck truss spans. The east and west ends of the viaduct were dropped by explosively cutting and removing 20-foot sections from upstream tower legs. The unbalanced load of the super-structure and towers caused them to topple to the ground. The structural steel, once on the ground was cut into pieces using conventional techniques.

