

Pontoon Bridge

One of the most interesting sidelights of Milwaukee railroad history was the manner in which it crossed the Mississippi River. It was the enterprising John Lawler of Prairie du Chien, who, mindful of increased railroad traffic, began operating a line of barges between Prairie du Chien and McGregor. Lawler contracted with the railroads to ferry cars of livestock across the Mississippi for \$6 each, receiving up to \$8 for other loaded cars.

At first the cars were taken on barges and guided by a steamboat around the big island in the middle of the river. Then the resourceful Lawler had rails laid on the island so that the railroad cars could be moved more rapidly from shore to shore. Barges were loaded with the cars on one bank and pulled across to the island by a cable which was powered by a steam rig from another barge on the island's shore. A switch engine took the cars across the island. Then they were ferried a second time by cable-operated barges for the last lap of the journey to the opposite bank of the river.

Going across the island was less hazardous than going around it. Still, the possibility of losing a car in getting it on and off a barge was very immi-

ment. Then, too, whenever a freight car plunged to the bottom of the Mississippi, Lawler did not get his toll charge, to say nothing of the threat of a lawsuit. Fortunately, he had in his employ a Bavarian shipbuilder, Michael Spettel, who came to his aid. Spettel advocated a pontoon bridge to solve the problem. He did more: he whittled out a model of the proposed structure and turned it over to his employer. Lawler subsequently financed the strange bridge, which was completed in 1874.

Essentially, the bridge in the east channel was three 131-foot barges lashed together by an immense strap-iron hinge to keep the span properly aligned, yet flexible enough for vertical movement. The pontoon in the west or Iowa channel was a specially constructed single deck scow, 408 feet long, 28 feet beam, and 6 feet depth. The pontoon in each channel, when in position in line with the piling, stood at an angle with the general direction of the current of about 55° . At one end, the floating span was hinged to a permanent trestle. At the free end, a steam-operated powerhouse was installed along with a cable drum. A cable was run from the stationary approach to the drum, and from there it was anchored to a piling downstream and at right angles to the crossing. Whenever a river boat whistled for the channel the cable was wound around the drum, pulling the free end of the span toward the heavy piling and thereby opening the bridge.

Inasmuch as Lawler took out patent rights for the pontoon bridge in his own name, this action precipitated a long-standing controversy which was sparked by Spettel's dismissal in 1887. The bridge itself was Lawler's, but it would appear the patent belonged to Spettel, who failed to file a claim or take action until years after the rights had been appropriated by his employer.

The bridge continued to be controlled by the Lawler interests until John Lawler's death in 1891. It is estimated that nearly a million railroad cars crossed the floating tracks at a fee of a dollar a car. After the passing of its owner, the Milwaukee Road took over the operation of the structure.

In 1914, the east channel bridge was replaced by a stronger pontoon structure. Two years later, a new 276-foot span was installed across the west channel. At the time of construction it was said to have been the largest bridge of its type in the world.

On the new bridge, the track was cradled between two upright structures which rested on the long barge-like pontoon. By an ingenious system of cables and pulleys the track could be raised or lowered as much as eighteen feet and blocked at the desired level. Variations in track elevation were desirable because the level of the Mississippi in this vicinity could vary as much as twenty-two and one-half feet.

The Prairie du Chien-McGregor pontoon

bridges carried multitudes of immigrants on their way to homestead in Iowa, Minnesota, and the Dakotas, and trainloads of grain and other commodities to the East. They gave reliable service except when the wind was unusually high; or when, in the Spring, the spans had to be kept open for several days to prevent floating ice from crushing them.

In recent years, however, with longer and heavier trains, it has become more economical to use the Milwaukee's orthodox bridges across the Mississippi at La Crosse, Wisconsin, and Savanna, Illinois, rather than the somewhat cumbersome pontoon crossing. Furthermore, the high cost of operation and repair of the historic floating structures was not warranted in light of declining traffic. The last train crept over the quaint span at the customary 4-mile-an-hour speed limit on October 31, 1961. Shortly thereafter the bridges were dismantled.