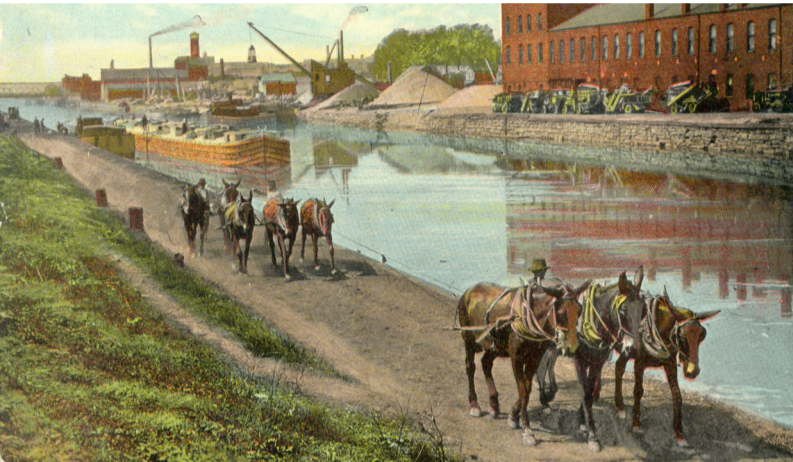


An Old Erie Canal Puzzler: How Did Mule Teams Pass Each Other?

This brief activity is a P.S. to the article in the previous issue of *Middle Level Learning*: “The Erie Canal: From Public Works to National Wealth,” by S. Kay Gandy (*MLL* no. 56, pages 10-16), which can be seen and downloaded at www.socialstudies.org/publications/ml.



PROCEDURE:

Gather students into groups of three, show students the image here, and then ask the groups to propose solutions to this puzzle. Give them ten minutes to arrive at a solution and prepare themselves to explain it to the rest of the class. They may draw a diagram of their solution if that helps. After hearing all of the proposed solutions, read the solution given below, and ask for comments about it.

THE PUZZLE:

On the old Erie Canal, there was usually only one path along one side of the canal, not along both sides. Teams of mules walked this path as they pulled barges and boats going east or west. How did two teams of mules, one heading east and one heading west, “pass” each other on a single path? You might get funny images in your mind of mules trying to climb over each other while keeping their ropes untangled! But that is not what really happened. How did they do it?

THE SOLUTION:

Teams of two to six mules pulled barges and boats on the canal. They pulled on long ropes, called “lines,”

reaching back to the boat, which followed 50 to 100 feet behind. When two boats were coming towards each other, the mule drivers first determined who would enjoy the right of way. That would usually be the boat going west because it tended to have more people, and be lighter (unburdened with produce, which came from the west). Or the decision might be determined by which boat had the scarier captain!

The mule team pulling the boat with the right of way kept pulling its boat. We’ll call that “boat 1.” The mule team for boat 2 (which was several yards ahead of the actual boat in the water) stopped walking and pulling, but the boat had enough momentum to glide until it was even with the mule team. This created enough slack in the lines that the lines would go under the water and boat 1 could float right over those ropes!

As for the mule teams, the towpath was typically about 10 feet wide, so there was enough space for the animals to maneuver around each other, probably with team 1 stepping over team 2’s line on the ground.

As for the boats or barges, each was piloted by a captain and steered with a rudder. As they approached, boat 2 would steer toward the far side of the canal, away from the towpath, while boat 1 would float over the slack and submerged lines. 🌊

SOURCE: “I actually get that question a lot!” says Natalie Stetson, Executive Director of the Erie Canal Museum in Syracuse, New York (eriecanalmuseum.org). “I really wish there was video of this little do-si-do because even though I describe it nearly weekly, and I have a pretty good image in my head, I can’t imagine how it worked when things were really busy on the canal, as they were most of the time. If only time travel were possible!”