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PRIMARY SOURCE READING 12

Riding the Liverpool-Manchester Railway, 1830

The openings of the first railways in England were exciting occasions for the public, who organized holiday outings to watch the trial runs of the tiny engines and coaches. Only a privileged few—mostly financial backers and their friends—actually had the chance to ride the experimental trains; these rides were both risky and thrilling. In 1830 the Kembles, a well-known English theatrical family of actors, managers, and playwrights, were in Liverpool when George Stephenson made a trial run of the Liverpool-Manchester line. Fanny Kemble, an actress and author who was 21 at the time, made the trip as Stephenson's guest and described it in letters that she later included in her memoirs.

Guided Reading *In this selection, read to learn how the first trains looked and functioned.*

While we were acting at Liverpool an experimental trip was proposed upon the line of railway which was being constructed between Liverpool and Manchester, the first mesh of that amazing iron net which now covers the whole surface of England and all the civilized portions of the earth. . . . My father knew several of the gentlemen most deeply interested in the undertaking, and [George] Stephenson having proposed a trial trip as far as the fifteen-mile viaduct, they . . . invited him and permitted me to accompany them; allowing me, moreover, the place which I felt to be one of supreme honor, by the side of Stephenson. . . . He was a rather stern-featured man, with a dark and deeply marked countenance; his speech was strongly inflected with his native Northumbrian accent. . . . He was wonderfully condescending and kind in answering all the questions of my eager ignorance, and I listened . . . as he told me of all his alternations of hope and fear, of his many trials and disappointments, related with fine scorn how the "Parliament men" had badgered and baffled him with their book-knowledge. . . . [The government had refused to finance Stephenson's plan.]

. . . And now I will give you an account of my yesterday's excursion. A party of sixteen persons was ushered into a large court-yard, where . . . stood several carriages of a peculiar construction, one of which was prepared for our reception. It was a long-bodied vehicle with seats placed across it, back to back; the one we were in had six of these benches. . . . The wheels were placed upon two iron bands, which formed the road, and to which they are fitted, being so constructed as to slide along without any danger of hitching or becoming displaced, on the same principle as a thing sliding on a concave groove. The carriage was set in motion by a mere push, and . . . rolled with us down an inclined plane into a tunnel, which forms the entrance to the railroad. This tunnel is four hundred yards long (I believe) and will be lighted by gas. . . .

. . . We were introduced to the little engine which was to drag us along the rails. She (for they make these curious little fire-horses all mares) consisted of a boiler, a stove, a small platform, a bench, and behind the bench a barrel containing enough water to prevent her being thirsty. . . ,—the whole machine not bigger than a common fire-engine. She goes upon two wheels, which are her feet, and are moved by bright steel legs called pistons; these are propelled by steam, and in proportion as more steam is applied to the upper extremities . . . of these pistons, the faster they move the wheels; and when it is desirable to diminish the speed, the steam (which unless suffered to escape would burst the boiler) evaporates through a safety-valve into the air. The reins, bit, and bridle of this wonderful beast is a small steel handle, which applies or withdraws the steam from its legs or pistons, so that a child might manage it. . . .

There is a chimney to the stove, but as they burn coke [fuel] there is none of the dreadful black smoke which accompanies the progress of

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a steam vessel [ship]. This snorting little animal, which I felt rather inclined to pat, was then harnessed to our carriage, and, Mr. Stephenson having taken me on the bench of the engine with him, we started at about ten miles an hour. The steam-horse being ill adapted for going up and down hill, the road was kept at a certain level, and appeared sometimes to sink below the surface of the earth, and sometimes to rise above it. Almost at starting it was cut through the solid rock, which formed a wall on either side of it, about sixty feet high. You can't imagine how strange it seemed to be journeying on thus, without any visible cause of progress other than the magical machine, with its flying white breath and rhythmical, unvarying pace, between these rocky walls. . . .

. . . We had now come fifteen miles, and stopped where the road traversed a wide and deep valley. Stephenson made me alight and led me down to the bottom of this ravine, over which, in order to keep his road level, he has thrown a magnificent viaduct of nine arches, the middle one of which is seventy feet high, through which we saw the whole of this beautiful little valley. . . .We then rejoined the rest of the party, and the engine having received its supply of water, the carriage was placed behind it, for it cannot turn, and was set off at its utmost speed, thirty-five miles an hour, swifter than a bird flies (for they tried the experiment with a snipe). You cannot conceive what that sensation of cutting the air was; the motion is as smooth as possible, too. . . . When I closed my eyes this sensation of flying was quite delightful, and strange beyond description; yet, strange as it was, I had a perfect sense of security, and not the slightest fear.

CHAPTER 12

INTERPRETING THE READING

Directions *Use information from the readings to answer the following questions. If necessary, use a separate sheet of paper.*

1. Railroads were often called "iron horses," and in several spots the author speaks about the locomotive as if it were a horse. Give examples of this from the selection and explain why people made this comparison.

2. How was the speed of the locomotive controlled?

3. What was Fanny Kemble's attitude toward George Stephenson?

4. To start his railroad, Stephenson engineered and built much more than just the locomotive and carriages. Cite some examples from the selection of his other engineering feats.

Critical Thinking

5. **Making Inferences** What does the opening sentence of this selection tell you about the spread of the Industrial Revolution?