

# Mr. Eads' Bridge

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## CHAPTER SEVEN

### Steel Resolve

Becky tried not to giggle. "You asked the President of the United States to help keep the bridge on track?"

Mr. Eads shrugged. "One has to use any and all means at their disposal. The steamship companies surely did in attempting to maintain their monopoly. If you only knew about the tussles I've had with Carnegie..."

"I'd love to hear about them," Becky said.

"Andrew Carnegie is a director at the Keystone Bridge Company, the iron supplier for the project. He continually pressures me to use common iron rather than the steel that is now available. I've seen alloy steel used successfully in several applications in Europe on a smaller scale. I know this river, and an inferior design using inferior materials will not stand up to its destructive nature."

"What's the difference between iron and steel?" Becky asked. "I always thought they were kind of the same."

"Steel is simply iron blended with other elements resulting in a stronger metal. The steel supplier delivered unacceptable quality carbon steel components. I've elected to use chrome steel instead for the structural parts, an alloy combining iron and chromium. However, the cast steel couplings for the superstructure were so shoddy I had to replace them with braces of my own design using forged wrought iron."

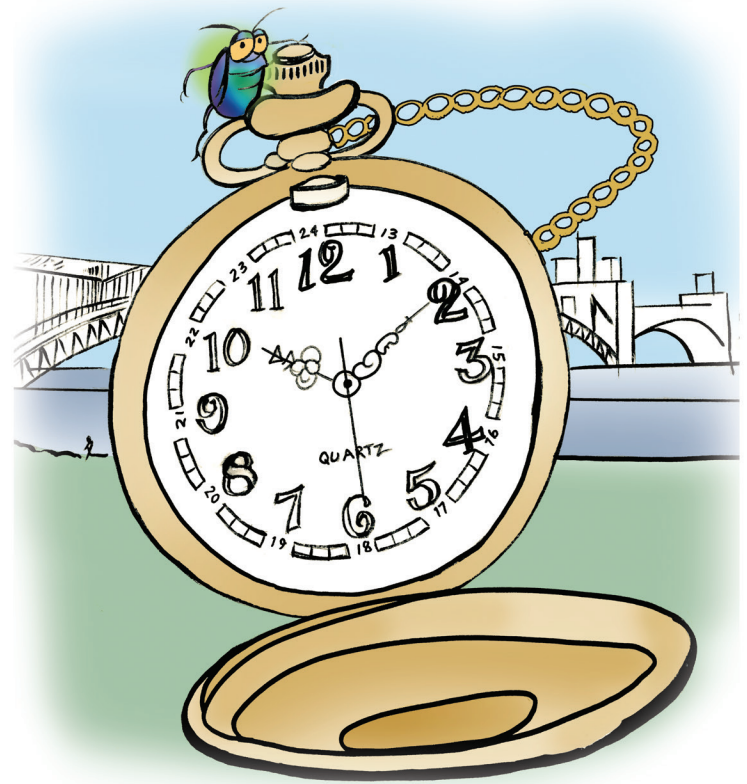
"Wrought iron?"

"It's shaped from solid metal rather than being fully melted and poured into a casting. It's one application that remains stronger than the new steels."

Becky looked at the interlaced tubes and ribbed arches on the emerging bridge. "It's more getting the right people involved that determines success or failure," Eads replied, following with her gaze. "I have a number of exceptional engineers with me who contributed immensely. The quality issues, unfortunately, resulted in nearly two years of delay."

He pulled out a pocket watch. "Ladies, I've enjoyed our talk. Thank you for your interest. I must bid you adieu and rush to another meeting." He smiled, bowed and departed.

"How fortunate I was able to introduce you to that man!" Laura said. "He has spent a great deal of time recuperating from



health issues. However, he's discovered a multitude of technical innovations while convalescing during his trips to Europe."

"Not simply discovered them; he's implemented them on a grander scale here than they have in Europe," Becky said.

Laura smiled. "Now you're seeing his genius."

"I can't blame you for being excited. It really is marvelous." Becky looked out the corner of her eye as a blinking, glowing beetle made a daring Immelmann loop in slow motion. "Umm, Laura, thank you for sharing all of this with me. I'll never forget it! But I need to be going now."

"Of course, my friend. It was a pleasure." Laura bowed gracefully, then walked toward the bridge.

"Now, my little glowing bug, where are you?" Becky whispered.

*Not bug. Time beetle, a tiny voice sang near her ear. You did well.*

### Newspaper Connections:

Building materials, such as steel, may be affected by tariffs. Use newspaper articles to read about and understand tariffs.