

CHAPTER XII -Tom Swift and His Electric Locomotive

The excitement and tension surrounding Tom Swift's electric locomotive increased as the try-out day approached. After Ned Newton shared his alarming discovery of a deliberate attempt to sabotage the locomotive with explosives, Tom, his father, and Ned delved into investigating the incident. They quickly deduced that the attempt likely stemmed from O'Malley, aiming to thwart Mr. Bartholomew and the H. & P. A. railroad rather than directly targeting the Swift Construction Company. The focus then shifted to tightening security around the construction site, notably by enhancing the stockade's defenses with a potentially electrified copper wire to prevent further sabotage attempts.

Despite steps to fortify the site and a keen focus on completing the locomotive, the cost of these preparations worried Ned Newton due to the financial strain they imposed on the Swift Company. Nonetheless, Tom was unwavering in his commitment, emphasizing the necessity of simulating real-world conditions for the locomotive's trial. This entailed establishing a system capable of converting and reducing a 100,000-volt alternating current received at the newly built station to a 3,000-volt direct current specifically for the locomotive's operation, aligning with the conditions it would face on the Hendrickton & Pas Alos line.

The meticulous plan for the electric locomotive extended beyond its internal mechanisms. Tom also had to consider the physical infrastructure for the trial, leading to the construction of a two-mile track within the stockade, equipped with an advanced overhead trolley system. This setup required substantial investment, much to the chagrin of Ned, who monitored the escalating expenses with caution. Despite the risk and the high stakes involved, Tom's resolve remained firm, driven by a blend of

innovation ambition and a determination to outdo the competition, symbolized by the "Jandels."

As the chapter closes, the advanced nature of Tom's project is evident—not only in the ambitious engineering efforts to create a cutting-edge electric locomotive but also in the strategic measures taken to protect the invention from sabotage. The seamless blend of technical detail, suspense, and determination sets a robust foundation for the try-out day, promising a showdown not just of technological prowess but also of Tom's resilience against external threats and internal challenges.



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