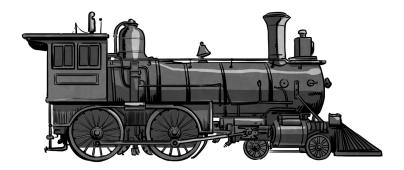


Elijah McCOY

Born of fugitive slaves and oppressed at every turn because of the color of his skin, a young boy with a natural curiosity for tinkering overcame all obstacles to become one of the most important inventors of the industrial age.



The Real McCoy

When you want "the real thing" or "the original," you may say you want "the real McCoy." For example, if you wanted the best shoes on the market, not a knock-off, you would walk into the store and proclaim, "I'm looking for the real McCoy."

But wait, whose name was worthy of being attached with such a praiseworthy phrase? Elijah McCoy.

We often hear that it's necessary for public bureaucrats to convince the public that corporations need government handouts to promote economic growth to create progress. However, history tells us a different story. It tells us that when entrepreneurs and inventors are left to their own devices with the freedom to succeed based on their own efforts, we find naturally occurring economic prosperity.

McCoy did just that. Not only did he become a successful inventor thanks to the freedom the market provided, he also destroyed the racist narrative of his time: black people could not compete with whites. His rise to prominence as an inventor came just after the American Civil War. McCoy became a beacon of freedom for people across the world, demonstrating that when we allow all people to experience equal freedom to invent, create and produce in the free market, innovative progress can never be halted.

The Makings of a Creator

McCoy was born in Colchester, Ontario, in 1843. His parents had escaped slavery in Kentucky using the Underground Railroad. Luckily, Canada acted as a sanc-

tuary from the barbarous practices of the United States at the time. This would become beneficial to McCoy's hard-working father, as he was able to make his family economically stable.

McCoy's parents saw potential in him. As a boy, he was always tinkering with his father's tools and machines; he was fascinated by how they worked. He would look at them and analyze how each part came together to make the entire mechanism work. He was forever intrigued!

The success of his father gave his family the resources to send McCoy to an engineering school in Scotland when he was just sixteen. Soon he would go on to earn the credentials of a master mechanic and engineer. After five years of studying mechanical engineering and the end of the American Civil War, McCoy and his family were able to return to the United States safely. They settled in Ypsilanti, Michigan, which was located near the Michigan Central Railroad.

Engineering had become Elijah's passion, and he was ready to take his next step toward becoming the inventor he dreamed of being. Unfortunately, the end of the Civil War did not immediately bring an end to the racial prejudices facing black Americans. McCoy applied to the Central Railroad company as an engineer, but once they discovered he was a black man, they refused to hire him. He was devastated. His work in Scotland had only fueled his passion for understanding the workings of machines, and now cruel and unjust racial profiling was getting in his way.

Although denied the engineering position, he wanted to find a position around the engines as a way to continue to learn and envision innovation. He worked with what he

was given. McCoy took a position as a fireman and oilman, which was one of the only railroad positions offered to black Americans at the time.

McCoy gladly took the opportunity. He got his start doing the job nobody else wanted but someone had to do. At the time, around 1870, every moving part in an engine needed to be lubricated with oil, especially the massive steam engine locomotives. The machine could only move as fast as the oilmen could work.

He did his job well, climbing all over the engine to oil every vital part. After several minutes of this undesirable work under the hot machinery, McCoy emerged covered in a dusty glaze of grease and his sweat. His sweat streamed down his face, mixing with oil and coal debris that covered him, stinging his eyes. It was exhausting work.

McCoy was able to visualize the objects around him and make connections to other areas of his life. After putting in backbreaking work to lubricate a train engine, he would emerge and head over to the water bucket to quench his thirst. After doing this repeatedly, he began to notice the similarity between the train and himself: both he and the train needed to replenish with liquids to keep everything running smoothly. He needed water, while the machine needed oil.

Finding a Solution

Have you ever noticed your parent's car dinging to let them know it requires an oil change? If you put off getting that oil change, the moving parts of your car will get extra hot! In time, your engine will begin running less efficiently, and engine parts may corrode, warp, and wear out. Eventually, your engine will need to be replaced!

Luckily, the innovative power of the free market has not only brought us automobiles to drive wherever we need to go, but it also opened up a service opportunity for businesses as well. With cars requiring tune-ups and oil changes, mechanics shops exist within a few mile radius of almost everyone in the United States.

Imagine the locomotive steam engine of McCoy's time. These large engines needed workers to lubricate the moving parts of the machine manually. The steam power caused higher pressure and considerably more heat, making the conditions ruthlessly corrosive to the metal on the locomotive. The oil provided a thin layer of lubrication to help protect the steam cylinders and pistons.

The engines didn't have a self-lubricating system that we see today. Now, we pour oil into a car and the mechanism is in place to properly lubricate everything needed on your vehicle, like magic! Due to the trains being in constant need of lubrication, they needed to make regular stops on the journey. If the trains didn't stop, it would cause overheating and fires in the engine. But stopping too often caused freights and passengers to become delayed—stifling the railroad system with inefficiency.

McCoy recognized this inefficiency. Since he was a child, his mind was always turning, imagining what he could do to make things more efficient. With his lifetime of experience, he was able to identify the problem: someone needed to find a way to lubricate the steam engine while the train was still in motion.

He immediately set to work on the problem after his shifts as an oilman. After tinkering, testing, and rethinking his invention, he had made the perfect prototype of a lubricating cup. His device used a reservoir of oil that gradually fed the oil to the various parts that needed lubrication, doing all of this while the locomotive was still in motion. Although this new mechanical invention of his would make his own job obsolete, he saw it as a risk worth taking. His mind was made for creating.

Once McCoy had successfully created the lubricating cup, word of his creation spread. Railroad companies and conductors did everything they could to get their hands on one. This new invention fixed the problem at hand, kept the trains on a more accurate schedule, and made cargo deliveries quicker and more reliable. Additionally, passengers on the trains were glad to arrive at their destinations quicker. Everyone was happy! Business was booming!

Demand for McCoy's invention skyrocketed. There was one problem, though: McCoy didn't have time to create an infrastructure to build his new invention fast enough, and the free market would not wait for him. Imitations of his invention began popping up across the country to fill this new market gap.

However, while others tried to copy his invention, none of these imitations could meet the golden standard that McCoy's version had achieved. His attention to detail, engineering skills, and standard of quality was so high that his lubrication cup was what all the railroad companies wanted on their steam engines, and they were willing to pay top dollar.

To avoid confusion around the other various lubrication

cups on the market, railroad businessmen and owners started asking for "the real McCoy." This was the birth of the famous phrase, but steam engine lubrication was not McCoy's only invention. It was only the beginning.

Takeaway

McCoy's invention had a ripple effect on the locomotive industry. With lubrication made easier and corrosive effects much less of an issue, it created an opportunity for innovation of the steam engine itself. They were soon able to run faster and, by consequence, hotter. This created another opportunity for Elijah to continue enhancing his creations; it was a chance to benefit the market and the people. He went on to create a graphite/oil lubricator made just for this issue.

Success would continue to follow him. He was a man looking to solve problems. He viewed everything with a lens of wonder. He was always asking himself "what can I do to make this better?" This question led him to patent fifty-seven inventions in his productive life. A few of his accomplishments were his enhanced lubricator cup, an improved air brake lubricator, and an enhanced wheel tire. He was filing patents into his 70s. His mind never stopped looking to improve. In 1920, he founded the Elijah McCoy Manufacturing Company in Detroit, a fantastic accomplishment for the time period given the prejudices of the times. He continued to create until his death in 1929 at the age of 86.

McCoy is a beautiful symbol of the power of free markets. After the Civil War, a time when people were free from the shackles of overregulation by the hands of government—

the rise of the regulatory state wouldn't come for another century—they were free to create. This included the finally free black Americans. This free enterprise of our country's past allowed black Americans to show white people the creative power they, too, possess.

McCoy took this opportunity and cemented his name in history for perfecting creations in a way that nobody else could.

Fun Facts

- After perfecting the lubricating cup for locomotive railroad engines, his designs made their way to ship engines.
- Elijah considered his engine lubricator combo his greatest invention. It decreased the use of coal and oil.