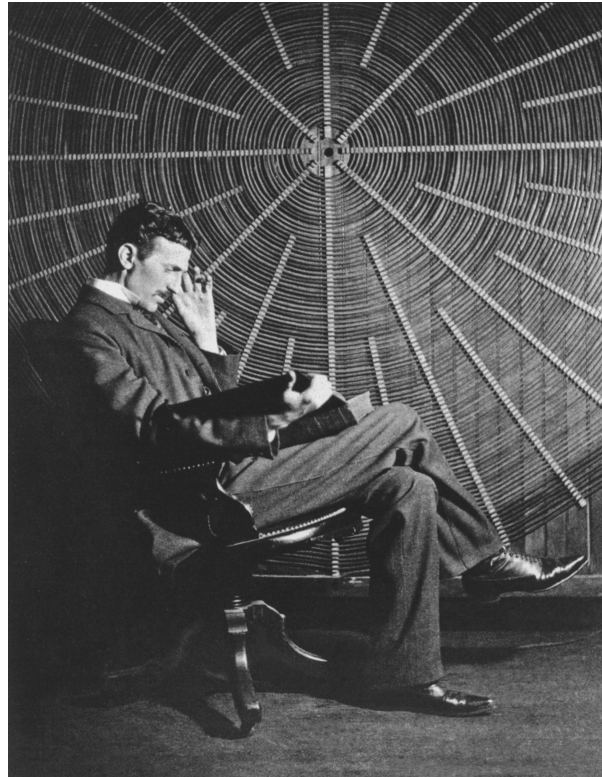


Nikola Tesla, Inventor



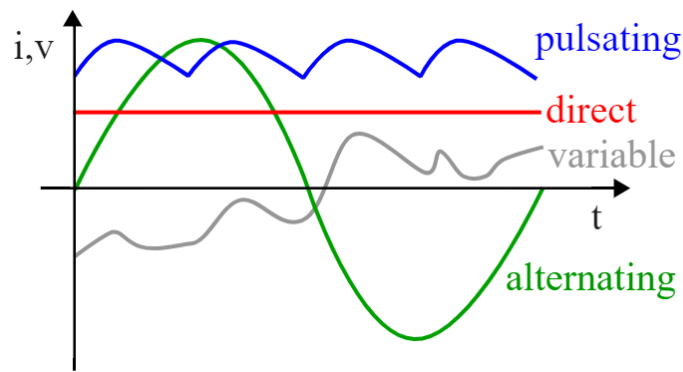
Most grade school students know about Thomas Edison. After all, he invented the light bulb, which literally lit up the world. Lesser known is another brilliant inventor who worked with Edison. His name was Nikola Tesla. Tesla was not born in America like Edison. He was born in Croatia, a country across a sea and east of Italy, in 1856. He was about nine years younger than Edison.

Nikola Tesla became an engineer, that is, someone who designs and builds things. He moved to America when he was 28. He became interested in electrical devices because his mother enjoyed inventing small home appliances when he was a boy. Tesla's father was a priest and a writer. He wanted his son to join the priesthood. But Tesla was interested in science.

Tesla had little money when he arrived in the United States in 1884. Since he was very bright, Thomas Edison hired him to help improve his inventions. The two had very different ideas though, especially about electric current.

Tesla spent a lot of time working on a different kind of electric system than Edison worked on. Tesla worked on alternating current or AC. Before AC, scientists, including Edison, worked only with direct current or DC. With the technology available at the time direct current could not travel along wires very far before it lost energy.

Alternating current could provide power across long distances, so it became the most commonly used type of current to provide electricity throughout the world.



In 1891, Tesla also invented the “Tesla coil.” It is used to produce high voltages at low currents. Tesla used his Tesla coil to conduct innovative experiments in many different applications, including the transmission of electrical energy without wires. Tesla’s patented Tesla coil laid the foundation for wireless technologies and is still used in radio technology today. He was also one of the first scientists to learn how radar, X-rays, and remote controls could be used. In 1887, he was able to start his own company, the Tesla Electric Company.



Most of Tesla’s scientific efforts were devoted to developing practical uses for his alternating current. Since Edison refused to work with alternating current, Tesla eventually quit working with the famous scientist. He then helped a man named George Westinghouse. Westinghouse planned to use Tesla’s alternating currents to set up electrical stations all over the country. Tesla, too, wanted all Americans to have power for lights and other new inventions.

In 1901 Tesla began work on a free energy project. He designed and had a power plant with a giant tower built on Long Island, New York. Tesla had competition though. Edison used funds from several wealthy investors to pay for building costs. Edison's success with radio technologies hurt Tesla. His own investors began to think his plans for widespread power would fail. Unfortunately, Tesla lost these investors and had to shut his project down in 1915.

Even though Tesla was a brilliant inventor, he was not good at business. For example, he sold his patent for alternating current to Westinghouse. Patents protect ideas for inventions so they cannot be copied by other people. People like Westinghouse took credit for Tesla's ideas and became wealthy using them, while Tesla died a poor man.

Many people think Tesla should get more credit for his many inventions and vast contributions to electrical science.

Nikola Tesla died from heart problems on January 7, 1943. He was 86. Even though he did not become as famous as Edison, his inventions changed the world. In particular, his work with alternating current made it possible for people everywhere to have power. So the next time you flick on a light or a computer, remember Tesla as well as Edison because both inventors made the miracle of electrical power possible.

By The Scholar Within Team

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