



## Did Thomas Edison steal the idea for electric light globes?

### Worksheet 3 - Who was Joseph Swan?

Contrary to what schools have taught for years, the American icon, **Thomas Edison**, neither invented the light bulb, nor held the first patent to the modern design of the light bulb.

In reality, light bulbs used as electric lights existed 50 years prior to Thomas Edison's 1879 patent date in the U.S.

Additionally, **Joseph Swan**, a British inventor, obtained the first patent for the same light bulb in Britain one year prior to Edison's patent date. Swan even publicly unveiled his carbon filament light bulb in Newcastle, England a minimum of 10 years before Edison shocked the world with the announcement that he invented the first light bulb. Edison's light bulb, in fact, was a carbon copy of Swan's light bulb.

How do two inventors, from two different countries invent exact same thing? Very easily, if one follows in the other's footsteps. Swan's initial findings from tinkering with carbon filament electric lighting, and his preliminary designs, appeared in an article published in Scientific American.

Without a doubt, Edison had access to, and eagerly read this article. Giving Mr. Edison the benefit of the doubt, and stopping short of calling him a plagiarist [thief], we can say that he invented the light bulb by making vast improvements to Swan's published, yet unperfected designs.

Swan, however, felt quite differently, as he watched Edison line his pockets with money made from his invention, and took Edison to court for patent infringement. The British Courts stood by their patent award for the light bulb to Swan, and Edison lost the suit. The British Courts forced Edison, as part of the settlement, to name Swan a partner in his British electric company. Eventually, Edison managed to acquire all of Swans' interest in the newly renamed Edison and Swan United Electric Company.

In the United States the Patent Office also ruled that Edison's patents were invalid, because he based them upon the earlier art of a gentleman named William Sawyer.

Edison dusted himself off, and went into business setting up a system of power distribution in New York City, and selling the light bulbs that used this electricity. The light bulb business only flickered between 1879 and 1889, until word-of-mouth advertising of lower electricity costs fanned the flame, and business boomed. Edison's client base rapidly expanded to three million customers over the span of 10 years.

**DID YOU KNOW?** The first light bulbs lasted a mere 150 hours, and that ten years later, Edison introduced one that lasted 1,200 hours? The average light bulb today lasts approximately 1,500 hours.

Adapted from [www.coolquiz.com/trivia/explain/docs/edison.asp](http://www.coolquiz.com/trivia/explain/docs/edison.asp)