

LIGHT BULB

FROM
1802

Thanks to the light bulb, the world suddenly became a lot brighter. This invention began the electrification of Planet Earth.



Once the light bulb had been invented, people could have as much light in their homes as they wanted—and it was much brighter than any light they had before. The invention was not just a complicated affair but it also ended up being a competition. Just imagine you are trying to solve a difficult problem with rich rewards at the end, and you know that there are others trying to do the same. You'd certainly be in a hurry to get there first!

In the first half of the nineteenth century, the British chemist Sir Humphry Davy used electricity, only recently discovered, to connect wires and a piece of carbon to a battery he had invented, making it shine.

In 1835, the Scotsman James Bowman Lindsay succeeded in getting an electric lamp to burn continuously for a few minutes.

In 1840, the British chemist and astronomer Warren De la Rue used Davy's discovery to obtain light from a platinum wire.



In 1850, yet another British inventor, Joseph Wilson Swan, had the idea to place a carbonized paper filament inside a glass bulb. Within 10 years he had created a working bulb. This approach prevented the filament from breaking or burning too quickly. In 1878 he conducted a more successful experiment: he pumped air out of a glass bulb in which he had placed a carbonized cotton filament. When he passed electricity through it, the filament lit up.

The German clockmaker and inventor Heinrich Göbel, who had emigrated to the U.S. in 1848,



Nothing moves faster than light. The speed of light is 186,000 miles (300,000 kilometers) per second. That is the speed at which the starship Millennium Falcon flies in *Star Wars*, though, according to Han Solo, it can actually reach one and a half times that speed.

