

Physical Science Readers: Making It Go: The Life and Work of Robert Fulton

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Sally Ride Science

Science Consultants
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Science Department Chair,
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Jane Weir, MPhys

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Always an Inventor

Robert Fulton is best known for creating the first successful **steamboat**. That is really just a small part of what he did. He was an inventor, artist, statesman, **mechanic**, and **engineer**. From the beginning, he spent his days learning and trying new things.



Fulton was born in Pennsylvania in 1765. His father died when he was just three. His mother was left to raise him and his siblings alone. When Fulton was just eight, his mother sent him away to school. But she became worried. She didn't think he was learning enough there.

She told his teacher of her concerns. The teacher said there wasn't much he could do. He thought that Fulton's "head was so full of original ideas that there was no room for . . . the contents of dusty books." Fulton didn't want to learn about what others said and did. He wanted to figure things out for himself.

↓ Force is needed to make planes take off, fly, and land.



Laws of Motion

Every engineer must learn the **Laws of Motion**. Sir Isaac Newton first came up with them about 300 years ago. They explain the effects of **force** on motion. The first law says that an object at rest will stay at rest if there is no outside force to put it into motion. It also says that a moving object will keep going in a straight line at the same speed forever unless there are outside forces. The second law says that a force makes an object speed up or slow down. The third law says that if a force is used, something happens in response to it that equals its power.