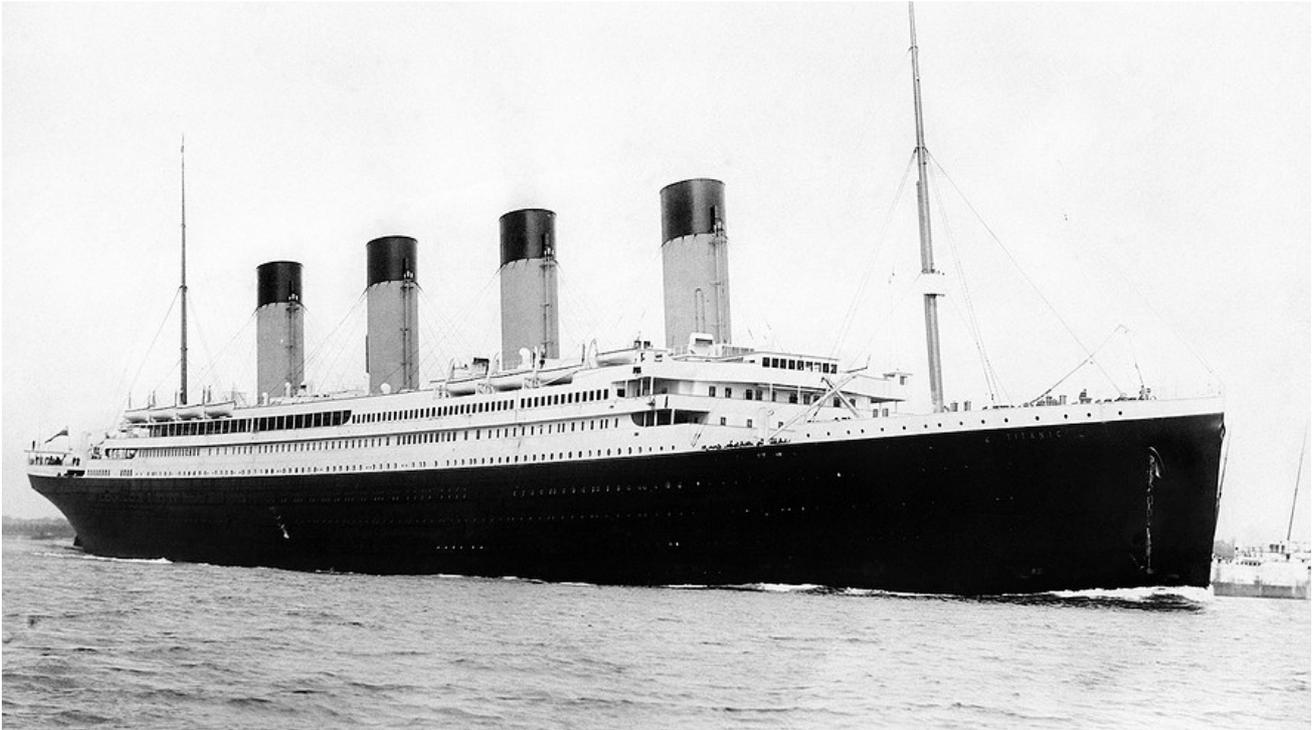


# Time Machine (1912): Wreck of the White Star liner Titanic

By Scientific American, adapted by Newsela staff on 03.30.16

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The RMS Titanic departing Southampton, England, on its maiden voyage, April 10, 1912. F.G.O. Stuart

*Newsela Editor's Note: This article originally appeared in the April 1912 issue of Scientific American. At the time, it was conventional to refer to a ship as "she."*

In the long list of sea disasters there is none to compare with the sinking of the Titanic on Sunday, April 14, 1912. The loss of the Titanic, on her first trip, has left the world with many questions.

The Titanic was thought to represent the latest technology in shipbuilding. It was built at the best shipyard in England. The Titanic was the largest ship ever built, and she was supposed to be the safest.

## **No One Thought Strong Ship Could Sink**

First, the floor of the ship had extra strength. The center steel beams at the bottom of the hull were the thickest and heaviest ever made. More strength came from waterproof, steel-walled rooms that were filled with coal for the boilers. They were supposed to keep water from getting into the boiler room.

Second, the Titanic had 16 watertight areas placed from left to right across the width of the ship. All the areas had a pumping system which would delay the rise of water if there was an accident.

Third, the great size of the Titanic was thought to be the most important safeguard of all. The builders thought that if an area flooded or the watertight doors failed to close, the ship would still stay afloat for a long time. Everyone thought the ship was unsinkable.

The overall length of the Titanic was almost 900 feet. The Britannia, built in 1840, was just 207 feet long. In 75 years, ocean liners grew to be almost 700 feet longer.

With passengers and crew, cargo and fuel, the Titanic weighed 60,000 pounds, or 30 tons. The ship had rooms for 2,500 passengers. Almost 500 more people worked on the ship.

### **Iceberg Warning Came By Radio**

On Wednesday, April 10, the Titanic left England on her only voyage. Four days later, on Sunday, April 14, the radio operator got a message from another ship. It warned that, by evening, Titanic's course was heading into a large field of icebergs.

The three propellers produced horsepower of 50,000. The Titanic was moving at nearly 22 knots, or about 23 miles an hour. It had covered 545 miles since Wednesday. Even though the crew had been warned about the ice field, they kept the ship moving at about 21 knots.

It is a mystery why Captain Edward Smith kept the ship moving at such a high speed. The night was clear and starlit. The sea was perfectly smooth. The thinking may have been that the ship's lookout could warn the captain before they came to the ice field. Also, there may have been the desire to break a speed record. Whatever the reason, the ship didn't slow down.

### **Titanic Moving Too Fast To Turn**

Suddenly the man in the crow's nest yelled, "Berg ahead!" It was a quarter of a mile away. The Titanic swung to the left, but it was too late. The iceberg tore a 300-foot gash in the side of the ship. Watertight doors were ripped open. The powerful pumps were flooded as the seawater rushed in. In just a few minutes, the crew knew the ship was going to sink.

If the Titanic had been moving more slowly, at 11 knots or at about 11 miles an hour, the gash on the side would have been shorter. The great ship might have bounced away from the iceberg. Fewer doors might have been ripped open. The pumps might have worked.

The wireless radio was important. The radioman sent an SOS signal for help. The SOS was heard by several ships. The nearest, the Carpathia, was 58 miles away. It arrived in 3 1/2 hours.

The ship began to sink. People lined up for the lifeboats. The boats! Just 20 in all, that could save 1,000 people. But more than 2,000 were waiting to be saved.

## Many More Lifeboats Needed

England has rules that ships need lifeboats for only 1 of 3 passengers. Many say this law is very wrong. A delay in changing the rules has cost many lives. It will not be forgotten. If the rules had been changed, every soul on board the Titanic could have been saved.

Space for extra restaurants, sun parlors or deck houses could have been used for 60 more lifeboats. Lives would have been saved. Steamship companies must change the rules. Companies say it will cost too much money. The answer to them should be that lives are more important than money.

The witnesses told us that the Titanic was almost straight up before she sank. Here she hung awhile, with her back end high in the air. As she swung, her heavy engines and boilers crashed forward. The water hissed as she sank, 2 1/2 hours after hitting the iceberg.

Survivors told of the muffled roar as the boilers burst, the bottom of the ship broke apart and it sank. The Titanic lies 2 miles below the surface of the Atlantic Ocean. The Titanic may, at this moment, be standing as a memorial to the 1,600 souls who died in this awful tragedy!