

Continuum of Greatness

*The Hall of Fame for Great Americans
at Bronx Community College, CUNY*



Alexander Graham Bell

1847 - 1922

*“All great inventions...are the product of many minds.
No one man could have made the telephone so
practical and useful.”*

Hall of Fame Facts

Alexander Graham Bell (1847 - 1922)

- Elected into Hall of Fame : 1950
- Alexander Graham Bell was among the six persons to be elected into the Hall of Fame
- Bell received 70 votes, nine more than were required
- Sculpture by : Stanley Martineau

Alexander Graham Bell

March 3, 1847 - August 2, 1922

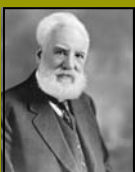


Alexander Graham Bell is best known as the inventor of the telephone, for which he received the first United States patent in 1876. The product of more than two years research and experimentation, Bell had at first offered the invention to Western Union for \$100,000. His offer was rejected. The company would soon regret its decision. The Bell Telephone Company, created in 1877, would within little more than a decade have more than 150,000 telephone subscribers. Other successes followed. The acquisition of Edison's patents for the carbon microphone would soon make telephone transmission over long distances practical. By 1915 Bell was able to make the first transcontinental telephone call between New York City and San Francisco.

The telephone was only one of Bell's creations. He and several associates attempted to impress a magnetic field on a record as a way of reproducing sound. Unable to develop a workable prototype, Bell soon abandoned the idea. It was only later realized that his conception of this basic principle would later lead to the development of the tape recorder, as well as both hard and floppy disc drives. Bell in addition would soon become interested in the development of hydrofoils and hydroplanes, beginning the experiments with airplane takeoffs from water in 1908 that would later lead to the development of practical hydrofoil watercraft. He eventually also became a supporter of aerospace engineering research through the Aerial Experiment Association (AEA) first created in October 1907.

Although best remembered for the telephone, Bell believed the photophone was his most important invention. This remarkable device, first developed in 1880, allowed the transmission of sound on a beam of light. Bell transmitted his first wireless telephone message that same year. The photophone used crystalline selenium cells as the receiver. Selenium's electrical resistance varies inversely with illumination; i.e., its resistance is higher when it is in the dark, and lower when it is lighted. The photophone worked through the modulation of a light beam. The resulting varying illumination of the receiver induced corresponding varying resistance in the selenium cells, which could then be used by a telephone to recreate the sounds captured at the receiver.

1876
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Bell receives the first U.S. patent for the telephone



1911
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Alexander Graham Bell successfully tests a hydrofoil craft

1915
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Bell makes the first transcontinental telephone call

1919
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A United States Navy hydroplane makes the first successful transatlantic flight

1935
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The first practical tape recorder is introduced in Germany

1947
↓
The American Ampex Company introduces a superior magnetic tape recorder

1952
↓
The first commercial hydrofoil is launched for service between Switzerland and Italy

1952
↓
The first optical fiber is created



1958
↓
The laserdisc is invented

Bell soon had to admit that photophone was a flawed device. The frequent disruption of transmission caused by clouds limited its use. The full importance of Bell's work would therefore be recognized only many years later. It was only after the development of modern fiber optics that the secure transmission of light over great distances was finally possible. Bell's photophone was then recognized as the progenitor of the modern fiber optics technology that today transports over eight percent of the world's telecommunications. It is through devices such as this that Alexander Graham Bell, protean and prolific nineteenth century inventor, continues to contribute to technological progress and a steadily rising standard of living in the twenty-first century.



Written and compiled by David Gordon.
Graphic design and layout by Chrystal Joseph

1969
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The floppy disk is invented



1970
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Improved fiber optic cables by the Corning Glass Works allows fiber optic telecommunications to begin

1970s
↓
Commercial digital recording of music is introduced in Japan and Europe

1979
↓
The first cell phones are introduced by Japan



1982
↓
The first compact discs appear on the market

1996
↓
The first photonic crystal fibers, carrying higher power than conventional fiber, becomes commercially

1997
↓
The first rewritable optical discs (CD-RW) appear

2001
↓
The first digital cell phones appear on the market

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