



Bringing the telephone to life

150 years ago, Alexander Graham Bell's invention changed how the world talks

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"Mr. Watson, come here, I want to see you."

Alexander Graham Bell spoke those words on March 10, 1876 – and changed the world.

The request made 150 years ago marked the first message successfully transmitted through Bell's new invention. In the next room over in his Boston laboratory, Bell's assistant heard the now-famous words crackle through a receiver.

The age of the telephone had just begun.

In a way, Bell's inspiration for the revolutionary invention started when he was a child growing up in Edinburgh,

Scotland, where his family was obsessed with speech. His father developed a system called "Visible Speech" to help the deaf learn to talk.

Bell ended up teaching the system at a deaf school in Boston after the family immigrated first to Canada and then to the United States. On the side, the young scientist became fascinated with how sound travels and worked to create a "harmonic telegraph."

At the time, inventors from around the world were racing to improve the telegraph, which was developed in the 1830s to transmit coded messages over wires. But Bell's idea was bigger: What if you could send the human voice over the wire?

Bell started making major

advances on his invention after joining with Thomas Watson, an experienced electrical designer and mechanic who became his dedicated assistant.

The breakthrough came when Watson accidentally plucked a metal reed they had attached to a wire. On the other end, Bell could hear the reed's overtones that would be necessary for transmitting speech.

Eight months later, Bell received his patent for "the method of, and apparatus for, transmitting vocal or other sounds telegraphically." Three days after that, Watson heard the first words ever spoken over the telephone.

Initial public reaction to the new device ranged from awe to skepticism.

After hearing a demonstration at the 1876 Centennial Exhibition in Philadelphia, Brazil's emperor reportedly exclaimed, "My God, it talks!" Queen Victoria reported the process to be "quite extraordinary," but said the sound was "rather faint," after Bell demonstrated the device.

Still, many people doubted the device's practicality and asked why anyone would need to speak to someone miles away when a telegram would do.

That sentiment quickly changed in 1877 after the Bell Telephone Company – today known as AT&T – began installing telephones in homes and businesses. By 1880, about 49,000 phones were in use across the United States.

Within years, the telephone had

morphed from a scientific novelty to a public necessity.

But 150 years later, questions still remain about who truly invented the world-changing device.

Another inventor, Elisah Gray, filed for a telephone patent the same day as Bell using a different technique for transmitting sounds waves. Gray later accused Bell of stealing the ideas described in his patent.

The controversy led to multiple lawsuits over the following years, but the courts ultimately upheld Bell's patent rights. Today, he is widely credited as the inventor of the telephone, though historians continue to debate the details of the case.

EVOLUTION OF THE PHONE

- 1876 — Alexander Graham Bell receives first U.S. patent for the telephone.
- 1877 — Bell Telephone Company begins building and operating telephone networks, marking the shift from invention to commercial enterprise and quickly attracting competing companies.
- 1878 — First commercial telephone switchboard introduced, enabling operators to manually connect calls. Innovation makes large-scale telephone networks practical.
- 1890s — Rotary dial replaces operator-assisted calling by allowing users to dial numbers themselves. Rotary dial automates call routing and significantly improves ease and efficiency of using a phone.
- 1915 — First transcontinental telephone line connects New York and San Francisco.
- 1927 — First transatlantic call uses radio waves to reach London.
- 1947 — Invention of transistor at Bell Labs revolutionizes electronic devices, including telephones, by replacing bulky vacuum tubes and paving the way for smaller, more reliable communication equipment.
- 1963 — Touch-tone dialing introduces dual-tone multi-frequency signaling, replacing rotary dialing. Technology enables faster dialing and later supports automated phone systems.
- 1983 — The Motorola DynaTAC 8000X becomes first commercially available hand-held mobile phone. Weighing nearly two pounds and costing \$4,000, it offers 30 minutes of talk time from a 10-hour charge.
- 1994 — IBM Simon becomes widely regarded as the first smartphone. It combines mobile calling with features such as email, a touchscreen and apps, foreshadowing modern smartphones.
- 2007 — The original Apple iPhone revolutionizes mobile communication with its multi-touch interface and full internet capabilities. It accelerates the global shift toward powerful, app-based smartphones.

PHONES OF THE PAST

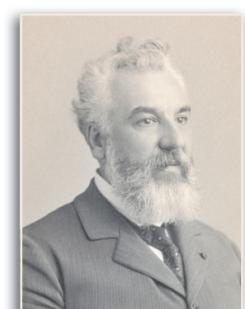


SMARTPHONES OF THE FUTURE

Tech giants such as Apple, Samsung and Google are racing to embed advanced AI systems directly into smartphones to produce the next generation of technology that started 150 years ago with Alexander Graham Bell's original telephone.

Instead of tapping through apps, users may soon rely on phones that anticipate their needs, according to the New York Times. AI assistants could draft messages based on context, summarize meetings in real time or suggest when to leave for an appointment based on live traffic and calendar data.

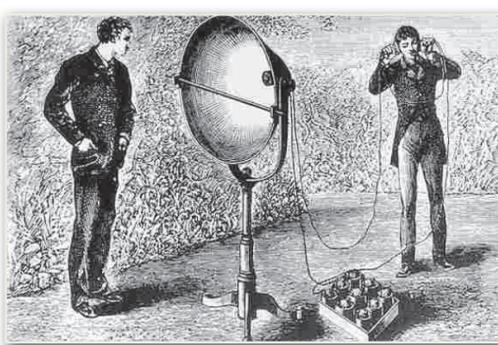
RELATED INVENTIONS



Alexander Graham Bell

PHOTOPHONE (1880)

Device transmits sound by reflecting sunlight off a vibrating mirror and sending it to a receiver that converts the light signals back into sound. This invention is an early precursor to modern fiber-optic communication.



METAL DETECTOR (1881)

Bell develops one of the first practical metal detectors in an attempt to locate a bullet lodged in U.S. President James A. Garfield's back after he is shot. Although unsuccessful due to interference from metal bed springs, the device lays groundwork for modern devices.

GRAPHOPHONE (1886)

An improvement on Thomas Edison's phonograph, the graphophone uses wax-coated cylinders instead of tin foil to record sound. This makes recordings clearer, more durable and easier to reproduce, helping advance early sound recording technology.