

How does telephone communication work?

1. The waves emitted by the voice reach the diaphragm.
2. The diaphragm vibrates and makes contact with an electromagnet.
3. The electromagnet transforms the wave into an electrical signal.
4. The signal travels along the cable.
5. The receiver translates the electrical signal into acoustic waves, and the voice is finally heard.

What were the first words ever spoken on the telephone?

10 March 1876. Alexander Graham Bell's home in Boston (United States). Bell speaks to his assistant, Thomas Watson, who is downstairs.

Message: "Mr. Watson, come here, I need you".

Distance covered by the signal: less than 100 m

The other inventors of the telephone

In 1876, Alexander Graham Bell went down in the annals of history with his patent for the telephone. Nevertheless, he was neither the first nor the only one to propose such an invention. In the same year, just two hours after Bell's patent application was filed, engineer Elisha Gray attempted to do the same with his own telephone apparatus.

Years earlier, in 1854, the Italian Antonio Meucci had already designed a device to talk at a distance with his sick wife, but financial difficulties prevented him from paying for the patent. He was 10 dollars short. In 2002, the Congress of the United States recognised him as the true inventor of the telephone.

Along with them, we find others who, at the time, conceived similar devices, such as Johann Philipp Reis in Germany, Charles Bourseul in France, Innocenzo Manzetti in Italy, Amos Dolbear in the United States and the Hungarian Tivadar Puskás.

There is no isolated genius without an enabling context, something that has happened repeatedly throughout the history of telecommunications with the emergence of similar ideas, coinciding in time, but in different places.

Alexander Graham Bell

United States, 1876

Cromwell Fleetwood Varley

England, 1870

Elisha Gray

United States, 1876

Antonio Meucci

United States, c. 1854

Charles Bourseul

France, 1854

Johann Philipp Reis

Germany, 1860

Innocenzo Manzetti

Italy, 1864

Tivadar Puskás

United States, 1877

Amos Dolbear

United States, 1870