

Living in the Past

Historical perspective

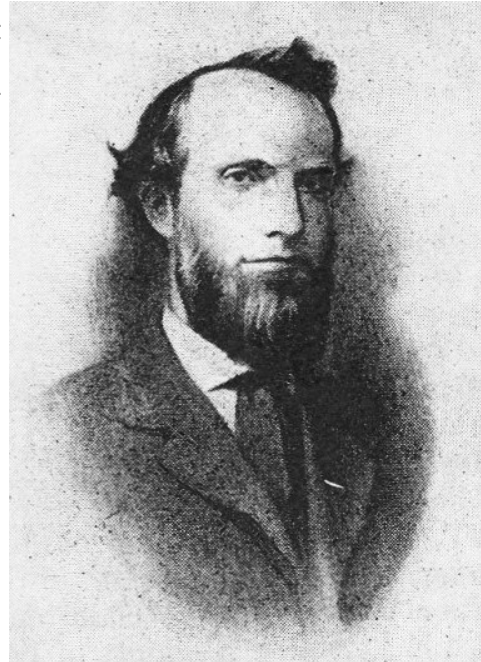


The first wireless transmission

It's well-established that [Guglielmo Marconi](#) was the first to make a local wireless transmission to his mother in [1894](#), and then the much-publicized transatlantic transmission in [1901](#). Later, the distinction of the very first radio patent was actually awarded by the US Supreme Court to [Nikola Tesla](#), who in 1893 wirelessly powered the Chicago World's Fair, then in 1898 demonstrated the first wirelessly controlled craft. Yet way back in 1866, before Marconi was even born, an obscure dentist named [Mahlon Loomis](#) had actually demonstrated a successful wireless transmission and reception between stations located 18 miles apart.

Who?

On two separate mountain peaks of the Blue Ridge Mountains, nearly identical setups using thin wires, kites covered in conductive mesh, and no power source except the Earth's atmosphere, Loomis set out to prove his theory. He surmised that the Earth's atmosphere contained enough "electrified energy" to power his stations, allowing one to send communication pulses to the other.



Each kite and conducting "kite string" was flown to nearly 600 feet in the air, with the end of the conducting string tied to earth ground. The wire of one of the kites was interrupted near the ground by a make-shift key (unwitting fore-runner of the later spark gap), while the wire of the other was interrupted by a galvanometer, to measure the reception response.

At a precise predetermined time, one station keyed a sequence of pulses, while the other station recorded the galvanic response. They repeated this several times, to ensure they had recorded accurately, and removed random noise from the result. The results were as Loomis had predicted, and had become [the first known wireless communication](#).

Due to lack of funding (in part because of the Chicago Fire), and in spite of an 1873 patent, Loomis was never able to produce his invention. Some also believed Loomis might have been a bit ahead of his time with this new wire-free communication marvel. His name fell to anonymity, and his discovery never found its way into radio textbooks, allowing bigger names to draw the limelight. His remains as one of the firsts you've never heard of.

