

All About The Telegraph

The telegraph, was invented by Samuel F. B. Morse in 1837. The first telegraph wires were strung between Baltimore, Maryland and Washington, D.C., in 1844. Within a few years wires criss-crossed the country, going all the way across the continent in 1861. The Pacific Telegraph Company, with construction headed by Edward A. Creighton, was completed between Salt Lake City Utah and Omaha on October 18, 1861, and between Salt Lake City and San Francisco on October 24, 1861, six days later. Both companies were heavily financed, and had the majority of their stock owned by Western Union.

The invention of the telegraph changed forever how America, and the world, communicated. It was the dawn of the first Information Age. Newspapers, financial markets, sporting events, railroads and general communications all got major boosts with the telegraph. It was relatively inexpensive to build, and once built, was economical

to maintain. It was electricity at its simplest, and its simplicity kept it alive long after newer forms of communications, including the telephone and teletypes, had arrived on the scene. During the Civil War both North and South used telegraph extensively, including right at the battle lines.

As late as the early 1960s there were still literally hundreds of telegraph offices still in operation on railroads and small Western Union offices. By 1970, however, most of them were gone, and by the early 1980s the final land line telegraph wires went silent forever.

AMERICAN MORSE

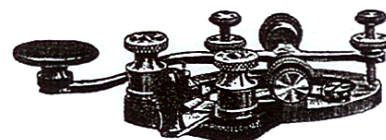
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INTERNATIONAL MORSE

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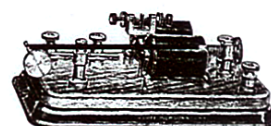
The KEY

The key is used to make and break the electric Morse circuit. It is operated in an up and down motion, although, in later years, keys that mechanically made dots, (the Vibroplex or Bug) became popular.



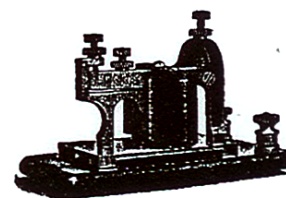
The RELAY

The relay works like a sounder, but is used to relay currents, from the main line (between offices) to a local circuit, that has its own battery, to operate the sounder. A similar device, called the repeater, allowed messages to be sent over hundreds of miles of wire.



The SOUNDER

The sounder is worked with a pair of electromagnets, that pull a metal striking rod down onto a brass anvil. Each stroke makes a click, and operators actually read the silence between the clicks, and not the clicks themselves, to form letters.



The Two Codes

The code that was used in Morse telegraphy, on land, was the original code as developed by Samuel Morse and Alfred Vail, and is called the **American Morse Code**. It has more dots and spaces within letters, and is faster than other codes. Later, when the Transatlantic Cable was laid in the 1860s, the European code, which was very much different, was adopted for international messages... and that code, The **Continental** or the **International Morse Code**, was eventually adopted when radio was invented.