## Britain and the Americas

Culture, Politics, and History
A Multidisciplinary Encyclopedia
VOLUME III

**EDITED BY** 

Will Kaufman and Heidi Slettedahl Macpherson

Transatlantic Relations Series

Will Kaufman, Series Editor



## **TELEGRAPHS**

First developed in France in 1791 by Claude Chappe, the télégraph, or "far writer," was an optical device that conveyed messages using a system of towers, panels, and telescopes. By the mid-1830s, Chappe's towers spanned Western Europe, yet his design was soon eclipsed by that of the American Samuel F. B. Morse, whose electromagnetic telegraph and alphabet code of short and long pulses became the standard of telegraphy. In 1844, when Morse unveiled his electromagnetic telegraph, William Cooke and Charles Wheatstone simultaneously tested their first line in England. Cooke and Wheatstone's device announced the birth of Queen Victoria's second son, while Morse's invention relayed his legendary message from Washington, D.C., to Baltimore: "What hath God wrought." Yet the New World was eager to hear news from the Old, and in 1858 the first working transatlantic cable was laid between Ireland and Newfoundland, carrying Queen Victoria's initial greeting to President James Buchanan in just over sixteen hours. Commercial and metaphoric appropriations of this exchange quickly ensued: Tiffany's of New York sold leftover cable pieces as souvenirs, and the London Times proclaimed, "The Atlantic is dried up, and we become in reality as well as in wish one country. . . . The Atlantic Telegraph has half undone the Declaration of 1776, and has gone far to make us once again . . . one people." However, the 1858 cable ceased working within a month-which led to speculation over whether it ever existed and another wasn't successfully laid until 1866. Demand for the new Atlantic line was so great that fast and accurate operators were highly sought after, and such operators created their own culture over the wires: playing checkers, telling stories, and falling in love. Akin to current "virtual romances," in 1876 the first couple was married "on-line," the groom in Arizona and the bride in California—each typing "I do" across 650 miles. In addition to its personal applications, the Atlantic telegraph was the precursor to modern-day global markets and information systems. In 1858, Newfoundland received its first telegraphic piece of international news: the British announced the suppression of the Indian Mutiny. By 1867, after US operator E. A. Callahan invented the stock ticker from his knowledge of the telegraph, corn and cotton prices were quoted in Liverpool, New York, and Chicago within minutes. Indeed, by the 1870s, adaptations of the telegraph began to undermine its very existence. Europe and the United States adopted the automatic telegraph, a machine that didn't need human workers, and in 1874, one shrewd US operator, Thomas Edison, developed a quadruplex (or "quad"), enabling one wire to transmit four lines of information. Such improvements led to Alexander Graham Bell's innovation in 1876; he called his new machine the "speaking telegraph," not foreseeing that, as the telephone, it would surpass its predecessor. Indeed, a mere four years after its creation, there were 30,000 telephones in use worldwide, and when Queen Victoria died in 1901, there was a telephone in one of every ten British and US homes. The telegraphic age was effectively

Jennifer Cognard-Black

See also: Radio; Television

## References

Clarke, Arthur C. How the World Was One. New York: Bantam, 1992.

Standage, Tom. The Victorian Internet: The Remarkable Story of the Telegraph and the Nineteenth Century's On-line Pioneers. New York: Walker and Co., 1998.