The Bradford County Heritage Association
Heritage Village and Farm Museum

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The museum has closed for the season, thank you to all the volunteers, visitors, and community support for another successful year. Much is planned for the 'off season'. Phase ll of the walkway/ramp/porch project is underway extending the project to include the schoolhouse. In the main museum the Native American exhibit will be downsized and relocated to the bay vacated by the General Store. The open space will become a community area for meetings, and special programs. The new General Sore will open in April 2023. (second building from left in the above picture).

Saturday Nov 5
Troy Fair Exhibit Halls
Visit the Museum's booth for some early Christmas Shopping

B.C.H.A. thanks Miller's Maze for the opportunity to provide the food booth at their opening weekend. The museum volunteers also brought along some hands-on activities for the youngsters: scarecrow making, pumpkin chuckin, 'Bessie' the life size 'Milking' cow and the Fishing Hole

Telegraph history, Thought.com sources Mary Bellis and Robert McNamara

The electric telegraph is a now outdated communication system that transmitted electric signals over wires from location to location and then translated into a message.
The non-electric telegraph was invented by Claude Chappe in 1794. His system was visual and used semaphore, a flag-based alphabet, and depended on a line of sight for communication.
When British officials wished to communicate between London and the naval base at Portsmouth in the early 1800s, they utilized a system called a semaphore chain. A series of towers built on high points of land held contraptions with shutters, and men working the shutters could flash signals from tower to tower.
A semaphore message could be relayed the 85 miles between Portsmouth and London in about 15 minutes. Clever as the system was, it was really just an improvement on signal fires, which had been used since ancient times.
There was a need for much faster communication. And by the middle of the century, Britain's semaphore chain was obsolete.

In 1809, a crude telegraph was invented in Bavaria by Samuel Soemmering. He used 35 wires with gold electrodes in water. At the receiving end, the message was read 2,000 feet away by the amount of gas produced by electrolysis. In 1828, the first telegraph in the USA was invented by Harrison Dyar, who sent electrical sparks through a chemically treated paper tape to burn dots and dashes.

Electromagnet-In 1825, British inventor William Sturgeon (1783-1850) introduced an invention that laid the foundation for a large scale revolution in electronic communications: the electromagnet. Sturgeon demonstrated the power of the electromagnet by lifting nine pounds with a seven-ounce piece of iron wrapped with wires through which the current of a single cell battery was sent. However, the true power of the electromagnet comes from its role in the creation of countless inventions to come.
The Emergence of Telegraph Systems-In 1830, an American named Joseph Henry (1797-1878) demonstrated the potential of William Sturgeon's electromagnet for long-distance communication by sending an electronic current over one mile of wire to activate an electromagnet, causing a bell to strike.
In 1837, British physicists William Cooke and Charles Wheatstone patented the Cooke and Wheatstone telegraph using the same principle of electromagnetism.
However, it was Samuel Morse (1791-1872) who successfully exploited the electromagnet and bettered Henry's invention. Morse started by making sketches of a "magnetized magnet" based on Henry's work. Eventually, he invented a telegraph system that was a practical and commercial success.

An American professor, Samuel F.B. Morse, began experimenting with sending communications via electromagnetic signal in the early 1830s. In 1838 he was able to demonstrate the device by sending a message across two miles of wire in Morristown, New Jersey. Morse eventually received funds from Congress to install a line for demonstration between Washington, D.C., and Baltimore. After an abortive effort to bury wires, it was decided to hang them from poles, and wire was strung between the two cities.
On May 24, 1844, Morse, stationed in the Supreme Court chambers, which were then in the US Capitol, sent a message to his assistant Alfred Vail in Baltimore. The famous first message: "What hath God wrought. "Morse allowed Annie Ellsworth, the young daughter of a friend, to choose the words of the message and she selected a verse from Numbers XXIII, 23: "What hath God wrought?" to be recorded onto paper tape. Morse's early system produced a paper copy with raised dots and dashes, which were translated later by an operator.

The Telegraph Spreads- Samuel Morse and his associates obtained private funds to extend their line to Philadelphia and New York. Small telegraph companies, meanwhile began functioning in the East, South, and Midwest. Dispatching trains by telegraph started in 1851, the same year that Western Union began its business. Western Union built its first transcontinental telegraph line in 1861, mainly along railroad rights-of-way. In 1881, the Postal Telegraph System entered the field for economic reasons and later merged with Western Union in 1943.
The original Morse telegraph printed code on tape. However, in the United States, the operation developed into a process in which messages were sent by key and received by ear. A trained Morse operator could transmit 40 to 50 words per minute. Automatic transmission, introduced in 1914, handled more than twice that number. In 1900, Canadian Fredrick Creed invented the Creed Telegraph System, a way to convert Morse code to text.

News Traveled Quickly After the Invention of the Telegraph- The practical importance of the telegraph was obvious, and in 1846 a new business, the Associated Press, began using the rapidly spreading telegraph lines to send dispatches to newspaper offices. Election results were gathered via telegraph by the AP for the first time for the 1848 presidential election, won by Zachary Taylor.

In the following year AP workers stationed in Halifax, Nova Scotia, begin intercepting news arriving on boats from Europe and telegraphing it to New York, where it could appear in print days before the boats reached New York harbor.

Abraham Lincoln Was a Technological President-By the time Abraham Lincoln became president the telegraph had become an accepted part of American life. Lincoln's first State of the Union message was transmitted over the telegraph wires, as the New York Times reported on December 4, 1861:

The message of President Lincoln was telegraphed yesterday to all parts of the loyal states. The message contained 7, 578 words, and was all received in this city in one hour and 32 minutes, a feat of telegraphing unparalleled in the Old or New World.

Lincoln's own fascination with the technology led him to spend many hours during the Civil War in the telegraph room of the War Department building near the White House. The young men who manned the telegraph equipment later recalled him sometimes staying overnight, awaiting messages from his military commanders.

The president would generally write his messages in longhand, and telegraph operators would relay them, in military cipher, to the front. Some of Lincoln's messages are examples of emphatic brevity, such as when he advised General Ulysses S. Grant, at City Point, Virginia in August 1864: "Hold on with a bulldog grip, and chew and choke as much as possible. A. Lincoln."

A Telegraph Cable Reached Under the Atlantic Ocean-During the Civil War construction of telegraph lines to the west proceeded, and news from the distant territories could be sent to the eastern cities almost instantly. But the biggest challenge, which seemed utterly impossible, would be to lay a telegraph cable under the ocean from North America to Europe.

In 1851 a functional telegraph cable had been laid across the English Channel. Not only could news travel between Paris and London, but the technological feat seemed to symbolize the peace between Britain and France just a few decades after the Napoleonic Wars. Soon telegraph companies began surveying the coast of Nova Scotia to prepare for laying cable.

An American businessman, Cyrus Field, became involved in the plan to put a cable across the Atlantic in 1854. Field raised money from his wealthy neighbors in New York City's Gramercy Park neighborhood, and a new company was formed, the New York, Newfoundland, and London Telegraph Company.

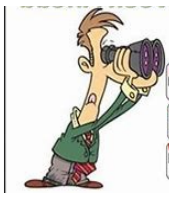
In 1857, two ships chartered by Field's company began laying the 2,500 miles of cable, setting off from Ireland's Dingle Peninsula. The initial effort soon failed, and another attempt was put off until the following year.

Telegraph Messages Crossed the Ocean By Undersea Cable-The effort to lay the cable in 1858 met with problems, but they were overcome and on August 5, 1858, Cyrus Field was able to send a message from Newfoundland to Ireland via the cable. On August 16 Queen Victoria sent a congratulatory message to President James Buchanan.

Cyrus Field was treated as a hero upon arrival in New York City, but soon the cable went dead. Field resolved to perfect the cable, and by the end of the Civil War he was able to arrange more financing. An attempt to lay cable in 1865 failed when the cable snapped just 600 miles from Newfoundland.

An improved cable was finally put in place in 1866. Messages were soon flowing between the United States and Europe. And the cable which snapped the previous year was located and repaired, so two functional cables were operating.

Telephone Rivals the Telegraph- Until 1877, all rapid long-distance communication depended upon the telegraph. That year, a rival technology developed that would again change the face of communication: the telephone. By 1879, patent litigation between Western Union and the infant telephone system ended in an agreement that largely separated the two services.



Looking For....

An antique telegraph machine for the RR Shanty

The public is invited to the next regular BCHA Board meeting
Wednesday November 16, 2022
1PM at the Museum