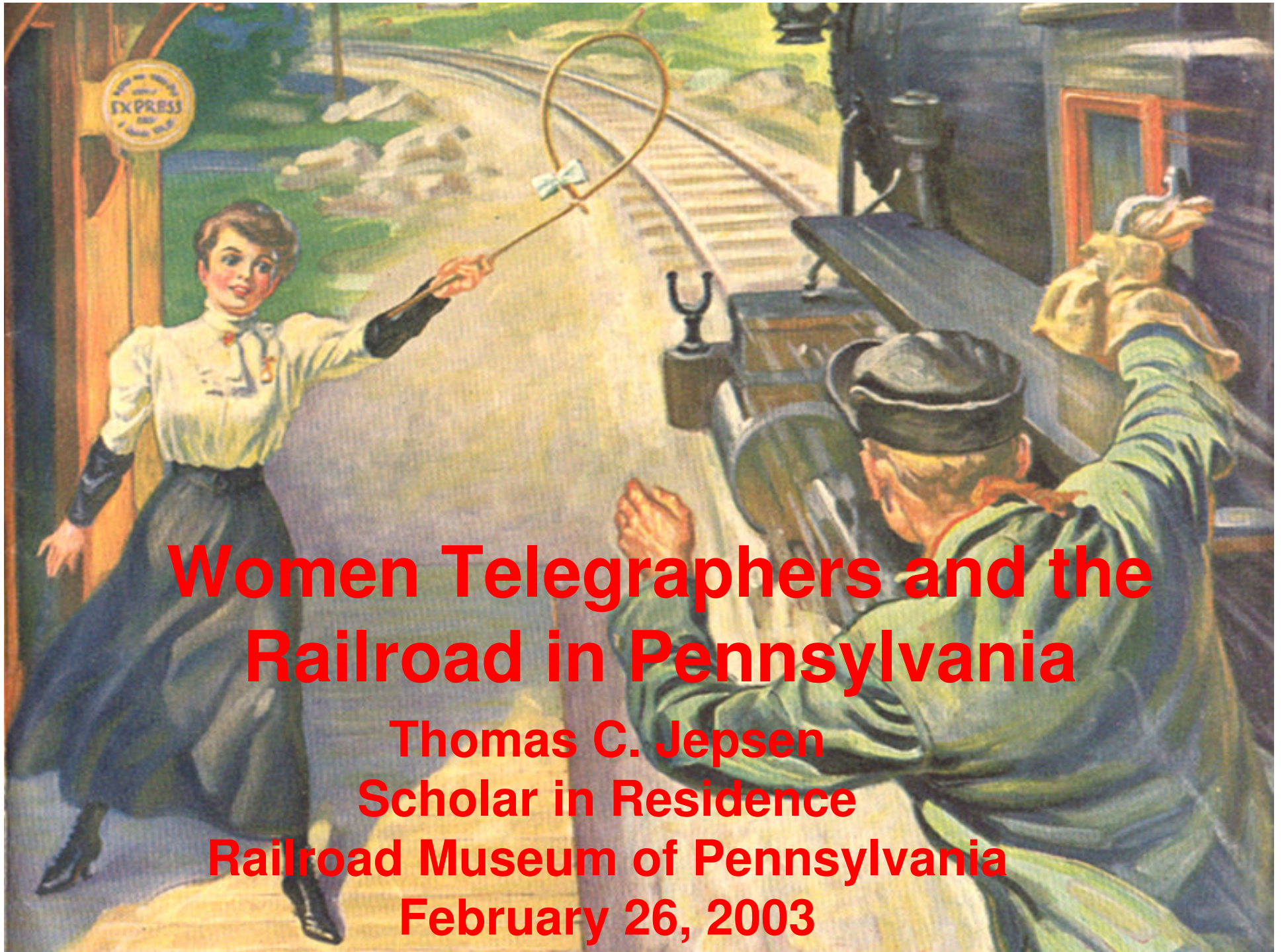




Women Telegraphers and the Railroad in Pennsylvania

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Railroad Museum of Pennsylvania
February 26, 2003

History of the Telegraph

- Invented by Morse and Vail, 1844
- Atlantic & Ohio line from Philadelphia to Harrisburg, 1845
- Need for operators in small towns led to employment of women
- Sarah G. Bagley was perhaps the first woman to work as a telegraph operator – Lowell, Massachusetts, 1846
- Western Union organized out of several small companies - 1856

Helen M. Plummer – Telegrapher, Greenville, PA 1850

- The early telegraph companies were continually in need of operators in small towns in Pennsylvania, and continually strapped for cash to pay operators
- Women could be hired for less money than men
- Helen M. Plummer became an operator for the Erie & Michigan Telegraph Company in Greenville, PA around 1850 – for a starting salary of \$125 a year!

Emma Hunter – Operator at West Chester, PA, 1851



- Became operator for Atlantic & Ohio Telegraph Company in West Chester in 1851
- Her initial salary was \$50 per year
- First “electronic commuter” – worked out of her parlor in 1851
- One of many women considered to be the “first female operator”

How did Emma Hunter Become a Telegraph Operator?

- Born in Meadville, PA, in 1831.
- Her father died when she was young
- Her mother moved to West Chester and opened a stationery store and lending library
- Emma learned telegraphy from Uriah H. Painter in West Chester and began to operate in 1851
- She was considered to be an expert operator – “Emma of S” was her “sine”
- Her income helped to support her mother and brother
- Her telegraph office and her mother’s stationery store moved to the Pennsylvania Railroad depot in 1857
- Managing a telegraph office is a little-studied aspect of business management by women in the 19th century

Emma Hunter as Office Manager

West Chester Telegraph Line. ^{L13493}

DIRECT COMMUNICATION WITH
PHILADELPHIA, HARRISBURG, PITTSBURG,
AND ALL INTERMEDIATE STATIONS

CONNECTING WITH THE
National Telegraph Lines throughout the Union.
Office at Mrs. Hunter's Book Store, adjoining Depot of Penn'a Central R. R. Co.

U. H. PAINTER, Superintendent.

Received West Chester, Pa.

Dated West Chester
June 5. 186/

To Washington & Townsend

West Chester Telegraph Office Dr.

April 6. 61. Despatch to Davenport 2.00

May 28. from " 2.00

" 29 To Reading .86

" " " " .54

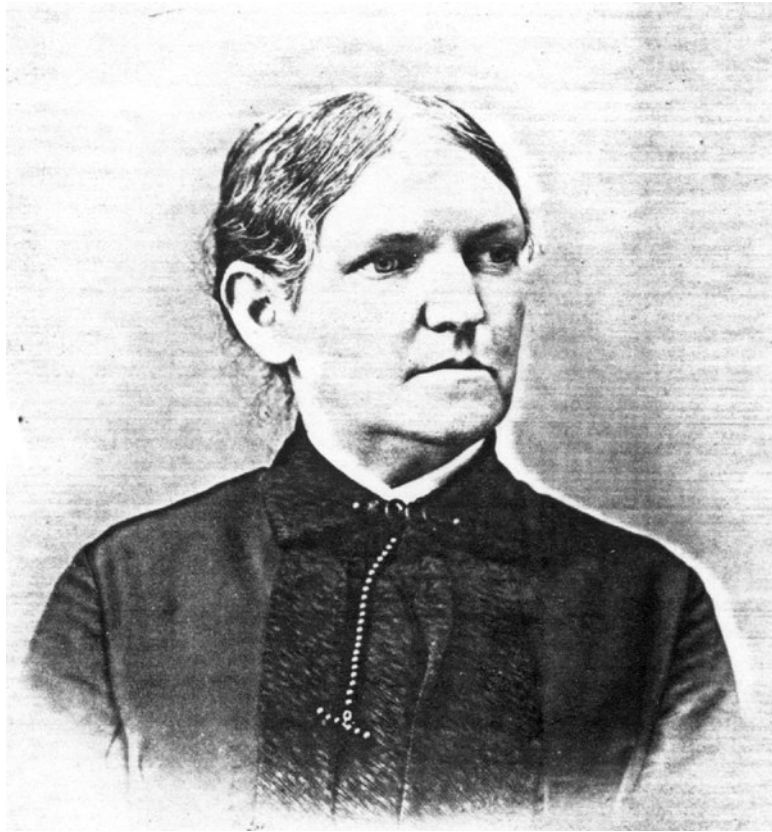
Recd. payment

\$ 5.40

Emma A. Hunter

"You have checked me with several msgs. that was sent by other Sine that I did not have anything to do with. Opr. W.C. Ofc. refered to her books & found the following msgs..." Emma Hunter, 1865

Emma Hunter's Later Life



- Telegrapher at West Chester during Civil War; send many war-related messages
- Left the telegraph office in the late 1860s and worked for the Bank of Chester County
- Married Thomas T. Smith, tobacco merchant, in 1868; they had two children
- Died on December 21, 1904, in West Chester

The Railroad and the Telegraph

- Telegraphic signaling was first used by Charles Minot on Erie Railroad, 1851
- The depot telegrapher became the “air traffic controller” of the railroad industry
- The telegraph company (Western Union) supplied the depot equipment, and the railroad paid the operator
- Soon there was a depot operator in every station
- Created a demand for railroad operators

Elizabeth Cogley – Pennsylvania Railroad Operator, Lewistown, PA, 1855



- Became operator for Atlantic & Ohio in Lewistown, PA in 1855
- Became Pennsylvania Railroad's first female operator in 1856
- Moved to Harrisburg during Civil War
- Retired in 1900 after 44 years service with Pennsylvania RR

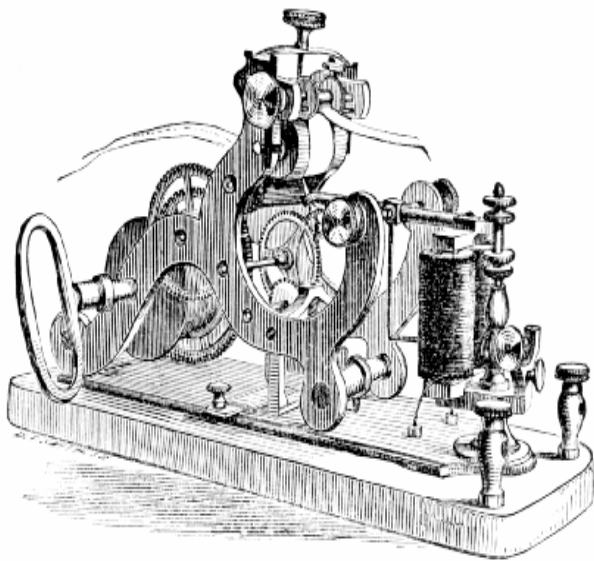
How Did Elizabeth Cogley Become a Railroad Telegrapher?

- Born in Lewistown, PA in 1833. Her father owned a book and stationery store and delivered newspapers
- Educated in “dame schools” and the Lewistown Academy
- As a child, remembered hearing the news read from the post office steps when the mail stage came in
- Learned telegraphy from Charles Spottswood, operator at Lewistown; delivered telegrams
- Became operator when Spottswood left in 1856
- Became a railroad operator when the Lewistown office was taken over by the Pennsylvania Railroad in 1856; taught telegraphy to several Lewistown women
- Moved to Harrisburg in 1862 and sent important messages during the Civil War

Elizabeth Cogley's Later Years

- Never married; retired from the Pennsylvania Railroad in 1900 after a career of almost 45 years
- Her Voluntary Relief file index card is at the State Archives, Harrisburg
- Retired in 1900 with title of "Chief Messenger" and a monthly pension of \$26.05
- Returned to Lewistown, and became active in church and civic affairs
- Died at age 88 in 1922

Reading by Sound



- The earliest telegraph receivers were “printing telegraphs” that printed out dots and dashes on paper tape
- Operators quickly learned that it was much faster to listen to the clicking of the sounder and “receive by ear”

Abbie Struble Vaughan, B&O Operator, Pittsburgh, 1866



- Learned to read by sound in Pittsburgh, 1860s
- Married J. L Vaughan and moved to Texas, 1880s
- Operated in Mexico for the Mexican National Railroad, 1890s
- Taught telegraphy in Long Beach, CA, 1917

Careers and Mobility

- Women operators were highly mobile workers in the 19th century
- Their technical skills enabled them to find work in any depot or Western Union office
- Some women telegraphers were “boomers” who moved from town to town, seeking higher pay and better positions

How Did Abbie Struble Become a Telegrapher?



- Born in Port Perry, PA in 1845, of Pennsylvania Dutch ancestry. Her father was a steamboat pilot.
- Learned sound telegraphy in Pittsburgh around 1861, together with her sister Madge.
- Married J. L. Vaughan, telegraph lineman, in 1866.
- Worked for B&O Railroad in Pittsburgh, late 1860s – early 1870s. Instructed many other railroad operators
- Lived in Ohio and Missouri. Had 5 children, all of whom became telegraphers

Abbie Struble Vaughan – Later Years



- Moved to Merkel, Texas, in 1882 and became operator at the Texas & Pacific Depot. Entire family moved into the depot.
- Moved to Mexico in 1891 to become operator for the Mexican National and Mexican Central Railroads
- Left Mexico after 1911 Revolution and settled in Long Beach, CA
- Came out of retirement in 1917 at age 72 to teach telegraphy during World War I
- Died in Long Beach, CA in 1924

Women as Station Agent/Telegraphers

- At stations “where the business has increased enough to warrant the employment of an assistant, a young woman to do the telegraphing is frequently the first helper employed.” B.B. Adams, Editor, *Railroad Gazette*, 1897.
- Women agents and operators became so common that “one has ceased to have even a feeling of surprise at seeing them there.” Frances Willard, 1897.
- The 1901 Official List of Officers, Agents and Stations of the Philadelphia and Reading Railway Company listed 19 female station and ticket agents – about 4 % of total

Working at the Depot - 1873



If the casual observer “should enter the room, he might see the operator at the key, holding a dispatch in her hand, and with the key making the strokes which are necessary for its transmission.”

Harper's Magazine,
August 1873

Railroad Families

- Julius Robert Rothe, born in Dresden Germany - 1852
- Section Foreman for New Hope Branch of Reading Railroad -1891
- His daughter Lillian became agent/operator at Traymore station in 1906, at the age of 17
- Lillian married Watson W. Carver, station agent at Ivyland – 1908

Irene Rothe – Station Agent, Bycot



- Daughter Irene became station agent at Bycot Station – 1912
- Irene married Harry B. Kappauf – 1915
- Irene resigned her position - 1917

Telegraphic Romances



- Many operators developed relationships on the wire that resulted in marriage
- Romances “over the line” became a popular subject for short stories and novels
- *Wired Love*, written by Ella Cheever Thayer in 1879, was a bestseller for over ten years
- Many operators believed they could tell the gender of the operator at the other end by their sending style

Women Operators in the News

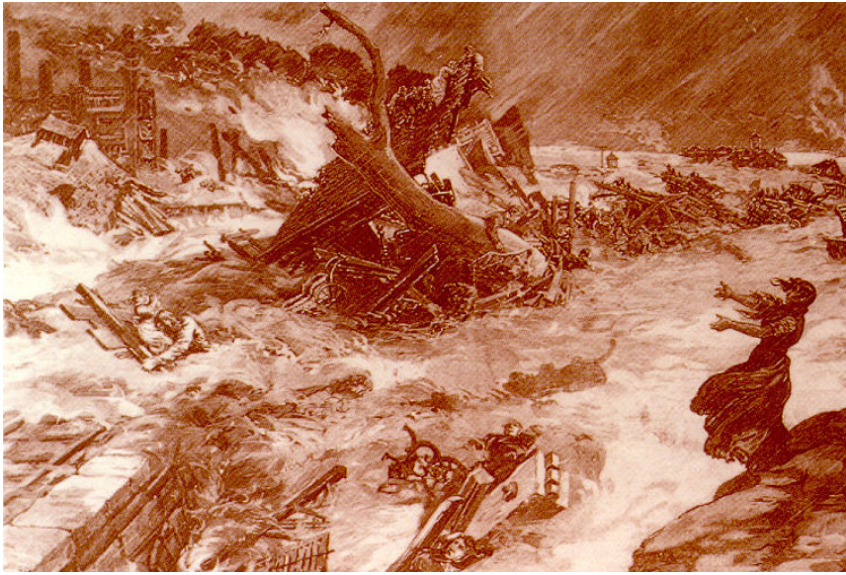
- In the 19th century, women and men were thought to occupy “separate spheres”
- Men occupied the “public sphere” and women belonged to the “domestic sphere”
- Women rarely appeared in the news
- In times of natural disasters, however, women telegraphers became visible because of their communications skills

Operators at the Johnstown Flood

– Emma Ehrenfeld and Hettie Ogle

- Emma Ehrenfeld was the Pennsylvania Railroad Operator at South Fork, PA – probably related to Fred Ehrenfeld, PRR Supervisor, Gallitzin Division
- Sent critical messages to Johnstown on May 31, 1889, warning of flood
- Wire only worked as far as next station, Mineral Point. Messages had to be hand-carried to the next station and re-transmitted to Johnstown
- PRR Depot operator at Johnstown telephoned warnings to Hettie Ogle at Western Union office

Emma Ehrenfeld, Pennsylvania Railroad Operator, South Fork, May 31, 1889



“It just seemed like a mountain coming, and it seemed close; of course I don’t know just how close it was, but I knew I must go if I wanted to get out, and I started and ran down the stairs without waiting to get my hat or anything... It was a very short time, not more than two minutes until the office was taken. “

Testimony, Emma Ehrenfeld.
PRR Investigation, 1890

Emma Ehrenfeld's Later Life

- Survived flood by running up hillside in South Fork; her telegraph tower was demolished
- Married Dr. Joseph Glass, South Fork physician, in 1890; had 8 children

Hettie Ogle, Manager, Johnstown, PA Western Union Office - 1889



- Hettie Ogle began working for Western Union in 1861- Civil War widow
- Became manager of Johnstown W. U. office and telephone exchange
- Her daughter Minnie was chief operator
- Remained at her post during May 31, 1889 flood - drowned

Hettie Ogle's Telegraphic Career

- Civil War widow; operated at Bedford, PA before coming to Johnstown in 1869
- Became manager of Johnstown Western Union Office; her daughter Minnie became Chief Operator
- Opened telephone exchange in the 1880s
- Remained in her office during flood; both she and her daughter Minnie were killed in the flood
- Her son Earl survived and became postmaster in Johnstown

Women and the Unions – the ORT

- Telegraphers began to form labor organizations in the 1860s
- Women began to join unions in the 1870s to work for higher wages and job advancement
- The Order of Railway Telegraphers was established in 1886; many women operators joined. Mrs. C. C. Pickard of Rawlins, Wyoming elected Assistant Division Chief in 1893
- Telegraphers went on strike in 1870, 1883, 1907, and 1919
- Women strikers gained visibility in the news

Carrie Pearl Seid, Operator and ORT Member, Sunbury, PA 1907



- Note ORT sign in window
- Commercial operators struck in August 1907, demanding higher pay, shorter working hours
- ORT members supported strike and refused to handle Western Union traffic
- However, strike was unsuccessful and telegraphers returned to work with no improvements in working conditions or pay

1907 Strike - Chicago

THE CHICAGO SUNDAY TRIBUNE: AUGUST 11, 1907.

Fair Participants in Telegraphers' Strike, Who Are as Enthusiastic as the Men.



MISS ELLEN FORSMAN—THE PRETTIEST OF THE STRIKING TELEGRAPHERS.

MISS ANALLA MARTIN, MISS BELLE MARTIN, MISS ELLEN FORSMAN.

MONEY LOSS COSTS TWO LIVES.

Ex-Mayor of Ottumwa, Ia., Kills Father-in-Law and Self.

HIS WIFE FINDS THE BODIES.

Returns Home to Find Husband and Parent Dead in Different Rooms.

[BY LONG DISTANCE TELEPHONE.]

Ottumwa, Ia., Aug. 10.—Frank Dunton, former mayor of Ottumwa, tonight shot and killed his father-in-law, George Godfrey, retired capitalist and millionaire. Dunton then ended his own life.

A quarrel over business matters is believed to have led up to the tragedy, which occurred at Godfrey's residence. Dunton.

NEW YORK'S 3,000 TO QUIT RUSH TO SELL; STOCKS FALL

Operators Will Abandon Their Keys Before Monday Night.

Leading Securities Reach New Low Price in Short Session.

BOTH COMPANIES IN FIGHT. OIL MEN UNLOADING, TOO.

- Women operators got press coverage
- However, they were not taken seriously regarding work issues
- Women operators wanted higher pay, shorter hours, end to sexual harassment on the job

Women Operators in WWI

- As in the Civil War, women took over telegrapher positions vacated by men who went to war in WWI
- Lillian Carver became an extra and was appointed agent at Grenoble – 1918
- Irene Kappauf went back to work as agent at Lahaska – 1918; remained until 1932
- Abbie Struble Vaughan came out of retirement to teach telegraphy in Long Beach - 1917

WWII – Victory Operators



- Catherine Megay,
extra, Reading
Railroad, Bethayres -
1945



- Monica Ambrozates,
clerk/telegrapher,
Reading Railroad,
Stenton - 1946

Decline of the Telegraph



- Agnes Jozaitis, teletype operator, Pennsylvania Railroad, 1960
- The telephone quickly replaced the telegraph for sending personal messages
- The telephone was also used for train dispatching
- Use of CTC reduced the need for telegraphers in each station
- The teletype eventually replaced the Morse telegraph

Conclusions

- Women telegraphers in Pennsylvania
- The role of telegraphers in their communities
- Why the story is forgotten – lack of corporate records, institutional history, devaluation of women's achievements
- Research techniques – use of genealogy, local history
- The relationship of the telegraph to the internet
- The relationship of women telegraphers to women in the computer industry

Women and Telegraphy in Pennsylvania

- Pennsylvania was the “gateway to the West” for the telegraph as well as for the canals and the railroads
- Pennsylvania’s passage of the Education Acts of 1834 and 1838 provided tax-supported public school education and specifically included women – “The credit of the discovery that girls should have an equal place with boys in a system of public instruction, higher as well as lower, belongs to the legislature of 1838.” James P. Wickersham, *A History of Education in Pennsylvania*, 1886.
- Industrialization and immigration created a strong middle-class work ethic in which it was considered appropriate for women to enter the workforce
- Pennsylvania had more women listed as telegraphers in the 1870 census than any other state

Telegraphy Schools in Pennsylvania

- The Pittsburgh Female College began to teach telegraphy to women in 1861: "...a complete Electro-magnetic Telegraph Apparatus has been ordered from Boston, and will be put up and in readiness for the next term. It is the opinion of those well versed in the matter, that ladies will, in a great many cases, soon take the places of gentlemen in our telegraph offices, and the design is to furnish them with the facilities for becoming thoroughly conversant with the details of the business and thus open up to those who may desire it, an easy, pleasant, and honorable means of obtaining a livelihood." - *Pittsburgh Evening Chronicle*, August 8, 1861.

Women Operators and their Communities

- Telegraphers were recognized by their communities as “wizards of the wire” who brought news from afar
- Women operators were recognized as communicators for bringing the news to their communities and helping the trains to run safely and on time
- Women station agents played an important role in the operation of the railroads
- Women operators found innovative ways to combine work and family; some moved the telegraph into the home, and others moved their families into the depot
- However, they also had to deal with gender bias relating to their technical skills, and lower pay

Why the Story is Forgotten

- The role of the telegraph in 19th century America has been largely forgotten – America's first digital network
- The telegraph and railroad industries kept few corporate records – many were destroyed
- 20th century histories of the telegraph industry tended to focus on institutions, not individuals
- Women's work was not considered to be of interest to historians

Tracing the Lives of Women Operators

- Women operators were visible, vocal members of their profession who joined unions and professional organizations and wrote to the trade journals about women's issues
- Women telegraphers were respected members of their local communities, and were often mentioned in the newspapers
- It is possible to retrieve their histories by using the techniques of genealogy
- Oral histories of retired telegraph operators are an excellent source of information

The Telegraph and the Internet

- There is a renewed interest in the telegraph as the “Victorian Internet”
- The Internet, like the telegraph, is a digital network
- The Internet revisits some of the gender issues raised by the telegraph – “gender in cyberspace”

From the Telegraph to the Computer – Women in Technology

- “In a historical sense, the computer is no more than an instantaneous telegraph with a prodigious memory, and all the communications inventions in between have simply been elaborations on the telegraph’s original work.” Carolyn Marvin, *When Old Technologies Were New*.
- Similar to women telegraphers, women computer/IT professionals constitute a minority in their profession
- Much of the early development in the computer industry was done by women whose names are now forgotten
- We need to recognize the achievements of the women who helped shape the global village of worldwide communications and computing

Acknowledgments

- Thanks to the following organizations and individuals for making this research possible:
- Railroad Museum of Pennsylvania – Strasburg, PA
- Chester County Historical Society – West Chester, PA
- Johnstown Flood Museum – Johnstown, PA
- Cambria County Library – Johnstown, PA
- Mifflin County Historical Society – Lewistown, PA
- State Archives of Pennsylvania – Harrisburg, PA
- State Library – Harrisburg, PA
- Spruance Library – Doylestown, PA
- Nancy Hardy, Abilene, TX (Abbie Struble Vaughan's great-granddaughter)
- My wife Marsha, for her persistence and help in researching Emma Hunter and Emma Ehrenfeld

**This project is supported by a grant
from the Pennsylvania Historical and
Museum Commission.**