

THE FIRST COMMERCIAL TELEGRAPH LINE

By WILLIAM L. SULLENBERGER

Lancaster, Pa., witnessed the installation of the first *commercial* telegraph line in the United States, the circuit from this city to Harrisburg having been completed November 24th, 1845.

The establishment of this pioneer line, built between Lancaster and Harrisburg along the tracks of the Harrisburg, Portsmouth, Mount Joy and Lancaster railroad, was the first step toward later gigantic developments in the field of telegraphy, and resulted in the erection of thousands of miles of poles and wires, connecting practically every hamlet, village and town in America.

No sooner had the practicability of Morse's invention been proved, than the patentees made numerous contracts for the construction of lines throughout the country,—the most valuable of them being given to Henry O'Reilly, of Rochester, N. Y.

Under this contract, it became necessary to construct a line between Lancaster and Harrisburg on or before January 1st, 1846, to connect at Lancaster with a line to be constructed between Baltimore and New York, on a route via York, Columbia, Lancaster and Philadelphia.

The route of this latter line, however, was changed so as to cross the Susquehanna at Port Deposit, instead of Columbia, and O'Reilly subsequently connected his "western" line with it at Philadelphia. O'Reilly, assisted by Bernard O'Connor of Lancaster, completed the line from Lancaster to Harrisburg, Pa., on November 24th, 1845, being in advance of the time fixed by the contract.

It was a primitive affair, this first commercial application of the "dot and dash" system; small, unbarked, chestnut poles were planted about one hundred yards apart, so as to make eighteen poles per mile. Through the top of each pole was inserted a turned black walnut cross-arm, the ends of which were covered with gummed cloth.

The conductor was a number fourteen copper wire attached to the poles by giving it a double twist around the gummed cloth ends of the cross-arm. The gummed cloth, not proving satisfactory as an insulator, this defect was somewhat eliminated by replacing it with a cotton cloth dipped in molten beeswax.

There was a good deal of enjoyment among the workmen, notwithstanding the difficulties with which they were surrounded. They planted the poles

to the accompaniment of the following choice ditty, much after the manner of the colored stevedores on the banks of the Mississippi:

“Sink the poles, boys, firm and strong,
Short and close together,
Solder the joints of the mystic thong,
And let 'em stand forever.”

The instruments arrived about January 1st, 1846, and were placed in circuit by James D. Reid, who possessed some telegraphic knowledge obtained through his friendship with Professor Morse, and by his experience on the experimental line.

The relays, enclosed in large walnut boxes, weighed 250 pounds each and required the strength of two men to lift them onto the “operating table.” The reason for this unusual weight grew out of the theory of Professor Morse and Alfred Vail, that the wire of the relay should be the size of that of the line. It was therefore covered with number fourteen copper wire wound around with cotton.

After the instruments had been placed in circuit and a battery located at the western terminus, the operators, David Brooks and Henry C. Hepburn, at Lancaster, and James D. Reid and H. Courtney Hughes, at Harrisburg, settled down to hard work in their efforts to open up communication between the two offices.

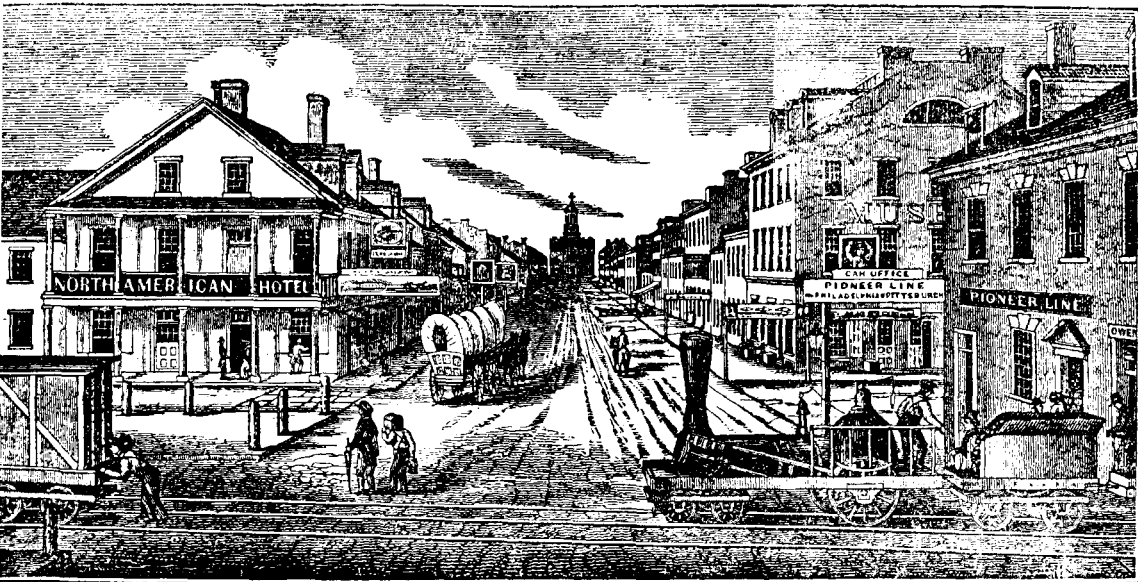
With the exception of Reid, none of the party could read or write the telegraphic alphabet without constant reference to a copy of it printed in a little book of instructions, by Alfred Vail, which was kept open before them.

For a week they pounded and adjusted and pounded, without any intelligible signals reaching either office. At last, however, on January 8th, 1846, when despair was on the point of supplanting patient endeavor, while Brooks was practicing writing the alphabet, by pressing his finger against the armature of the relay, he made the startling discovery that the armature of the relay had, under certain conditions, a motion corresponding to that made on the key.

Turning to Hepburn, he made known his discovery and told him to wait a moment and he would so adjust the armature that writing upon the register could be done by simply manipulating the key. Brooks made the adjustment, whereupon the armature started to work apparently of its own volition and the pen-lever of the register responded.

Starting the paper to see what marks or impressions would be made on it, they had the great satisfaction, after comparing the marks with their copy of the alphabet, to be able to read the following words: “Why don't you write, you rascals?”

These few words, written by James D. Reid, formed the first intelligible



THE NORTH AMERICAN HOTEL AS IT PROBABLY APPEARED AT THE TIME THE TELEGRAPH WAS INTRODUCED INTO LANCASTER. SOUTHEAST CORNER OF NORTH QUEEN AND EAST CHESTNUT STREETS. SITE NOW OCCUPIED BY BRUNSWICK HOTEL. COURT HOUSE IN PENN SQUARE IN FAR DISTANCE.

message ever sent over a line in Pennsylvania, and gave to the line itself the distinction of being the first in operation after the Washington-Baltimore experimental line of Professor Morse.

There was great rejoicing in Lancaster and Harrisburg when it was found that instantaneous communication could be maintained. People flocked to the offices to see the wonder of the age, but made no commercial use of the line, the patronage being confined to writing names, in telegraphic characters, on the paper ribbon with written letters underneath, in explanation. Such was the only source of revenue.

Although the line was not a financial success, it furnished additional proof of the value of Professor Morse's invention. The relays were difficult of adjustment and would remain adjusted for only a few minutes.

The line itself worked only in clear, cold weather, and then very irregularly. Breaks were of daily occurrence and so certain were they to happen that Brooks went to the Lancaster office every morning, at 4:30 o'clock, to test for current, and it was the exception when he found it.

Finding no current, he would shoulder a bundle of copper wire and start out to find and repair the break, taking passage on "the night line," a train which passed Lancaster at 5:00 o'clock in the morning. This train, climbing over the Conewago hills, made the distance from Lancaster to Harrisburg,—thirty-seven miles—in from four and a half to five hours.

Reid and Hepburn left the line in February, 1846. James M. Lindsay was sent from Baltimore to succeed Reid; and he, and Brooks, stationed at the Lancaster office, continued for a few weeks to operate the line.

Since the only revenue accruing to the "system" was derived from sending names of the curious over it, naturally, the novelty soon wore off, patrons ceased to materialize, and cash receipts failed to appear.

There being no other available revenue, and with the line constantly breaking, O'Reilly ordered Lindsay to Philadelphia. He directed Brooks to take down the wire, sell it for old copper, and apply the proceeds to paying the operators' boarding and washing, which had been accruing from the time of their arrival.

By March 1st, 1846, this initial commercial line had passed into history. The money for its construction had been furnished by a Rochester, N. Y., company, known as "The Atlantic, Lake and Mississippi Valley Telegraph Company."

The line formed the link in the great chain of protected telegraphs, which in less than twenty years, from the time of its completion, was to bind in indissoluble bonds the Atlantic and Pacific coasts; and in less than thirty years was to unite four of the continents of the world.

During the short life of the line, it created quite a stir in the counties of Lancaster and Dauphin. Many persons in the neighborhood were superstitious and were alarmed by the "fantastic" sounds caused by the wind sweeping over the wires. These people went out of their way in order to avoid passing under or near the line. This was specially true after sundown. Many dismal stories were told of its supernatural powers. One woman actually fenced in a pole to keep her cow from rubbing against it, fearing that the milk might be spoiled.

The advent of the "telegraph," surcharged in the public mind with plenty of "hexing," witchcraft, and various ill-omens, precipitated a state of affairs which rapidly became the central theme of discussion at the stores in the villages through which the line passed.

A story, dealing with this all-absorbing topic, and connected with the "big man" of a certain village, has been repeated through generations.

For two terms he had represented his district in the lower house of the Legislature and he now felt it to be his duty to express his opinion on the subject, which he did by saying: "This telegraph is a great thing. When I had the honor of representing you in the Legislature I often thought about it, and having turned the subject over in my mind, the conclusion reached by me in regard to it is: it will do well enough for carrying letters and small packages, but it will never do for carrying large bundles and bale boxes!"

David Lechler, proprietor of "The North American House," which was at the southeast corner of North Queen and Chestnut streets, Lancaster, now the site occupied by the Brunswick Hotel, was of a humorous turn of mind and made the telegraph the basis for playing many pranks upon the public.

At this day, few can credit the curiosity and credulity which characterized people, regarding the telegraph, nor how few had even an idea of the principles governing it.

Lechler, discerning the trend of mind of the people, undertook to explain the mysteries of the telegraph. On market mornings, it was his great delight to gather a crowd of countrymen and women in the barroom and then speak to them, in Pennsylvania Dutch, of the wonders of the great invention.

There was scarcely a story that he could invent or apply, or that credulity would accept, in connection with the telegraph, that he did not relate. When his harangue had raised the curiosity of his hearers to the highest pitch, he would hurriedly enter the room where the telegraph office was located and immediately returning would show a pair of hose, a handkerchief, or a newspaper which he had previously punctured with holes, as specimens of the telegraph's possibilities, at the same time gravely saying: "I received these in just forty seconds from Philadelphia."

Few doubted Lechler's word or took into consideration that the line

did not extend to Philadelphia; but all, with open-eyed wonder, tried to account for the articles passing over and around the cross-arms. They were satisfied however, with Lechler's explanation: "That the process was the inventor's secret, which dared not be divulged."

Following the taking down of the line, a school of telegraphy, the first in America, was instituted in Lancaster, the instruments from the line being used to instruct the pupils. This school was attended by students from all parts of the country, sent by various companies to learn the rudiments of the mysterious "dots" then in use. The teacher was William Johnson.

Many men, who afterward became prominent in the telegraphic profession, went out into the world for "dots and dashes," with Uncle Billy's diploma. Among the number was Anson Stager, who became the manager of Western Union interests, and through his ability insured the great success of that company. Stager was appointed quartermaster during the Civil War and detailed to the military telegraph department, in which position he rose to be a brigadier-general. The United States Military Telegraph Corps received its first recruits from Pennsylvania; and its first line builder was a Lancastrian.

Along about 1846, the Atlantic and Ohio Telegraph Company came into being; to be followed in 1863 by the Inland Telegraph Company—the name being changed in due course to the United States Telegraph Company. This company was merged with the Western Union in 1866 or 1867.

Other companies entering the field during this period, were the Baltimore and Ohio Telegraph Company, the Bankers' and Merchants' Telegraph Company, and the American Rapids Telegraph Company. The Postal Telegraph Company absorbed the Bankers' and Merchants', and the Western Union absorbed the American Rapids Telegraph Company in 1885.

THE TELEPHONE

The first telephone "conversation" was brought to Lancaster in 1879, by David H. Potts, manager of the Western Union, who had been endeavoring for some time to interest Lancaster business men in organizing a telephone company in Lancaster. Potts was known as "old Davy." He was an eccentric character, and when he announced that he would connect a Western Union wire to a telephone wire at Philadelphia and hear a "concert," all hope for him was lost.

However, "Davy" stuck to his guns, and, on a certain date, arranged to have a number of business men meet in a room adjoining the telegraph office and listen to a "cornet" solo coming over the telephone-telegraph line. This successful demonstration established "Davy's" reputation.

Shortly after listening to this solo, those present, organized the first telephone company in Lancaster, with half a dozen telephones in operation. This

company subsequently lost its identity by being absorbed by larger telephone companies then coming into the field.

What was considered one of the greatest newspaper "scoops" in history occurred in Lancaster, in 1873. A man named Goss had a place of business in Baltimore county, Md. His house was destroyed by fire and the corpse of a man was found in the ruins. The Life Insurance company which had written a policy on Goss's life, refused to pay the death claim, on the ground that the corpse found in the ruins of the fire was not that of Goss, which allegation was subsequently proven to be true. A man named Uderzook, and Goss, under an assumed name, traveled from place to place, coming at last to Penningtonville, now Atglen, Chester county, Pa. A few days after they disappeared from Atglen, buzzards circling over a woods, on the road from Atglen to Cochranville, attracted the attention of passers-by, and on investigation, the body of a man was found in a shallow grave, covered with brush. Uderzook was arrested, and convicted for the murder of Goss.

The discovery of the murder caused great excitement, and a reporter for the Philadelphia Record, in order to obtain a "scoop" for his paper, came to Lancaster to send his story, over the wire, to Philadelphia.

The Western Union office was then located in the Pennsylvania Railroad depot. Charles Heckert, a reporter for the Lancaster Examiner, who also was a telegraph operator, happened to be standing outside the open window of the telegraph office as the story was started over the wire. Grasping the importance of the incident, he copied it as it was being sent, and pressing a passer-by into service, he rushed the story, sheet by sheet, to the local newspaper office. The story appeared in the Examiner, on the streets of Lancaster, before the "Record" article was published. This created a sensation, the "Record" threatening all kinds of drastic action against every one concerned