

STORIES of New Jersey

years of age he had been made manager of his father's business. At the end of five years, however, he decided to abandon the field of mechanics to prepare himself for the ministry. He enrolled as a student at the University of the City of New York, graduating in 1836. On September 23, 1837 Morse gave a demonstration of his telegraph instrument before a group of students. Alfred Vail was present and was so impressed with the practicability of the invention that he induced his father to advance \$2,000 to cover the expense of perfecting the instrument.

Morse and Vail entered into a contract under the terms of which Vail was to give his services, \$2,000 in cash, and the use of his father's shop in return for one-quarter of the American royalties and one-half of the foreign interest. Vail retired to his shop in the yard of his father's iron works and applied himself to working out mechanical improvements on the Morse instrument.

On January 6, 1838 Morse and Vail gave a demonstration to prove to Judge Vail and his friends that he was not wasting his money on a useless toy. Workers in the iron works and people from the surrounding districts were invited. Three miles of wire were stretched along the walls of the shop, with an electro-magnet receiving instrument attached to one end, and a sending apparatus to the other. The sending instrument was a simple affair. A spring raised a metal knob over another metal knob attached to a board. When the pressure was used on the top knob, it made contact with the lower one and the circuit was completed. When the pressure was removed, the circuit was broken.

The now famous message "A patient waiter is no loser" was flashed along the wire from one instrument to the other by the dot and dash alphabet--the Morse code as it is in use today. The little shop was filled with jubilation at the success of the experiment, but it is certain that no one there foresaw the wide range of scientific achievement that was to follow--trans-Atlantic cables and wireless, and following them radio and television.

To convince the public of the practical possibilities of the telegraph it was necessary to give a demonstration covering two distant points. It was not enough to send a message from one room to another or even from one house to another. It had to be shown that a message could be sent over a wire, no matter how great its length.

Again and again Congress was petitioned for a subsidy to permit building a telegraph line between Baltimore and Washington but each time it was presented the bill died in committee. The public seemed utterly indifferent to the whole idea. Talking over wires! The thing was absurd!

On February 23, 1843, the bill was again introduced. It passed the House by 6 votes but it had only a slim chance in the Senate due to the pressure of business. Morse asked two Senators if they thought the Senate would get to consider his bill before its adjournment. As they suggested that he be prepared for disappointment he went to his room wholly discouraged.

Morse was sitting at breakfast the next morning when Annie Ellsworth, the daughter of the Commissioner of Patents, had him called into the hotel parlor. When he expressed surprise at the early call, she said, "I have come to congratulate you."