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PRIMARY SOURCE The Birth of the Telephone

While conducting telegraph experiments, Alexander Graham Bell and his assistant, Thomas A. Watson, made an important discovery—the telephone. As you read Watson's account, consider the inspiration that led to the birth of the telephone.

On the afternoon of June 2, 1875, we were hard at work on the same old job, testing some modification of the instruments. Things were badly out of tune that afternoon in the hot garret, not only the instruments, but, I fancy, my enthusiasm and my temper, though Bell was as energetic as ever. I had charge of the transmitters as usual, setting them squealing one after the other, while Bell was retuning the receiver springs one by one, pressing them against his ear as I have described. One of the transmitter springs I was attending to stopped vibrating and I plucked it to start it again.

It didn't start and I kept on plucking it, when suddenly I heard a shout from Bell in the next room, and then out he came with a rush, demanding, "What did you do then? Don't change anything. Let me see!" I showed him. It was very simple. The make-and-break points of the transmitter spring I was trying to start had become welded together, so that when I snapped the spring the circuit had remained unbroken while that strip of magnetized steel by its vibration over the pole of its magnet, was generating that marvelous conception of Bell's—a current of electricity that varied in density within hearing distance of that spring.

That undulatory current had passed through the connecting wire to the distant receiver which, fortunately, was a mechanism that could transform the current back into an extremely faint echo of the sound of the vibrating spring that had generated it, but what was still more fortunate, the right man had that mechanism at his ear during that fleeting moment, and instantly recognized the transcendent importance of that faint sound thus electrically transmitted. The shout I heard and his excited rush into my room were the result of that recognition. The speaking telephone was born at that moment. Bell knew perfectly well that the mechanism that could transmit all the complex vibrations of one sound could do the same for any sound, even that of speech.

That experiment showed him that the complex apparatus he had thought would be needed to accomplish that long-dreamed result was not at all

necessary, for here was an extremely simple mechanism operating in a perfectly obvious way, that could do it perfectly. All the experimenting that followed that discovery, up to the time the telephone was put into practical use was largely a matter of working out the details. . . .

You can well imagine that both our hearts were beating above the normal rate, while we were getting ready for the trial of the new instrument that evening. I got more satisfaction from the experiment than Mr. Bell did, for shout my best I could not make him hear me, but I could hear his voice and almost catch the words. I rushed upstairs and told him what I had heard. It was enough to show him that he was on the right track. . . .

It was not until the following March that I heard a complete and intelligible sentence. It made such an impression upon me that I wrote that first sentence in a book I have always preserved. The occasion had not been arranged and rehearsed as I suspect the sending of the first message over the Morse telegraph had been years before, for instead of that noble first telegraphic message—"What hath God Wrought?" the first message of the telephone was: "Mr. Watson, please come here, I want you." Perhaps, if Mr. Bell had realized that he was about to make a bit of history, he would have been prepared with a more sounding and interesting sentence.

from Richard B. Morris and James Woodress, eds., Voices from America's Past, Vol. 2, Backwoods Democracy to World Power (New York: Dutton, 1963), 219–221.

Research Options

- Research the telephone's growth after Bell first exhibited it in public at the 1876 Philadelphia Centennial Exposition. Then prepare a brief oral report to share your findings.
- 2. Find a quote or saying that you think would have been a more "noble" first telephone message and share it with classmates.
- 3. Research Alexander Graham Bell's life. Write a brief biographical sketch and share it with the class.