

Figure 18.—A MOREY AND JOHNSON sewing machine as illustrated in *Scientific American*, January 27, 1849. (Smithsonian photo 45771.)

rollers, which supported the endless clothholder, carried a ratchet wheel advanced by the action of a pawl connected to the end of the crankshaft by a small crankpin, whose position or distance from the axis of rotation of the shaft could be adjusted.

By this adjustment the extent of the vertical travel of the impelling pawl was regulated to control the length of the stitch. A spring catch kept the ratchet wheel in place at the end of each forward rotation of the wheel by the pawl. A roller placed over the endless belt at its middle roller pressed the cloth onto the wire points. A curved piece of metal was bent over and down upon the top of the belt so that the cloth, as it was sewed, was carried toward and against the piece by the belt. The cloth rose upon and over the piece and was separated from the points. When the machine was in motion the cloth was carried forward, passed under the needle, was stitched, and finally, passed the separator and off the belt. A vertically reciprocating, straight, eye-pointed needle, a horizontal supporting surface, and a yielding cloth presser were all used, but none were claimed as part of the patent. These were later specifically claimed in reissues of this patent. Bachelder's one specific claim, the endless feed belt, was not limited to belt feeding

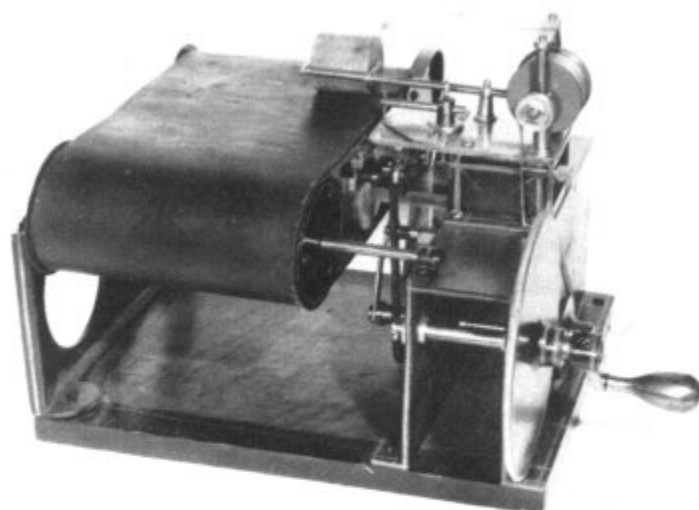


Figure 19.—BACHELDER'S PATENT MODEL, 1849. (Smithsonian photo 45572).

only. As he explained in the patent, a revolving table or a cylinder might be substituted.

Bachelder did not manufacture machines, but his patent was sold in the mid-1850s to I. M. Singer.³⁷ It eventually became one of the most important patents to be contributed to the "Sewing-Machine Combination," a patent pool, which is discussed in more detail on pages 41 and 42.

While new ideas and inventors continued to provide the answers to some of the sewing-machine problems, Elias Howe began a series of patent suits to sustain the rights that he felt were his. Since his interest had never been in constructing machines for sale, it was absolutely essential for Howe to protect his royalty rights in order to realize any return from his patent. He was reported³⁸ to have supervised the construction of 14 sewing machines at a shop³⁹ on Gold Street in New York toward the close of 1850. Sworn contemporary testimony indicates that the machines were of no practical use.⁴⁰ Elias stated, in

³⁷ The exact date is not known; however, it was prior to 1856 as the patent was included in the sewing-machine patent pool formed that year.

³⁸ JAMES PARTON, *History of the Sewing Machine*, p. 12, (originally published in the *Atlantic Monthly*, May 1867), later reprinted by the Howe Machine Company as a separate.

³⁹ *Sewing Machine Times* (Feb. 25, 1907), vol. 17, no. 382, p. 1, "His [Bonata's] shop was on Gold Street, New York, near the Bartholf shop, where Howe was building some of his early machines."

⁴⁰ *Sewing Machine News*, vol. 3, no. 5, p. 5, Sept. 1881-Jan. 1882. "History of the Sewing Machine."