

ewing device into commercial operation was Barthelemy Thimonnier,¹⁸ a French tailor. After several years of fruitless effort he invented a machine for which he received a French patent in 1830.¹⁹ The machine (fig. 8) made a chainstitch by means of a barbed or hooked needle. The vertically held needle worked from an overhanging arm. The needle thrust through the fabric laid on the horizontal table, caught a thread from the thread carrier and looper beneath the table, and brought a loop to the surface of the fabric. When the process was repeated the second loop became enchainé in the first. The needle was moved downward by the depression of a cord-connected foot treadle and was raised by the action of a spring. The fabric was fed through the stitching mechanism manually, and a regular rate of speed had to be maintained by the operator in order to produce stitches of equal length. A type of retractable thimble or presser foot was used to hold the fabric down as required.

The needle, and the entire machine, was basically an attempt to mechanize tambour embroidery, with which the inventor was quite familiar. Although this work, which served as the machine's inspiration, was always used for decorative embroidery, Thimonnier saw the possibilities of using the stitch for utilitarian purposes. By 1841 he had 80 machines stitching army clothing in a Paris shop. But a mob of tailors, fearing that the invention would rob them of a livelihood, broke into the shop and destroyed the machines. Thimonnier fled Paris, penniless. Four years later he had obtained new financial help, improved his machine to produce 200 stitches a minute, and organized the first French sewing-machine company.²⁰ The Revolution of 1848, however, brought this enterprise to an early end. Before new support could be found other inventors had appeared with better machines, and Thimonnier's was passed by. In addition to the two French patents, Thimonnier also received a British patent with his associate Jean Marie Magnin in 1848 and one in the United States in 1850. He achieved no financial gain from either of these and died a poor man.

¹⁸ See biographical sketch, pp. 217-218.

¹⁹ French patent issued to Barthelemy Thimonnier and M. Ferrand (who was a tutor at l'Ecole des Mines, Saint-Etienne, and helped finance the patent), July 17, 1830.

²⁰ The company was located at Villefranche-sur-Saône, but no name is recorded. See J. Granger, *Thimonnier et la machine à coudre* (1943), p. 16.

While Thimonnier was developing his chainstitch machine in France, Walter Hunt,²¹ perhaps best described as a Yankee mechanical genius, was working on a different kind of sewing machine in the United States. Sometime between 1832 and 1834 he produced at his shop in New York a machine that made a lockstitch.²² This stitch was the direct result of the mechanical method devised to produce the stitching and represented the first occasion an inventor had not attempted to reproduce a hand stitch. The lockstitch required two threads, one passing through a loop in the other and both interlocking in the heart of the seam. At the time Hunt did not consider the sewing machine any more promising than several other inventions that he had in mind, and, after demonstrating that the machine would sew, he sold his interest in it for a small sum and did not bother to patent it.

A description—one of few ever published—and sketch of a rebuilt Hunt machine (fig. 9) appeared in an article in the *Sewing Machine News* in 1881.²³ The important element in the Hunt invention was an eye-pointed needle working in combination with a shuttle carrying a second thread. Future inventors were thus no longer hampered by the erroneous idea that the sewing machine must imitate the human hands and fingers. Though Hunt's machine stitched short, straight seams with speed and accuracy, it could not sew curved or angular work. Its stitching was not continuous, but had to be reset at the end of a short run. The validity of Hunt's claim as the inventor of the lockstitch and the prescribed method of making it was argued many times, especially during the Elias Howe patent suits of the 1850s. The decision against Hunt was not a question of invention,²⁴ but one of right to ownership or control. Hunt did little to promote his sewing machine and sold it together with the right to patent to George A. Arrowsmith.

²¹ See biographical sketch, p. 218.

²² The earliest known reference in print to Walter Hunt's sewing machine is in *Sewing by Machinery: An Exposition of the History of Patentees of Various Sewing Machines and of the Rights of the Public* (I. M. Singer & Co., 1853). A more detailed story of Hunt's invention is in *Sewing Machine News* (1880-81), vol. 2, no. 2, p. 4; no. 4, p. 5; and no. 8, pp. 3 and 8.

²³ Vol. 2, no. 8, p. 3.

²⁴ In the opinion and decision of C. Mason, Commissioner of the Patent Office, offered on May 24, 1854, for the Hunt vs. Howe interference suit, Mason stated: "He [Hunt] proves that in 1834 or 1835 he contrived a machine by which he actually effected his purpose of sewing cloth with considerable success."