infuriated mob, as had been earlier labor-saving devices such as the Jacquard attachment for the loom and Hargreaves' spinning jenny. Thimonnier was forced to flee to his home in St. Etienne, once more penniless.

Soon after this, Jean Marie Magnin, an engineer from Ville-franche-sur-Saône became interested in Thimonnier's machine and provided the inventor again with financial backing. In 1845 under the name of Thimonnier and Magnin the patent of 1830 was renewed, and under it they organized the first French sewing-machine company. The machines they manufactured could produce 200 stitches per minute.

The Revolution of 1848 curtailed the manufacture and sale of the machines. Thimonnier, remembering his unpleasant experience in 1841, decided to go to England with Magnin, where, on February 8, 1848, they received the English patent for his chainstitch machine. He was also granted United States patent 7,622 on September 20, 1850. This later machine had some advantages over his French machine of 1830, but by this time other inventors had joined the field with machines that were more practical. Magnin entered a sewing machine (which from the description in the catalog must have been Thimonnier's invention) in the Crystal Palace Exhibition in London in 1850, but because it was late in arriving it was overlooked by the judges and not even considered in the competition. Thimonnier died in poverty at Amplepuis on July 5, 1857.

WALTER HUNT

Walter Hunt was born near Martinsburg, New York, on July 29, 1796. Although little is known of Hunt's early childhood, we do learn from the author of his obituary, which appeared in *Scientific American*, July 9, 1860, that even as a child he was more interested in people and what he could do for them than in what he could do to insure his own welfare. He is said to have devoted his life to his friends, frequently giving away his last cent when he did not have enough to provide for himself.

There is no record that Hunt maintained a regular business other than the occupation of inventor. His interests were numerous and varied. He received his first patent on June 26, 1826, for a machine for spinning flax and hemp. During the next 33 years he patented 26 ideas. In addition he sold or dropped several more. His second patent was for a coach alarm, and through the years he also received patents for a variety of things including a knife sharpener, heating stove, ice boat, nail machine, inkwell, fountain pen, safety pin, bottle stopper, sewing machine (1854), paper collars, and a reversible metallic heel.



Figure 216.—Walter Hunt, 1796–1860. From a daguerreotype owned by his great-grandson, C. N. Hunt. (Smithsonian photo 32066–A.)

ELIAS HOWE, JR.

Elias Howe, Jr., was born on his father's farm in Spencer, Massachusetts, on July 9, 1819. This was one of those barren New England farms with many rockfilled acres. All possible ingenuity was necessary to secure a living. The elder Howe supplemented his farming by having a small gristmill, a sawmill, and also by manufacturing cards for the fast-growing cotton industry of New England. Elias Jr.'s earliest recollections were of the latter. He worked with his brothers and sisters sticking wire teeth into strips of leather to make these cotton cards, but, not being very good at this, his family decided to let him "live out" with a neighboring farmer. (Children were leased in those days; they received their board and keep in exchange for chores they would perform.) After a few years, Elias returned home and worked in his father's mill until he was sixteen. Then, against the wishes of his family, he went to Lowell, Massachusetts. Here, he obtained a