

Figure 39.—One of the first commercial machines produced by the Willcox & Gibbs Sewing Machine Co. in 1857, this machine bears no serial number, although the name "James E. A. Gibbs" is inscribed in two places on the cloth plate. It was used as the patent model for Gibbs' improvement on his 1857 patent issued the following year on August 10, 1858. (Smithsonian photo P. 6393.)

Singer machine. Gibbs was very much impressed, but thought the machine entirely too heavy, complicated, and cumbersome, and the price exorbitant. It was then that he recalled the machine he had devised. Remembering how simple it was, he decided to work in earnest to produce a less-expensive type of sewing machine.

Gibbs had little time to spend on this invention since his family was dependent upon him for support, but he managed to find time at night and during inclement weather. In contemporary references, Gibbs is referred to as a farmer, but since he is also reported to have had employers, it may be surmised that he was a farmhand. In any event, his decision to try to produce a less-expensive sewing machine suffered from a lack of proper tools and adequate materials. Most of the machine had to be constructed of wood, and he was forced to make his own needles. By the end of April 1856, however, his model was

sufficiently completed to arouse the interest of his employers, who agreed to furnish the money necessary to patent the machine.

Gibbs went to Washington, where he examined sewing-machine models in the Patent Office and other machines then on the market. Completing his investigations, Gibbs made a trip to Philadelphia and showed his invention to a builder of models of new inventions, James Willcox. Much impressed with the machine, Willcox arranged for Gibbs to work with his son, Charles Willcox, in a small room in the rear of his shop. After taking out two minor patents (on December 16, 1856, and January 20, 1857), Gibbs obtained his important one, U.S. patent No. 17,427 on June 2, 1857 (fig. 38). His association with Charles Willcox led to the formation of the Willcox & Gibbs Sewing Machine Company, and they began manufacturing chainstitch machines in 1857 (fig. 39). The machine used a straight needle