

through the loop by means of reciprocating drivers. The cloth was suspended in a vertical position, impaled on pins projecting from a baster plate, which moved intermittently under the needle by means of a toothed wheel. The length of each stitching operation depended upon the length of the baster plate, and the seams were necessarily straight. When the end of the baster plate reached the position of the needle, the machine was stopped. The cloth was removed from the baster plate, which was moved back to its original position. The cloth was moved forward on the pins, and the seam continued.

In his patent specifications, Howe claimed the following:

1. The forming of the seam by carrying a thread through the cloth by means of a curved needle on the end of a vibrating arm, and the passing of a shuttle furnished with its bobbin, in the manner set forth, between the needle and the thread which it carried, under combination and arrangement of parts substantially the same with that described.

2. The lifting of the thread that passes through the needle-eye by means of the lifting-rod, for the purpose of forming a loop of loose thread that is to be subsequently drawn in by the passage of the shuttle, as herein fully described, said lifting-rod being furnished with a lifting pin, and governed in its motion by the guide-pieces and other devices, arranged and operating substantially as described.

3. The holding of the thread that is given out by the shuttle, so as to prevent its unwinding from the shuttle-bobbin after the shuttle has passed through the loop, said thread being held by means of the lever or slipping-piece, as herein made known, or in any other manner that is substantially the same in its operation and result.

4. The manner of arranging and combining the small lever with the sliding box, in combination with the spring-piece, for the purpose of tightening the stitch as the needle is retracted.

5. The holding of the cloth to be sewed by the use of a baster-plate furnished with points for that purpose, and with holes enabling it to operate as a rack in the manner set forth, thereby carrying the cloth forward and dispensing altogether with the necessity of basting the parts together.

The five claims, which were allowed Howe in his patent, have been quoted to show that he did not claim the invention of the eye-pointed needle, for which he has so often been credited. The court judgment<sup>34</sup>

<sup>34</sup> *In the Matter of the Application of Elias Howe, Jr. for an Extension of His Sewing Machine Patent Dated September 10, 1846*, New York, 1860, with attachments A and B, U.S. Patent Office. [L.C. call no. TJ 1512.H6265]

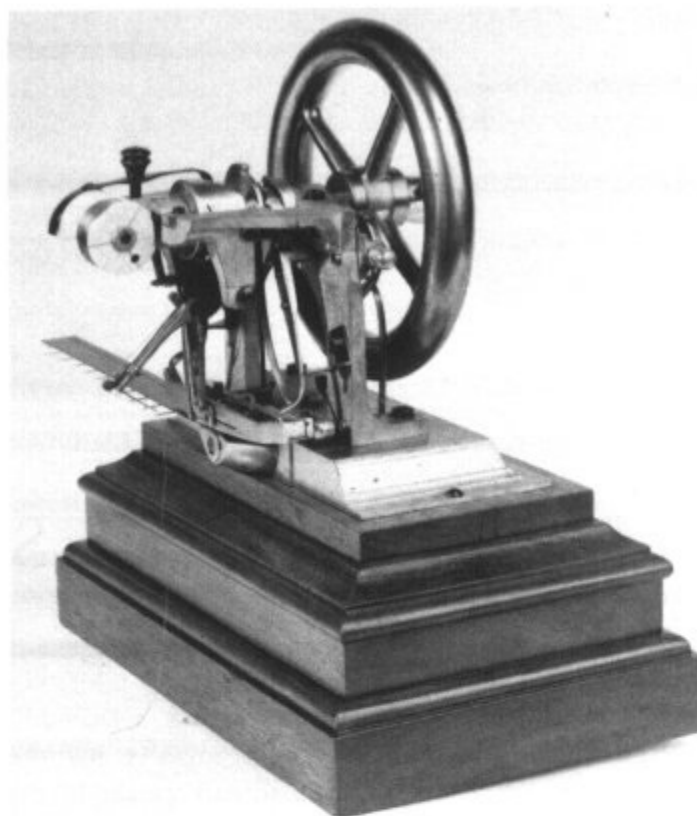


Figure 15.—HOWE'S PATENT MODEL, 1846.  
(Smithsonian photo 45525-B.)

that upheld Howe's claim to his patented right to control the use of the eye-pointed needle in combination with a shuttle to form a lockstitch was mistakenly interpreted by some as verifying control of the eye-pointed needle itself.

After patenting his invention, Howe spent three discouraging years in both the United States and in England trying to interest manufacturers in building his sewing machine, under license. Finally, for £250 sterling, he sold the British patent rights to William Thomas and further agreed to adapt the machine to Thomas' manufacture of umbrellas and corsets.<sup>35</sup> This did not prove to be a financial success for Howe and by 1849 he was back in the United States, once again without funds.

On his return, Howe was surprised to find that other inventors were engaged in the sewing-machine

<sup>35</sup> It is interesting to note that when William Thomas applied for the British patent of the Howe machine (issued Dec. 1, 1846), the courts would not allow the claim for the combination of the eye-pointed needle and shuttle to form a stitch, due to the Fisher and Gibbons patent of 1844. For more details on Howe's years in England, see his biographical sketch, pp. 218-221.