

A. C. Hobb.
Sewing Machine.

No. 67,544.

Patented Aug. 6, 1867.

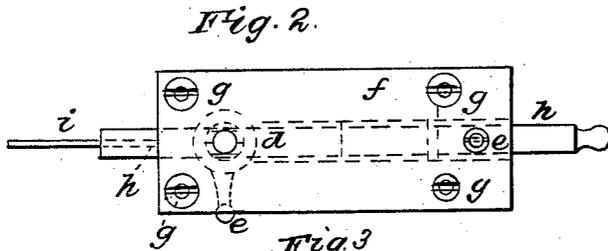
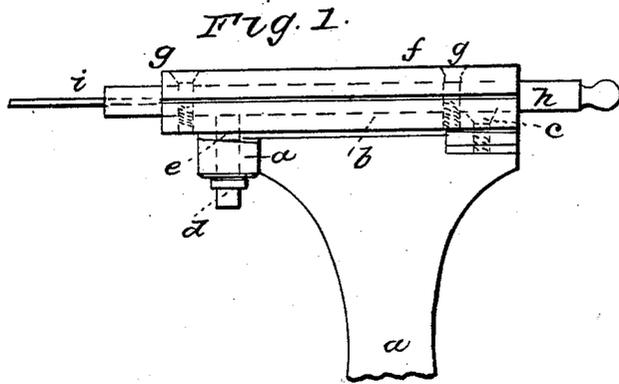


Fig. 3.

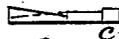
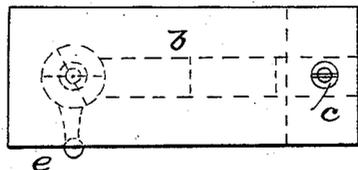
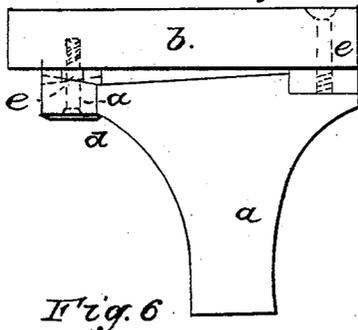


Fig. 4.



Fig. 5.



Witnesses

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A. C. HOBBS, OF BRIDGEPORT, CONNECTICUT.

Letters Patent No. 67,544, dated August 6, 1867.

IMPROVEMENT IN SEWING MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, A. C. HOBBS, of Bridgeport, in the county of Fairfield, and State of Connecticut, have invented certain new and useful Improvements in Sewing Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, like letters indicating like parts wherever they occur.

To enable others skilled in the art to construct and use my invention I will proceed to describe it.

My invention relates to an improvement in sewing machines, and consists of a new method of adjusting and controlling the proper adjustment of the face-plate, needle-bar, and needle therein.

Figure 1 represents a side view showing a portion of the arm of a sewing machine, the face-plate, needle bar, needle, and adjusting device.

Figure 2 represents a front view of the same.

Figures 3 and 4 represent the cam or device for the adjusting, &c.

Figures 5 and 6 represent other side views.

In fig. 1, *a* represents a portion of the arm of a sewing machine, *b* and *f* the two pieces forming the face-plate or needle-bar box; *h* the needle-bar; *i* the needle attached to the needle-bar; *g g* the screws which fasten together the two pieces forming the face-plate; *e* and *d* the screws which fasten the piece *b* to the arm *a* of the machine; *e* the cam which is fitted in between the arm *a* and the face-plate piece *b*. In figs. 3 and 4, *e* represents the cam on a larger scale, and shows its peculiarity of form. The object to be secured is to so adjust the needle, whether coarse or fine, as to make it operate in the required proximity to the shuttle-race, shuttle-hook, or other device used for securing the loop of the needle. It will be readily understood that if the machine were adjusted with a coarse needle, on taking it out and substituting a fine one, there would be a space between the needle and the shuttle-race, shuttle, or hook, equal to one-half the difference of the diameters of the needles. Now, in order to adjust the needle within the required proximity to the shuttle-race, shuttle, or hook, I make a cam, *e*, having a face with two inclines, and I make two similar inclines, so that they will correspond and fit to those upon the cam *e* on that part of the arm *a* through which the screw *d* passes. I then place this cam *e* between the arm *a* and the face-plate *b*, and so that it may be held and turn upon the screw *d*, and with its inclines fitting upon the inclines upon the end of the arm *a*. The arm *a* is firm and stationary. Now, whenever I want to move the face-plate or needle-bar box for the purpose of adjusting the needle to the required proximity of the shuttle-race, shuttle, hook, or other device for securing the loop, I have only to loosen the screw *d*, turn the cam *e*, so as to increase or diminish the distance between the arm *a* and the face-plate *b*, as may be required, and then fasten it by tightening the screw. In this way are firmly bound together the arm *a*, cam *e*, and face-plate *b*, containing the needle-bar *h'*, with the needle *l* attached.

I am aware that other methods have been devised for adjusting the needle or face-plate, or needle-bar box, by which the needle, whether coarse or fine, may be adjusted and made to operate in the required proximity to the shuttle-race, shuttle, or hook for securing the loop of the needle; but this particular method by the use of a cam I claim to be my invention.

And having thus described my invention, what I claim is—

In combination with the face-plate or needle-box *b f*, the screw *d* and the cam *e*, for adjusting and controlling the proper adjustment of said face-plate or needle-bar box, and the needle-bar and needle therein, substantially as described.

Witnesses:

WM. S. GOLDY,
H. C. DODGE.

A. C. HOBBS.