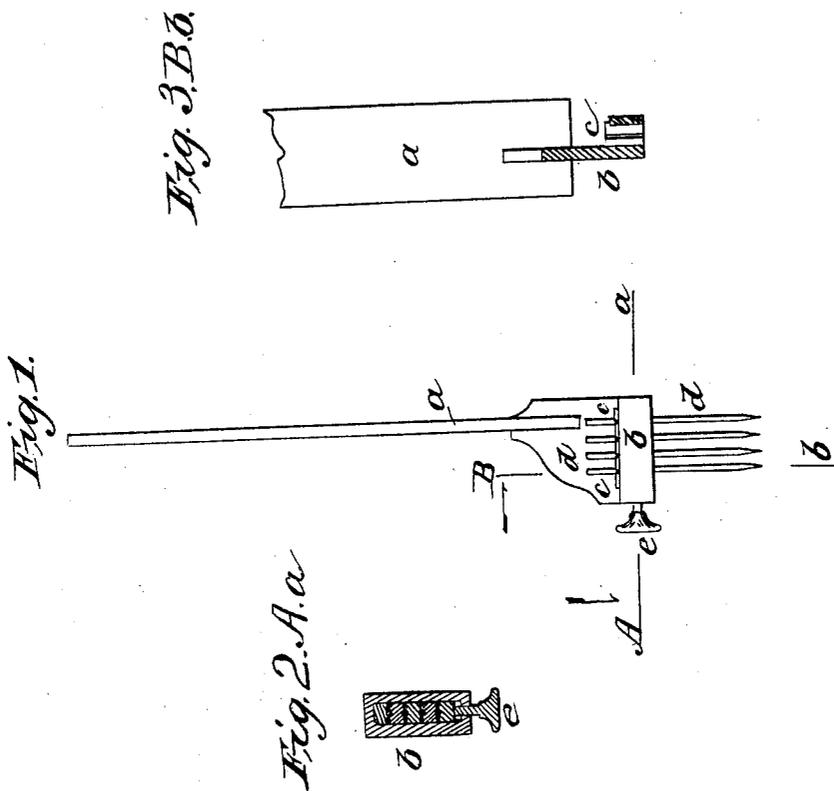


I. M. SINGER.
SEWING MACHINE.

No. 24,892.

Patented July 26, 1859.



Witnesses
Wm. H. ...
A. ...

Inventor
I. M. Singer.

UNITED STATES PATENT OFFICE.

ISAAC M. SINGER, OF NEW YORK, N. Y.

IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. **24,892**, dated July 26, 1859.

To all whom it may concern:

Be it known that I, ISAAC M. SINGER, of the city, county, and State of New York, have invented a certain new and useful Improvement in the Method of Securing two or more Needles in the Needle-Carrier of 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, in which—

Figure 1 is an elevation of my improved needle-carrier; and Figs. 2 and 3, sections thereof, taken at the line A *a* and B *b* of Fig. 1.

The same letters indicate like parts in all the figures.

The nature of my invention, which relates to the method of securing two or more needles in the needle-carrier of sewing-machines, consists in securing two or more needles in a mortise in the needle carrier or stock by means of interposed blocks grooved on their parallel faces to receive the body of the needles, and all clamped by a clamp-screw or equivalent means, whereby any number of needles can be secured and all held parallel with each other, and the spaces between the several needles varied at pleasure to suit the required width of seams by taking out one set of blocks and substituting blocks of a different thickness.

In the accompanying drawings, *a* represents the needle-carrier, which is formed with a flange-like projection, *b*, in which is cut a vertical mortise with parallel sides. In this mortise are fitted a series of metal blocks, *c*, the contiguous faces of which are parallel and grooved vertically, so that the shanks of the needles *d* will be received and held between any two of such blocks. The upper ends of the said blocks are flanged to rest on the upper surface of the said projection. After the re-

quired number of such blocks have been inserted in the mortise with the needles between them, they are made to grip the needles and hold them firmly in place by a temper-screw, *e*, at the end of the mortise. As all the blocks are grooved in one and the same plane, and the shanks of the needles are inserted in the said grooves when clamped, the needles—whether one, two, or more—will be brought to the required position, and when two or more are inserted will be parallel with each other, and all brought in the same plane and parallel with the plane of motion of the shuttle-face, that the one shuttle may carry its thread through the loops of all the needle-threads to form the seams; and it will also be observed that the distances between the needles will depend upon the thickness of the blocks, and that by having blocks of different thicknesses the needles can be readily set at any desired distance from each other to sew parallel seams at any required distance apart by merely taking out one set of blocks and putting in another set.

It will be obvious that instead of the temper-screw a wedge-key or other equivalent device may be substituted.

What I claim as my invention, and desire to secure by Letters Patent as an improvement in sewing-machines, is—

Making the needle-carrier with a mortise, substantially as described, in combination with the needles, a series of blocks having parallel sides grooved to receive the needles, and with a clamp-screw or its equivalent, all substantially as described, and for the purpose set forth.

I. M. SINGER.

Witnesses:

R. E. STILWELL,
A. CRIST.