(Model.)

N. HAYDEN.

NEEDLE BAR FOR SEWING MACHINES.

No. 250,809. Patented Dec. 13, 1881.

Fig. 1.

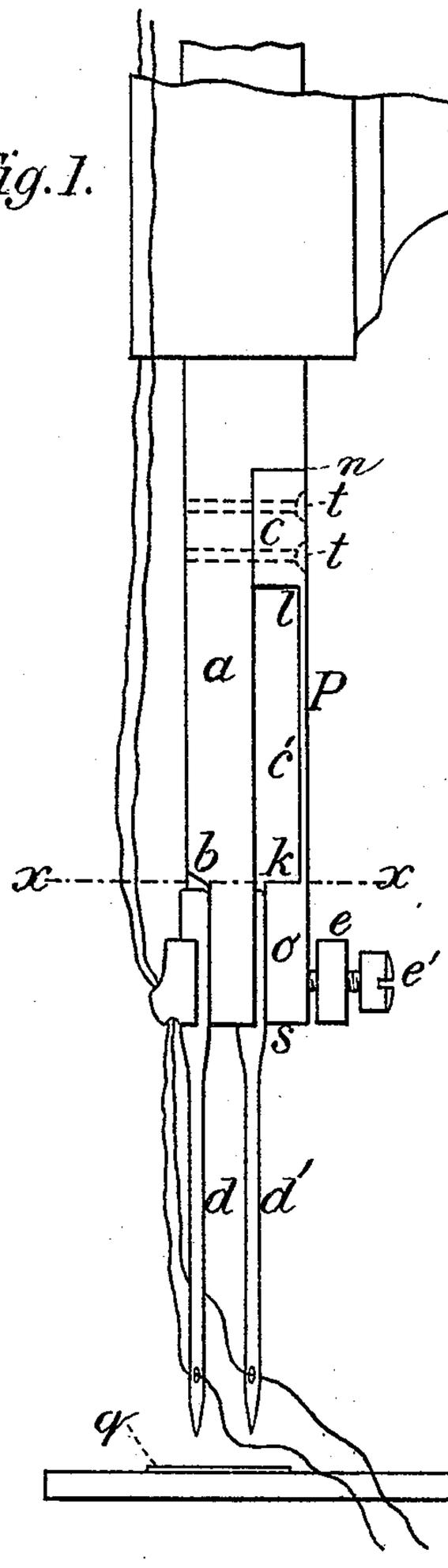


Fig. 2.

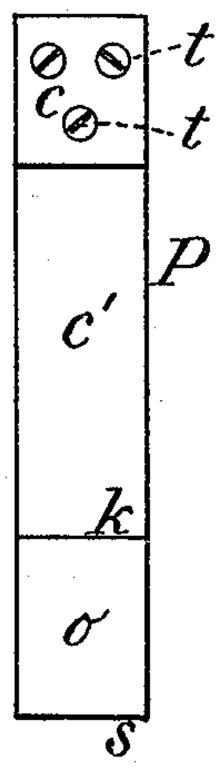


Fig. 3.

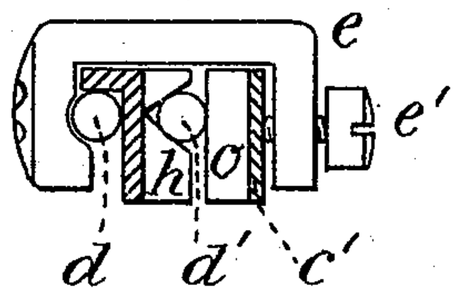
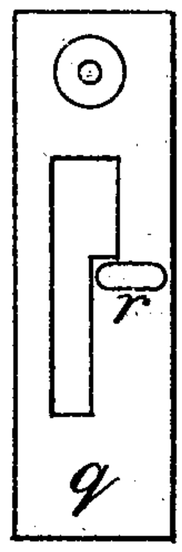


Fig. 4.



Witnesses:

S. Holderness

Francis R. Dempsey

Inventor.

Nathan Hayden

UNITED STATES PATENT OFFICE.

NATHAN HAYDEN, OF CHICAGO, ILLINOIS, ASSIGNOR TO HIMSELF AND RICHARD RAINFORTH, OF SAME PLACE.

NEEDLE-BAR FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 250,809, dated December 13, 1881.

Application filed March 17, 1880. (Model.)

To all whom it may concern:

Be it known that I, NATHAN HAYDEN, of the city of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Needle-Bars for Sewing-Machines, of which the following is a specification.

My improvement relates to sewing-machines using two needles for the purpose of sewing two seams at once, and has for its object to provide means for properly securing and adjusting the needles in the bar.

Referring to the accompanying drawings, Figure 1 is a side elevation of a portion of a sewing-machine arm fitted with my improved needle-bar. Fig. 2 is a side view of the spring-plate for holding one of the needles detached. Fig. 3 is a horizontal sectional view of the needle-bar on line *x x* of Fig. 1; and Fig. 4 is a view of the throat-plate used with my needle-bar.

A is the arm of a sewing-machine, and *a* the reciprocating needle-bar, operated in any usual or desired manner. The needle-bar is recessed at *b* to receive the shank of needle *d*, in the usual manner. To receive the second needle, *d'*, the needle-bar *a* is recessed from the point *n* to its lower end, and is provided with a V-shaped groove, *h*, in line with the needle *d*. A spring-plate, P, is then fitted to said recess, said plate being so deeply recessed at *c'* from *k* to *l* as to make an elastic spring-tongue. At the lower end, *o*, of said plate is a projecting solid block or jaw of smooth and even surface from *k* to *s*. On the upper part of the spring-plate P is a similar projecting solid block, *c*, by which said plate is secured to the needle-bar *a* at *t t*. The second needle, *d'*, being placed in the V-shaped groove *h*, is securely held by the common clamp *e* and screw *e'*, pressing the jaw *o* from *k* to *s* against the shank of the said needle *d'*, holding the same securely in the V-shaped groove *h* of the needle-bar *a*, as shown in Figs. 1 and 3 of the drawings.

I claim—

The combination, with the needle-bar *a*, recessed upon one side for the reception of the spring-plate P, and provided at its lower end with the recess *b* and the V-shaped groove *h*, of the said spring-plate P, secured to said needle-bar, and having at its lower end a smooth-faced jaw, *o*, the clamp *e*, and the set-screw *e'*, substantially as shown and described.

NATHAN HAYDEN.

Witnesses:
C. C. STACEY,
S. HOLDERNESS.