

(No Model.)

R. RAINFORTH.

NEEDLE BAR FOR SEWING MACHINES.

No. 266,050.

Patented Oct. 17, 1882.

Fig. 5.



Fig. 1.

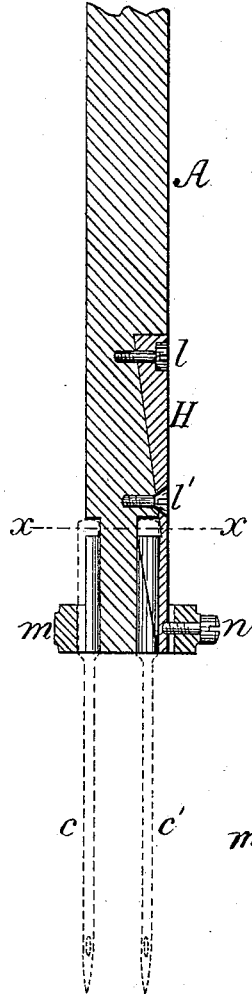


Fig. 2.

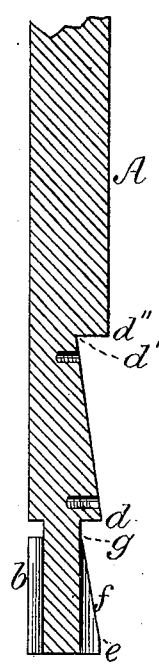


Fig. 3.

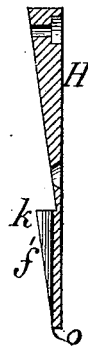


Fig. 4.

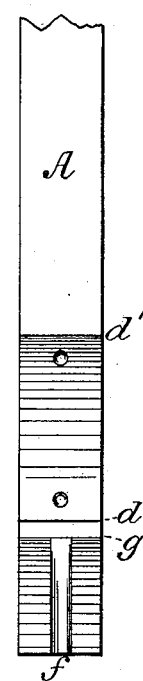


Fig. 7.

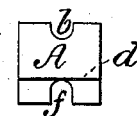


Fig. 6.

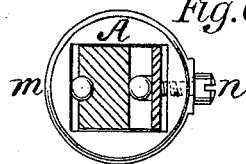
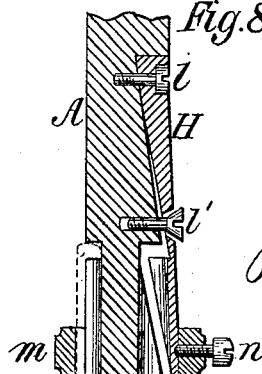


Fig. 8.



Witnesses

S. H. Golder
J. P. Denny

Inventor:

Richard Rainforth

UNITED STATES PATENT OFFICE.

RICHARD RAINFORTH, OF CHICAGO, ILLINOIS.

NEEDLE-BAR FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 266,050, dated October 17, 1882.

Application filed July 26, 1882. (No model.)

To all whom it may concern:

Be it known that I, RICHARD RAINFORTH, 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 adjusting and securing the needles in the bar.

Referring to the accompanying drawings, Figure 1 is a longitudinal section of a needle-bar fitted with my improvement. Fig. 2 is a similar view with the collar and jaw removed. Fig. 3 is a sectional view of a doubly-beveled spring-jaw. Fig. 4 is a side view of my needle-bar with the spring-jaw removed. Fig. 5 is a side view opposite to that shown in Fig. 4. Fig. 6 is a horizontal sectional view of the needle-bar on line *x x* of Fig. 1, showing also collar and set-screw. Fig. 7 is a bottom view of a needle-bar, showing the grooves for each needle. Fig. 8 is a view of my needle-bar, showing adjusting-screw loosened and needle removed.

A is the reciprocating needle-bar for a sewing-machine operated in any desired manner. The needle-bar is grooved at *b* to receive the shank of needle *c* in the usual manner. To receive the second needle, *c'*, the needle-bar A has a double-beveled recess from *d'* to its lower end, *e*, with a projecting shoulder at *d* and a groove, *f*, extending from its lower end, *e*, to *g* in line with groove *b*, the needle *c'* being ad-

justed by its upper end resting against projecting shoulder *d*. A spring-jaw, H, of metal, is fitted to the double-beveled recess in needle-bar A. It is doubly beveled, allowing a spring tendency, and is provided with a groove, *f'*, extending from *k* to near its lower end in line with grooves *b* and *f* in needle-bar A. Said spring jaw is fastened to needle-bar A at its upper end by screw *l*, and has an adjusting-screw, *l'*, which, when tightened up, acts on said jaw H by pressing it against the shank of needle *c'* and needle-bar A. A collar, *m*, with a set-screw, *n*, is fitted to needle-bar A and spring-jaw H, securely fastening needles *c* and *c'* in their proper place and position.

Having thus described my invention, I claim—

1. The combination of the needle-bar A, provided with the groove *f*, and a double-beveled recess having a projecting shoulder, *d*, as shown, with the spring-jaw H, doubly beveled to correspond to the beveled recess of the needle-bar, and means for adjustably securing said jaw to said bar, substantially as described.

2. The combination, with the needle-bar A, provided with the grooves *b* and *f* and a double-beveled recess, as shown, of the spring-jaw H, doubly beveled to correspond with the beveled recess of the needle-bar, and having the groove *f'*, the fastening-screw *l*, adjusting-screw *l'*, collar *m*, and set-screw *n*, substantially as set forth.

RICHARD RAINFORTH.

Witnesses:

S. HOLDERNESS,
V. P. DEMPY.