

JEROME B. SECOR.

Improvement in Sewing Machines.

No. 121,967.

Patented Dec. 19, 1871.

Fig. 1.

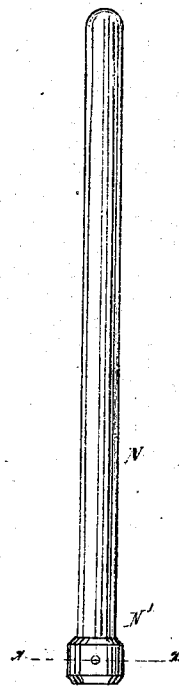
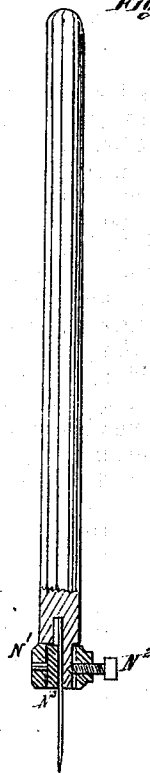


Fig. 3.

Fig. 2.



Witnesses:

Henry F. Brown.
Francis F. Warren.

Inventor:

Jerome B. Secor

UNITED STATES PATENT OFFICE.

JEROME B. SECOR, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN NEEDLE-HOLDING DEVICES FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 121,967, dated December 19, 1871.

To all whom it may concern:

Be it known that I, JEROME B. SECOR, of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Sewing-Machines, of which the following is a specification, reference being had to the accompanying drawing.

My invention consists in the combination of the needle-bar N, the band N¹, the set-screw N², and presser N³; and the object of my invention is to secure the needle in the metallic bar in such a manner that it will be firmly held and be readily adjusted, and always be in the same position, whatever the size of the needle may be.

Figure 1 represents a side elevation of that portion of the needle-bar to which the needle is attached; Fig. 2, a vertical central section of the same with the needle attached; and Fig. 3, a transverse sectional view of the same at the line *x x*.

It is important that needles of different sizes can be used in a machine, and it is also important that all the needles make their vertical motion in the same line in order to avoid breakage and work evenly and smoothly with the other parts of the machine.

N is the needle-bar. N¹ is a band surrounding the lower end of the needle-bar. N² is a pointed set-screw, which passes through the band and sets into a slight recess in the needle-bar and prevents the band from falling off when the screw is not tightened, as shown. N³ is a presser rigidly attached to the band N¹, as shown at its side

opposite the set-screw N². This presser extends through a slot in the needle-bar and presses against the needle as the set-screw N² is turned. The needle is always pressed against the side of the needle-hole in the needle-bar next to the set-screw, and that is made to fit the line of the motion of the needle when in operation.

It will be observed that, whatever the size of the needle, it is inserted in the needle-bar as shown in Fig. 2, and by turning the set-screw the band causes the presser to press the needle against that side of the hole toward the set-screw, thereby always holding the needle in the same position—that is, the side of the needle is always against the same side of the needle-hole. This arrangement allows all needles, whatever their size, to pass at the same distance from the shuttle, and so prevents the dropping of stitches. The presser is held in place by a small pin passing through the band N¹, as shown.

Having described the construction and operation of my improvements, what I claim, and desire to secure by Letters Patent, is—

The combination of the needle-bar N, the ring or band N¹, the set-screw N², and presser N³, when constructed and operated as and for the purposes described.

JEROME B. SECOR.

Witnesses:

HEINR. F. BRUNS,
FRANCIS F. WARNER.

(134)