

Improvement in Needle-Setters, Needle-Sharpener, Needle-Cases, and Rippers.

Patented May 16, 1871.

A perspective view of the front of the instrument. It shows a long, rectangular body with a central slot. On the right side, there is a small rectangular component with a slot. The letter 'A' is positioned above the central slot. The letter 'c' is on the left end, 'd' is in the center, 'a' is on the right end, and 'd' is on the small component.

[illegible]

Witnesses.
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ELI E. HENDRICK, OF CARBONDALE, PENNSYLVANIA.

Letters Patent No. 114,815, dated May 16, 1871.

IMPROVEMENT IN NEEDLE-SETTERS, NEEDLE-SHARPENERS, NEEDLE-CASES, AND RIPPERS.

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, ELI E. HENDRICK, of Carbondale, in the county of Luzerne and State of Pennsylvania, have invented a Combined Sewing-Machine Needle-Setter, Needle-Sharpener, Needle-Case, and a Ripping Device; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a side view of the case, which incloses the needle-setter and ripping device.

Figure 2 shows the needle-setter and ripping device exposed beyond the end of the case.

Figure 3 is an enlarged sectional view of part of the case, also showing the setter and ripper.

Figure 4 shows the gauge adjusted for setting a needle.

Similar letters of reference indicate corresponding parts in the several figures.

The following description will enable others skilled in the art to understand the construction and manner of using my improved instrument.

In the accompanying drawing—

A represents a tube, which may be made of hard rubber or of metal, and which has a chamber in one end closed by a cap, *c*, for containing needles.

The chamber in the other end of the tube or case A contains a sliding plug, *B'*, which is connected by pins *t*, working in an oblong slot, *d*, to a ring-slide, *a*, on the outside of the case.

The notches *d'* receive the pins *b* when slide *B'* is in the position shown in fig. 3, and hold the slide in this position.

To the outside of the case A I secure in any suitable manner a small oblong piece, *b*, which is made of stone or other substance which will answer a good purpose for sharpening the points of needles.

The narrow V-groove in the bone *b* is intended to receive and guide the point of a needle while sharpening it.

To the outer end of the sliding plug *B'*, and in the center thereof, a tube, *B*, is permanently secured, which tube terminates in a bifurcation, *e*, flattened as shown in the drawing and having secured in its crotch a knife, *g*.

This tube *B* is not so long but that it may be inclosed within the case A when the ring *a* is slid back, as shown in fig. 1.

Through the flattened portion of the tube *B* a hole, *h*, is made for receiving into or through it the perforated end of a needle.

s, fig. 3, is a sliding point, which is applied to a spring slide inclosed within the tube *B*, and which is

intended to enter the eye of a needle and hold it firmly in a given position.

The thumb-screw or knob *j* is applied to the needle-slide, and the neck of the knob works in an oblong slot, *i*, made through the tube *B*.

The spring which is applied in tube *B* acts to force the point *s* toward the flattened end of this tube, and is compressed when the point is drawn back to insert a needle through the hole *h*.

In conjunction with the perforation *h* and movable point *s*, I employ a gauge, *k*, which is pivoted to the tube *B* at one side, and curved laterally at the other end.

This gauge *k* is made of two narrow slotted pieces held together by a set-screw for the purpose of shortening or lengthening it, and thus adapting it to short and long needles.

This gauge, being slightly elastic at its curved or concaved end, will embrace the tube *B*, as shown in figs. 2 and 3. Thus the gauge will be held in place out of the way when it is not in use.

The pivot at *m* will allow the gauge to be adjusted at right angles to the tube *B*, as indicated in fig. 4, in which position it will gauge the depth desired to insert a needle into the end of the needle-bar of a sewing-machine.

Operation.

Draw back the point *s*, pass the needle through the hole *h* until its eye is below said point, turn the long groove in the needle toward the handle or case A, let go the knob *j*, and the point *s* will be forced into the needle-groove; now pull up the needle until the point *s* enters the eye and fastens the needle. Next, swing the gauge *k* around parallel with the needle, as shown in fig. 4, enter the needle in its place in the needle-bar, and press it up until the gauge strikes the bottom of this bar; set the needle fast, draw back the point *s*, drop the holder off the needle, and turn back the gauge *k* parallel with the tube *B*, and the instrument is ready for ripping.

This is done by running the flattened end of the tube *B* between the pieces to be ripped in such manner that the forks straddle the threads of the seam, and thus bring the threads against the knife *g* in the crotch of said forks. The seam should be held together by the left hand, instead of apart, as is customary when ripping with a knife.

To sharpen a needle, its point is oiled and then rubbed gently lengthwise in the groove of the bone *b*, at the same time turning the needle to round its point.

When the setting and ripping devices are not in

use they can be pressed back into the case A, out of sight and out of the way.

Having described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. The gauge *k*, the perforation *h*, and sliding point *s*, in combination with the ripping device *e g* on tube B, substantially as explained.

2. The combination of the needle-setter, the case A, and the hone *b*, substantially as described.

3. The combination of the needle-case, the sliding tube B, and the needle-setting device, substantially as described.

Witnesses:

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