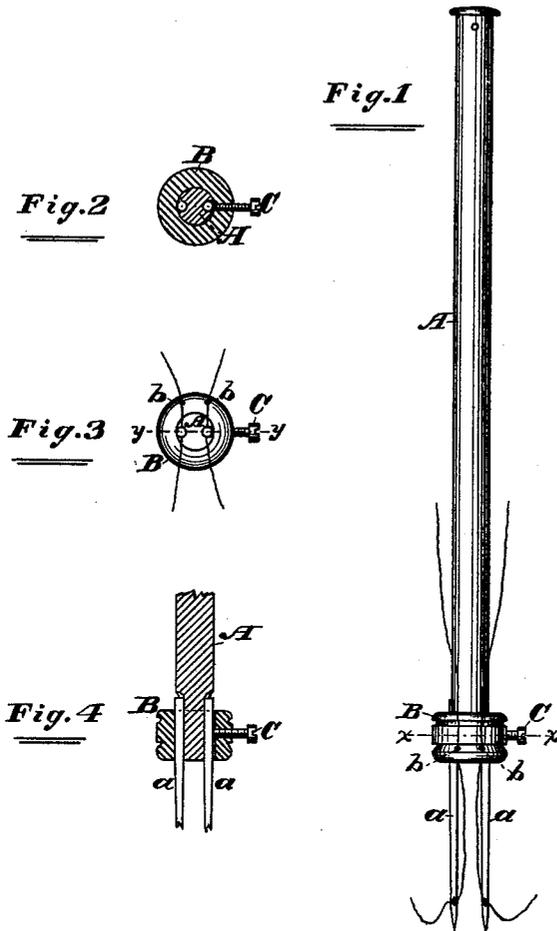


N. HAYDEN.
Needle-Bar for Sewing-Machines.

No. 213,819.

Patented April 1, 1879.



Attest:

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NATHAN HAYDEN, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN NEEDLE-BARS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **213,819**, dated April 1, 1879; application filed October 8, 1878.

To all whom it may concern:

Be it known that I, NATHAN HAYDEN, of Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Needle-Bars for Sewing-Machines; and I do hereby declare the following to be a full, clear, and exact description, which will enable others skilled in the art to which my invention appertains to construct and make use of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a side view of a needle-bar having a collar or double needle-holder attached to the lower end thereof; Fig. 2, a transverse section of the same, taken on the line *xx*, Fig. 1; Fig. 3, an inverted plan view; Fig. 4, a longitudinal central section taken at *yy*, Fig. 3.

The object of my invention is to provide an improved needle-holder for that class of sewing-machines by which two seams may be run at the same time.

The nature of my invention consists in so constructing the lower end of the needle-bar as to adapt it for holding and operating two needles, inclosing the same by a removable collar or needle-holder, the needle-bar and collar being so constructed as to admit of securing both needles with one screw, which screw also serves as a means of both holding the collar to the needle-bar and preventing it from turning.

In the drawings, A represents the ordinary needle-bar common to sewing-machines, with this difference: the lower end is grooved on two sides. *aa* are needles inserted in said grooves. B represents a removable collar or needle-holder placed upon the lower end of the needle-bar A. The collar B is provided with apertures *bb*, through which the thread is made to pass, guiding and keeping the same within certain limits. C is a set-screw inserted in the collar B, for the purpose of securely holding the needles when they are inserted in the needle-bar.

The groove in which the point of the set-screw C is seated is of a greater depth than the groove on the opposite side, so as to ad-

mit of the set-screw having sufficient hold to prevent any possibility of the collar B changing position while the machine is in operation. By this arrangement of the parts, both the needles are securely held in place, and the collar is firmly fastened to the needle-bar with a single set-screw, which admits of the ready and cheap substitution of a new collar when the thread of the screw-hole in the old one becomes worn so as no longer to hold the screw by which the needles are secured; or, by boring and tapping a new hole in the opposite side of the collar and reversing its position, the collar can be used again.

This double-needle attachment is especially useful in quilting, and in the manufacture of ready-made clothing, where double seams are often required; and with this device the operator will only have to pass the material through the machine once to produce a double seam, which is a great saving in time and labor, and the seams are always regular and of a uniform distance apart.

The action of the shuttle in catching the loops is just as accurate and perfect as when but one needle is used, the two-needle attachment forming a zigzag stitch on the reverse side of the material.

The ornamental stitch produced on the lower side of the material is especially appropriate for the stitching on the backs of gloves, or any article requiring an ornamental seam or stitch.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

The combination of a needle-bar having two grooves on opposite sides, and of different depths, with a loose collar and set-screw, the whole arranged as described, so as to hold both of the needles and the collar with one set-screw, as set forth.

NATHAN HAYDEN.

Witnesses:

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