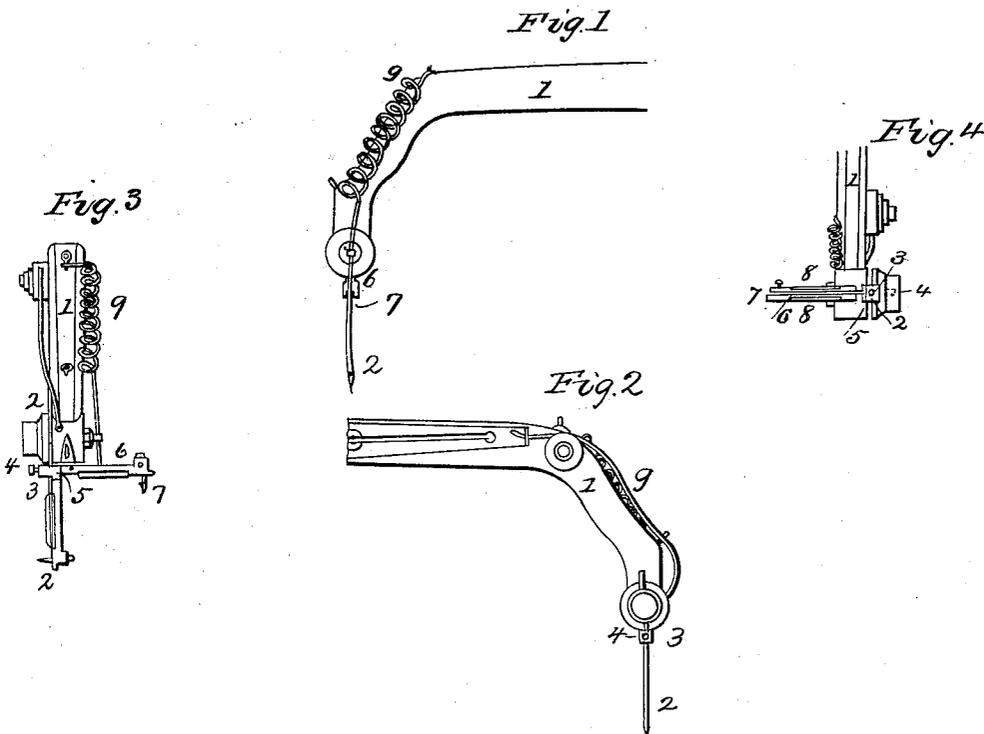


J. STEVENS.

Instrument for Threading Needles.

No. 27,762.

Patented April 3, 1860.



WITNESSES

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JOHN STEVENS, OF NEW YORK, N. Y., ASSIGNOR TO H. BRIND; OF SAME PLACE.

IMPROVEMENT IN MECHANISM FOR THREADING SEWING-MACHINE NEEDLES.

Specification forming part of Letters Patent No. 27,762, dated April 3, 1860.

To all whom it may concern:

Be it known that I, JOHN STEVENS, of New York, in the county of New York and State of New York, have invented certain Improvements in Instruments for Threading Needles, the construction and operation of which I have described in the following specification, and illustrated in its accompanying drawings, with sufficient clearness to enable competent and skillful workmen in the arts to which it pertains or is more nearly allied to make and use my invention.

My invention consists in, first, the device, hereinafter described, for attaching the implement to the needle, so as to make its longitudinal adjustment to meet the eye of the needle certain and reliable, as hereinafter more fully set forth; second, the construction and arrangement of parts, hereinafter described, for securing the lateral adjustment of the instrument to the eye of the needle with certainty; third, the combination with the jointed arm, as described, of the spiral spring attached to the needle-beam of a sewing-machine, the whole being so constructed and arranged as to withdraw and raise the threading-hook from the eye of the needle and out of the way of the operation of the machine, as set forth.

My invention is illustrated in the accompanying drawings, as follows: Figure 1 shows the device in what I deem to be the best and most available form attached, with the needle, to the arm of a common sewing-machine, and is an elevation with that side of the needle-beam toward the observer which is usually toward the operator in working. Fig. 2 is also a side elevation, reverse to Fig. 1. Fig. 3 is a front elevation. Fig. 4 is an under side view. Fig. 5 is a side view of an arrangement for threading a common hand-needle, or may be used for threading machine-needles, though by no means as advantageously as the arrangement first shown.

In the arrangement last shown the stop to prevent the hook from passing too far through the eye of the needle is made by leaving a sufficient breadth of the steel just back of the hook for that purpose.

1 is the needle-beam. 2 is the needle. 3 is a portion of the instrument which is attached

firmly to the needle by means of the set-screw 4. At 5 a hinge-joint connects this piece 3 to the folding arm 6, which carries the hook 7 near its end. It is so constructed, and the part 3 is so attached to the needle, that when the arm 6 is folded down against the needle, as shown in red lines in Fig. 3, the hook will occupy the proper position longitudinally to exactly enter the eye of the needle. To insure its proper position laterally for that purpose, I make the arm 6 with two flanges, 8 8, with a sufficient space for the needle to enter between them, and these flanges are so arranged with reference to the hook 7 as to give lateral guidance to the said hook and cause it to enter the eye of the needle. In this arrangement the arm 6 itself acts as a stop to prevent the hook 7 from passing too far through the eye of the needle. The arm 6 is usually kept up in the position in which it is represented in the full views in the drawings by the spiral spring 9, which is attached to the needle-beam, or, what is the same thing essentially, to some of its attachments.

The operation is as follows: In threading the needle the arm 6 is first brought down to the position in which it is shown in red lines in Fig. 3, which passes the hook 7 through the eye of the needle. The thread is then cast over the hook, and it being allowed to be retracted by the action of the spring 9 the thread is by that means drawn through the eye and the arm 6 resumes its natural position. The arm 6 is also made of such length that while it answers the purpose of threading the needle it also serves as a gage to measure the necessary distance from the eye of the needle to the needle-beam or slide, as the case may be, by setting far enough into the said arm or slide to bring the part 3 just up to it, when the device is so attached to the needle as to pass the hook through the eye.

Having fully described my said invention, I claim—

1. The combination and arrangement of the perforated piece 3, provided with a set-screw or other convenient means of attaching it to the needle, with the arm 6, jointed to the piece 3, as described and shown, in such a manner as to furnish a ready and convenient means of securing the accurate adjustment longitudi-

nally with the needle to cause the hook 7 to enter the eye of the needle, as set forth.

2. The combination, with the arm 6, containing the hook 7, of the flanges 88, to secure the proper lateral adjustment of the hook, substantially as set forth.

3. The combination, with the folding arm 6,

and with the needle-beam, of the spring 9, substantially as and for the purpose set forth.

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Witnesses:

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