

I. M. & R. M. ROSE.

Embroidering Attachment for Sewing-Machines.

No. 130,317.

Patented Aug. 6, 1872.

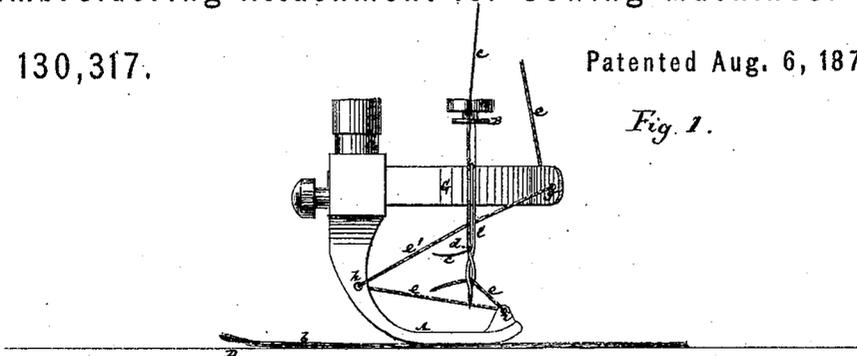


Fig. 1.

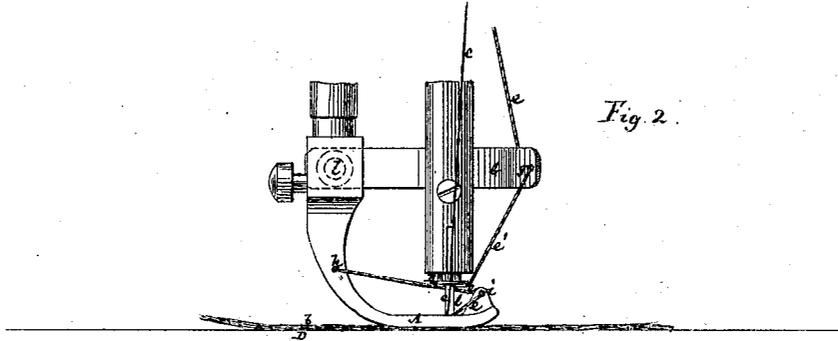


Fig. 2.

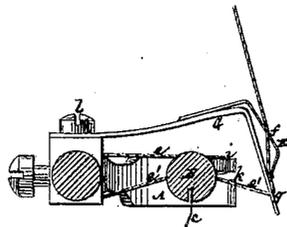


Fig. 3.

Witnesses

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IMPROVEMENT IN EMBROIDERING ATTACHMENTS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 130,317, dated August 6, 1872.

To all whom it may concern:

Be it known that we, ISRAEL M. ROSE, of Brookhaven, in the county of Suffolk, and REUBEN M. ROSE, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Embroidery Attachments for Sewing-Machines; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 represents a front view of a presser-foot and needle-bar, in part, of a sewing-machine, with needle attached, and having our improvement applied, the needle being in its raised position; Fig. 2, a similar view of the same when the needle is down; and Fig. 3, a horizontal section or plan of like devices.

Similar letters of reference indicate corresponding parts.

This invention relates to the sewing-machine needle for embroidering for which Letters Patent No. 103,664 were issued to Israel M. Rose aforesaid, May 31, 1870, said needle, in addition to being eye-pointed for working the sewing-thread, being also formed up one side with a slotted guide, which is twisted toward the point, and extends below the eye of the needle, to receive through it the embroidering thread or cord, which, without the aid of any special mechanism, and by the reciprocating action of the needle, in combination with the feeding-movement of the fabric, is laid in a series of loops on the surface of the fabric, each stitch of the ordinary needle-thread being made to secure two loops of the embroidering-thread that does not pass through the fabric, but is merely laid on the surface of it, and retained in place by the stitches of the sewing-thread, with or without a locking-thread. The improvement, generally, consists in a peculiar and preferably adjustable tension attachment for the embroidering-thread, in combination with certain eyes or guides for said thread in the presser-foot, for operation with the needle-bar of the needle hereinbefore referred to, whereby the laying of the embroidering-thread on the fabric in proper re-

lation with the sewing-thread is insured, and either a close or open embroidering-stitch, as required, may be produced.

A represents the presser-foot, B the needle-bar, and C a Rose's embroidering-needle of the description previously mentioned. D represents the cloth-bed, and *b* a piece of fabric under operation.

The sewing-thread *c* is passed as usual through the eye *d* of the needle, and the embroidering cord or thread *ee'* through the twisted portion of the slot in the needle below the eye of the latter as follows, namely: First down and through a spring, E, at *f*, and between the open end of said spring and the bent limb of a tension-arm or lever, G, carrying the spring. From thence said embroidering-thread passes through an eye, *g*, in the bent limb of the tension-lever and behind the needle C and directly under the needle-bar B to and through a back eye, *h*, in the presser-foot from the front of the latter, and back again from behind the latter to and through, from the rear, an eye, *i*, on the back side of the needle-slot *k* at the forward end of the presser-foot, and from thence through the lower twisted portion of the needle, and so on to the upper surface of the fabric beneath the presser-foot. The tension-lever G is pivoted in its rear, at *l*, to the presser-foot, and preferably made adjustable up or down from said pivot as a center of motion, for a purpose that will be hereinafter explained. By this disposition of the embroidering-thread and mode of carrying it, subject to tension by the lever G and its spring E, the needle-bar B, in its descent, presses down on the line or portion *e'* of said thread, and draws on the spool while the needle is in the fabric to give the necessary feed or supply for each succeeding stitch, and insures the proper laying of the embroidering-thread on the fabric for its retention by the sewing-thread *c*. By raising the forward end of the lever G the needle-bar will take an earlier and longer hold on the portion *e'* of the embroidering-thread to make a more open embroidering-stitch; and by lowering the front end of said lever a reverse effect is produced, and a tighter or closer embroidering-stitch will be made. When no such ad-

justing, however, is required, then the tension arm or lever G may be an immovable attachment to the presser-foot.

What is here claimed, and desired to be secured by Letters Patent, is—

1. The tension arm or lever G and its spring E, having a forward eye or guide, *g*, in combination with the presser-foot A, carrying said arm, and provided with eyes *h i*, for operation, in relation with the needle-bar B and with

the embroidering-needle C, essentially as described.

2. The adjustable tension arm or lever G, combined with the presser-foot, so that it may be raised or lowered to make an open or tight stitch, substantially as specified.

Witnesses:

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