

(No Model.)

L. ABELES.

THREAD GUIDE FOR EMBROIDERING MACHINES.

No. 539,929.

Patented May 28, 1895.

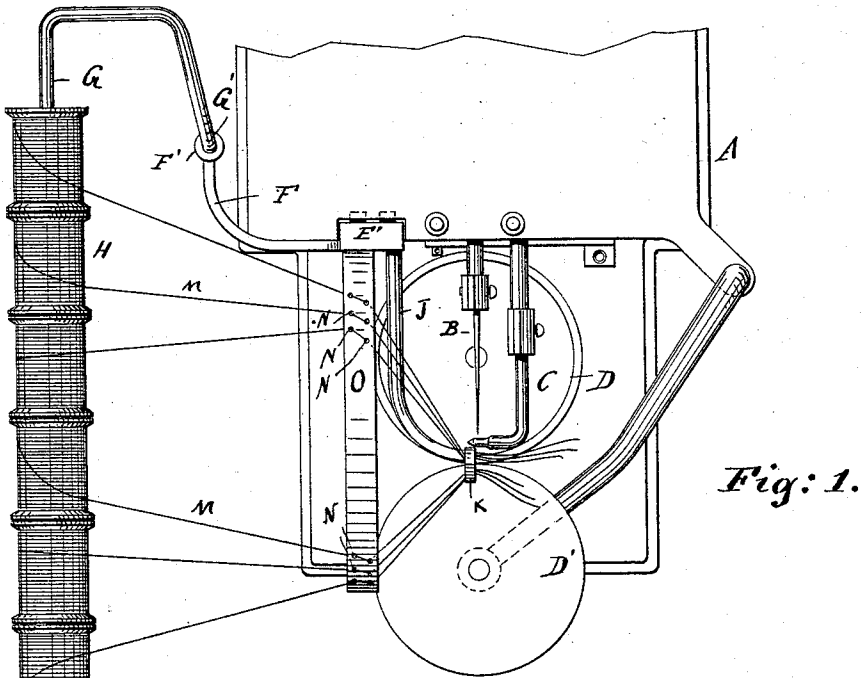


Fig: 1.

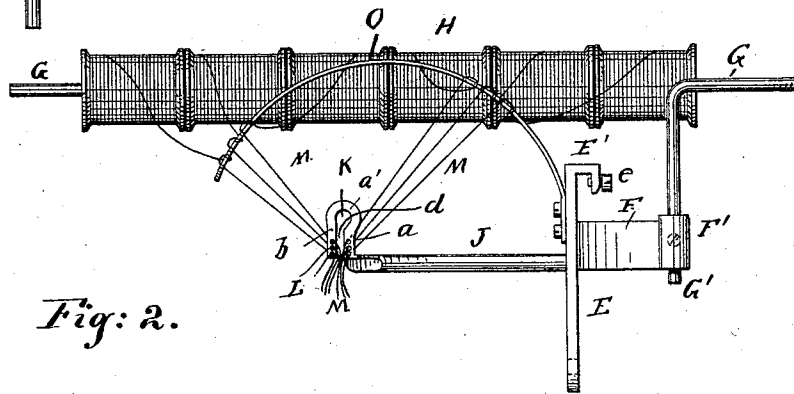


Fig: 2.

Witnesses
D. P. Palmer.
John C. Metzger

L. Abeles. Inventor
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UNITED STATES PATENT OFFICE.

LEON ABELES, OF RUTHERFORD, NEW JERSEY.

THREAD-GUIDE FOR EMBROIDERING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 539,929, dated May 28, 1895.

Application filed March 22, 1895. Serial No. 542,792. (No model.)

To all whom it may concern:

Be it known that I, LEON ABELES, a citizen of the United States, and a resident of Rutherford, in the county of Bergen and State of New Jersey, have invented certain new and useful Improvements in Thread-Guides for Embroidering-Machines, of which the following is a specification.

This invention relates to improvements in thread guides for embroidering machines and especially to machines of that kind that are used for embroidering the edges, either plain or scalloped, of fabrics.

The object of my invention is to provide a new and improved thread guide which is so constructed as to guide the filling threads uniformly upon the edge to be embroidered and to give ample room for turning and inclining the fabric so as to present the edge to the greatest advantage to the needle.

The invention consists in the construction and combination of parts and details as will be fully described and set forth hereinafter and finally pointed out in the claims.

In the accompanying drawings, forming a part of this specification, and in which like letters of reference indicate like parts in both views, Figure 1 is a plan view of an embroidering-machine provided with my improved thread-guide. Fig. 2 is a side view, on an enlarged scale, of my improved thread-guide.

Letters Patent of the United States No. 516,155 were issued to me on the 6th day of March, 1894, for a new and improved embroidering machine, invented by Jacob Fischel, and my improved thread guide is to be used on a machine of the kind shown in said patent.

The casing A, contains the mechanism for operating the reciprocating needle B and the rocking and swinging looper C, which however, do not constitute any part of my invention and are old and well known, as are also the presser and feed wheels D and D' of which the outer one can be moved outward to permit of inserting the edge of the fabric to be embroidered.

A plate or flat bar E is provided at its upper end with a hook E' for embracing the upper edge of the front wall of the casing A on which front wall said plate E is held by screws *e e*. A curved arm F of said plate E extends to the rear and is provided with a socket F'

in which the pivot G' formed on the inner end of the spool supporting rod G can turn, which spool supporting rod is approximately U-shaped with a long arm and a short arm, the spools H being mounted loosely on the long arm as shown. With this construction the spool supporting arm can readily be swung out of the way when the needle B, looper C or other parts are to be adjusted and can readily be swung in position for operation as shown.

An arm J projects horizontally from the front of the plate E and has its outer end bent laterally as shown, so as to be about above the point of contact of the two presser and feed wheels D and D'. At the outer end of said arm an upright U-shaped loop K is formed which is parallel with the vertical plane passing through the casing from front to rear, the inner shank *a* of said loop having an outward bend *a'* at the top as shown. Each shank *b* and *a* of said U-shaped loop is provided with three apertures L one above the other through which the filler threads M pass as shown, so that an equal number of threads is at each side of the slit *d* between the shanks *a* and *b* of the loop K. A curved flat arm O projects from the front of the plate E above and to one side of the arm J and is provided at each side of the center with three groups of two apertures N, each.

The thread M pass from the spools H to the under side of the arm O up through the outer apertures N, then over part of the upper surface of the arm O, then down through the inner apertures N and to the shanks *a* and *b* of the loop K and through the apertures L in said shanks as shown. The edge of the fabric is passed into the slit *d* between the shanks *a* and *b*, the enlargement formed by the outward bend *a'* of the shank *a*, serving to receive part of the finished embroidered edge when the fabric is turned or held at an inclination to reach all parts of a scalloped edge.

By passing the filler threads M through the apertures in the curved arm O a uniform tension is given to all the threads M.

By my improved guide the threads are disposed uniformly on both faces of the fabric along the edge and these are then held in place by the thread in the needle B, producing a uniform bead along the edge of the fabric.

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

1. In an embroidering machine, the combination, with a looper, a reciprocating needle, and pressure feed wheels, of an arm extending to the point of contact of the presser wheels, which arm has an upright U-shaped loop, open at the bottom, formed at its outer end, said loop having a series of apertures in each shank, substantially as herein shown and described.

2. In an embroidering machine, the combination, with a looper, a reciprocating needle and a pair of presser feed wheels, of an arm extending to the point of contact of the pressure wheels, which arm has a vertical U-shaped loop formed at its end, open at bottom and having apertures in both shanks, one shank being bent outward at the top to form an enlargement of the slit between the shanks, substantially as herein shown and described.

3. In an embroidering machine, the combination, with a looper, a reciprocating needle and a pair of presser feed wheels, of an arm extending to the point of contact of the presser wheels, which arm has a vertical U-shaped loop formed at its free end, and an aperture

in both shanks of the loop, a curved arm above said arm provided with the loop, which curved arm has as many pairs of thread apertures as there are apertures in the shanks of said loop, substantially as herein shown and described.

4. In an embroidering machine, the combination, with a casing, a reciprocating needle, a looper and a pair of presser feed wheels, of a plate held on the front of the casing, an arm projecting from said plate and having a U-shaped loop formed on its end, which loop is provided with apertures in its shanks, a curved arm projecting from said plate and provided with apertures through which the threads pass to the apertures in the shanks of the loop, an additional arm on said plate provided with a socket and a spool holding rod having a pivot fitting in said socket, substantially as herein shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 21st day of March, 1895.

LEON ABELES.

Witnesses:

OSCAR F. GUNZ,
N. M. FLANNERY.