

JOSEPH W. DUFOUR'S
SEWING MACHINE GUIDE

112327

PATENTED MAR 7 1871

FIG 1

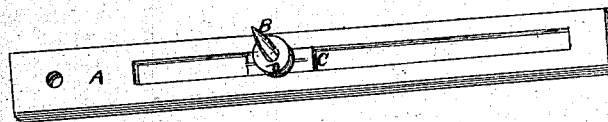


FIG 2.

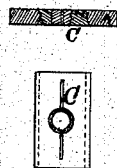


FIG 3



Henry P. Melvin
A. C. Knapp

WITNESSES

INVENTOR

Joseph W. Dufour

United States Patent Office.

JOSEPH WILLIAM DUFOUR, OF STRATFORD, CONNECTICUT.

Letters Patent No. 112,327, dated March 7, 1871.

IMPROVEMENT IN SEWING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

I, JOSEPH WILLIAM DUFOUR, of Stratford, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Sewing-Machine Guides, of which the following is a specification.

This invention relates to a guide having an adjustable pin and a friction-roller thereon to provide a center, around which the material revolves as it is stitched, giving a complete circle of stitching on any part thereof.

It is more especially designed for stitching around eyelets of carriage-boots, curtains, and general carriage-trimming work.

In the accompanying drawing—

Figure 1 is a perspective view of guide.

Figure 2 is a detail of friction-roll.

Figure 3 is a detail of nut and needle-plate.

A represents the needle-plate.

B, the guide-pin.

C, the adjustable nut.

D, friction-roll.

The needle-plate is constructed of steel or brass, with the usual opening for needle to pass through.

The slot 1 in needle-plate is beveled on its sides to retain the nut laterally.

The nut C has the opening for pin B drilled tapering. In its sides it has a thread cut to match that on pin B.

The nut is cut from its center each way to allow of its expansion, by action of the tapered pin against the sides of slot in needle-plate, to retain both in a desired position.

The pin B is provided with the tapered screw fitted to match nut, and is enlarged above the screw, forming a shoulder at *a*. This enlargement keeps a regular size through the friction-wheel, and then tapers to a point.

The friction-wheel is manufactured either of glass or metal. Its periphery is concave, to keep the cloth from slipping over or above the roll.

The operation of this invention is as follows:

If it is desired to stitch around the eyelet of a curtain an opening the size of the guide-pin is made, the material placed on the table of sewing-machine, the pin B through the opening, the foot is let down, pressing the material onto the feeding mechanism, and by its action the material is carried around the pin, thus giving a stitched circle around the opening without any attention from the operator.

By using the friction-roll C on the guide-pin an anti-friction guide is produced, by which any desired seam, either straight or irregular, can be sewn.

The advantages I claim for my invention are, that by using the guide-pin B to retain the material at a central point a regular circle is stitched without guiding by the operator or other preparation other than providing an opening for the pin.

The friction-roll relieves most or quite all the friction by its working on the pin as an axle, rolling with the work, instead of the material having to drag against a stationary surface or guide, the usual way, and a method attended with considerable friction while stitching leather, so much so that oil has to be often used to overcome it.

Again, the roll will admit of stitching irregular-edged work, keeping the stitch an even distance from the edge, while the direction of work is easily controlled by the operator.

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

The combination, with the slotted plate A, of the adjustable nut C, guide-pin B, and friction-roller D, substantially as described.

In testimony whereof I have signed my name to this specification before two subscribing witnesses.

JOSEPH WM. DUFOUR.

Witnesses:

HENRY S. STERLING,
A. SKAATS.