

No. 630,474.

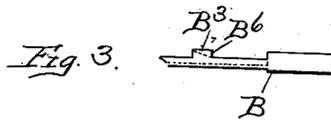
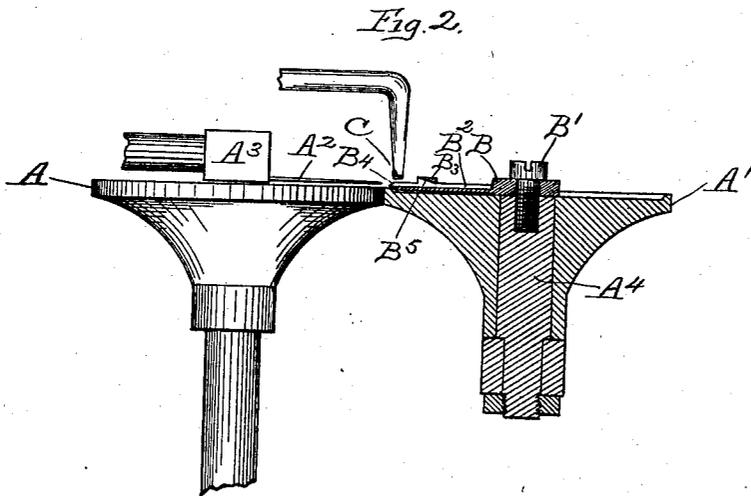
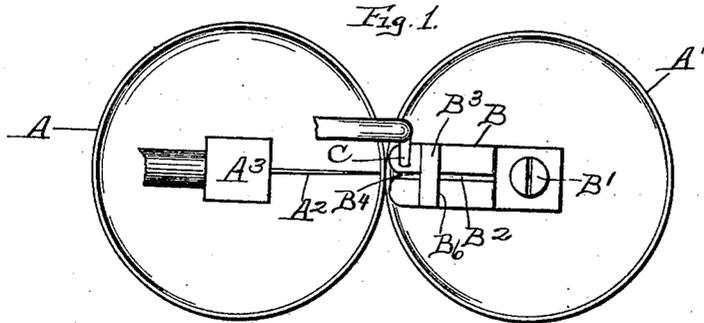
Patented Aug. 8, 1899.

C. O. WAGNER.

NEEDLE GUIDE FOR GLOVE SEWING MACHINES.

(Application filed Jan. 5, 1899.)

(No Model.)



Witnesses:

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UNITED STATES PATENT OFFICE.

CHARLES OTTO WAGNER, OF TROY, NEW YORK.

NEEDLE-GUIDE FOR GLOVE-SEWING MACHINES.

SPECIFICATION forming part of Letters Patent No. 630,474, dated August 8, 1899.

Application filed January 5, 1899. Serial No. 701,238. (No model.)

To all whom it may concern:

Be it known that I, CHARLES OTTO WAGNER, a subject of the Emperor of Germany, residing at Troy, county of Rensselaer, and State of New York, have invented certain new and useful Improvements in Needle-Guides for Glove and Fur Sewing Machines, of which the following is a specification.

The invention relates to such improvements; and it consists of the novel construction and combination of parts hereinafter described and subsequently claimed.

Reference may be had to the accompanying drawings, and the letters of reference marked thereon, which form a part of this specification.

Similar letters refer to similar parts in the several figures.

Figure 1 of the drawings is a top plan view of the feed-disks of a fur and glove sewing machine, showing my improved needle-guide attached to one of the disk-supports. Fig. 2 is a view of the same parts, partly in side elevation and partly in central vertical section. Fig. 3 is an edge view of my improved needle-guide detached.

My improved needle-guide is adapted for use in glove and fur sewing machines such as shown in United States Patents Nos. 288,949 and 562,109.

The objects of my invention are to prevent injury by breakage or bending to the needle and to provide a needle-adjusting guide.

The invention consists of a metallic bar adapted to be secured to a support and provided with a longitudinal guide-channel for the needle and an undercut bridge over the channel to guide and retain the needle in its channel and also to form a guide for properly adjusting the needle in its carrier.

It is well known to those acquainted with the art that the unequal resistances of different parts of the same piece of leather, either with or without the fur coating, tend to deflect a sewing-machine needle and very frequently raise the needle from the channel of the needle-guide into the path of the transversely-moving looper, so that the looper engages and bends or breaks the needle. I have ascertained that the breakage or bending of the needle can be wholly avoided by providing the guide with an undercut bridge over

the needle-channel a short distance from its mouth, which prevents the needle from being deflected upward out of its channel and into the path of the looper.

Referring to the drawings, A and A' are the two disks which feed the fur or other material to be sewed past the horizontally-reciprocating needle A², supported by the reciprocating carrier A³.

B is the needle-guide, which is secured by the screw B' to the vertical spindle A⁴, which supports the disk A', rotary thereon.

C is the looper, which is adapted to be reciprocated transversely of the guide and needle.

The operating parts are not shown, as these parts and their movements are well known and described in said Patents Nos. 288,949 and 562,109.

As heretofore constructed the needle-guide has been provided with a needle-channel like the needle-channel B², open on its upper side throughout its entire length. My improved guide has a bridge-piece B³, which spans the needle-channel a short distance from its mouth B⁴. The bridge is preferably undercut or beveled on its lower side to form the inclined surface B⁵, extending from its front to its rear edge. Should the needle be deflected upward as it passes through the material, it will strike the inclined surface and be forced down again into its channel out of the path of the looper before the looper passes over the needle, wherein it is forcibly retained until the looper has passed over it. The rear edge B⁶ of the bridge serves also as a guide for properly adjusting the needle in its carrier, being so located that the eye of the needle will just come into view on the rear side of the bridge when properly adjusted and the needle-carrier is moved to the limit of its forward thrust.

It is obvious that the bridge may be made integral with the needle-guide bar, as shown, or it may be a separate piece secured to the bar in any known manner.

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

1. A needle-guide for sewing-machines, comprising a bar provided with a needle-channel, and means for securing the bar to a support, and having a bridge across the channel a short distance from its mouth whereby

the needle-channel is wholly bridged over, substantially as described.

2. In a needle-guide, the combination with a bar provided with a needle-channel and means for securing the bar to a support, of a guide-bridge crossing the channel a short distance from its mouth, and having its under surface inclined upwardly and toward the mouth of the channel, substantially as described.

3. A needle-guide for fur-sewing machines comprising a bar provided with a needle-channel and means for securing the bar to a support, and having a bridge across the channel

with its front edge a short distance from the mouth of the channel, and its rear edge at a distance from the channel-mouth equal to the desired limit of inward thrust of the needle-eye, whereby the rear edge of the bridge serves as a guide for properly adjusting a needle in its carrier, substantially as described.

In testimony whereof I have hereunto set my hand this 3d day of January, 1899.

CHARLES OTTO WAGNER.

Witnesses:

GEO. A. MOSHER,
FRANK C. CURTIS.