

G. M. PETERS.
Sewing-Machine Guide

No. 205,675.

Patented July 2, 1878.

FIG. 1.

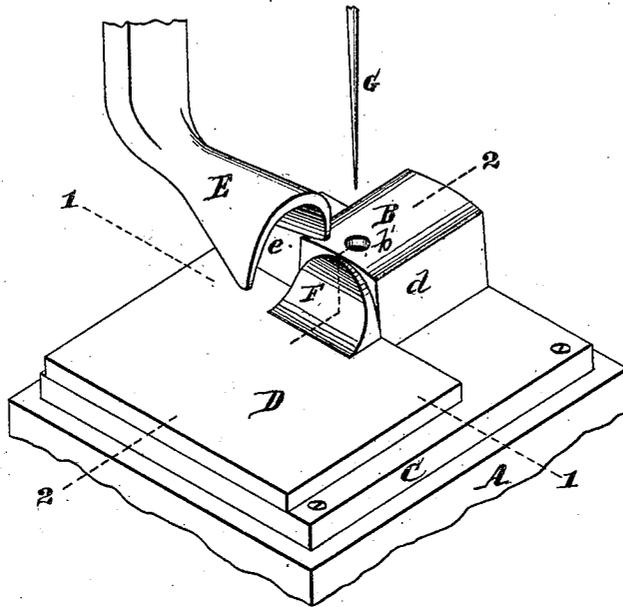


FIG. 2.

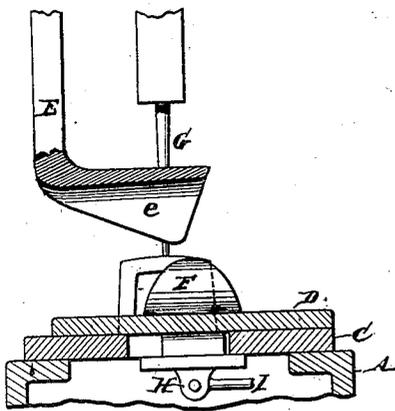


FIG. 3.

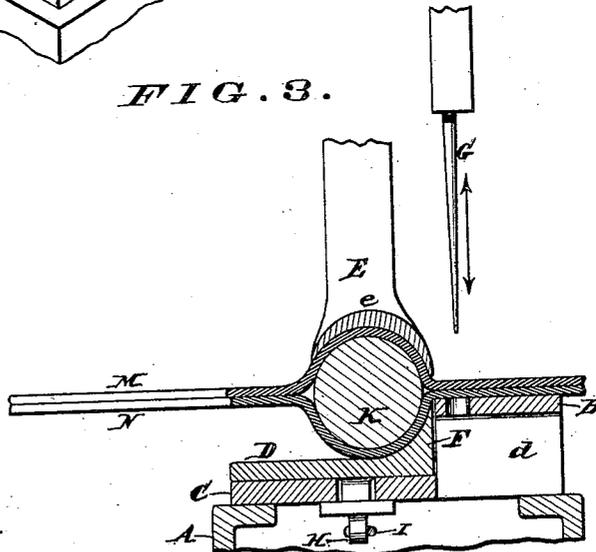
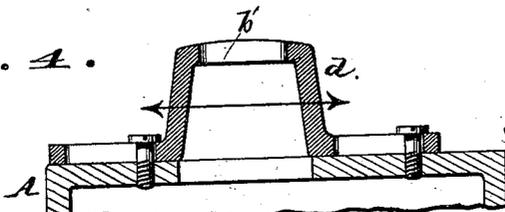


FIG. 4.



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UNITED STATES PATENT OFFICE.

GEORGE M. PETERS, OF COLUMBUS, OHIO.

IMPROVEMENT IN SEWING-MACHINE GUIDES.

Specification forming part of Letters Patent No. 205,675, dated July 2, 1878; application filed August 19, 1875.

To all whom it may concern:

Be it known that I, GEORGE M. PETERS, a resident of the city of Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Attachments for Sewing-Machines, of which the following is a specification:

The object of my invention is to employ the sewing-machine in sewing materials on one or more sides of a cylindrical body. To accomplish this object it is necessary that the material while being sewed should be pressed close up to the cylindrical body at that point where the seam is to be made; and, further, that the material should be held in that position while the seam is being stitched. This object my invention accomplishes, and enables the operator of the sewing-machine to make such a seam in a workmanlike manner, and also to sew such seams far more expeditiously than they can be done by the method now in use—viz., the method of sewing by hand.

My invention consists, in general, of a raised needle-plate and a presser-foot, the under surface of the latter being adapted to cover a greater or smaller part of the upper surface of the cylindrical body around which the material to be sewed is fastened.

In the accompanying drawings, Figure 1 is a perspective view of the upper part of a sewing-machine turret provided with my improvements, the feed-plate being shown shifted to the left. Fig. 2 represents a vertical section of the turret at the line 1 1, the feed-plate being retracted to the right. Fig. 3 represents a vertical section on the line 2 2, the machine being shown in the act of stitching two leather covers around a frame; and Fig. 4 represents a modification of my improvements, in which the raised needle-plate is adapted to have a horizontally-reciprocating movement imparted to it, as indicated by the double-headed arrow.

The upper part A of a sewing-machine turret supports a stationary plate, C. At the right-hand side of the turret, Fig. 1, a raised needle-plate, B, is seen, provided with a hole for the needle G. A feed-plate, D, rests upon the left-hand portion, Fig. 1, of the plate C,

and the right-hand edge of the feed-plate rests against the left-hand edge of the needle-plate support *d*.

The devices shown in the drawings are especially adapted to the stitching of material around a true cylinder. For this reason the concave *e* on the under side of the presser-foot E is made in the arc of a true circle to embrace closely the upper portion of the cylinder formed by the material being pressed upward by the rod K or the body, which forms the interior cylinder or bar. For the same reason a lip, F, is attached to the top of the feed-plate D at the right-hand edge of the latter. This lip or guide is curved, so as to receive accurately a portion of the periphery of the cylinder formed by the material when pressed around the rod K or the like.

The feed-plate D is operated in any of the usual ways and by any of the usual devices. In the present instance a horizontal reciprocating movement is imparted to the feed-plate by a connecting-rod, I, pivoted to a lug, H, attached to the feed-plate, the said connecting-rod being operated by mechanism from the driving-shaft of the sewing-machine.

The mode in which my machine operates is as follows: The rod K, around which the material is to be fastened, is covered with the material. One thickness, M, is laid above, and the other, N, below, the rod, and the rod and material introduced upon the feed-plate D, (see Fig. 3,) the parts where the seam is to be stitched being placed directly beneath the needle G. The presser-foot E being let down upon the material, it presses the upper thickness M of the material closely against the lower thickness N of the material, the lower thickness being at the same time held and pressed up by the lip F, which also affords a guide for the covered rod K to rest against while it and the material are passing under the needle.

The feed-plate, in the present instance, operates as follows, viz: While the needle is passing through the material to be stitched the feed-plate is retracted, and when the needle rises out of the material the feed pushes the article to be sewed along far enough for the needle, in descending, to make a new stitch of the requisite length. This process of feeding is

continued till all of the material to be sewed has passed under the needle.

In the present drawing the article shown is such that the material to be sewed must be sewed together on both sides of the rod K.

A modification of the device shown in Figs. 1, 2, and 3 is exhibited in Fig. 4. This modification consists in the feed-plate and the raised needle-plate being attached immovably together, or in the raised needle-plate being adapted to have a horizontally-reciprocating motion imparted to it for the purpose of feeding the material to be sewed to the needle. Such modification may be preferred on account of the simplicity of its construction, as the feed-plate and the needle-plate can in such case be made in one and the same piece of metal. Where such modification is employed the hole for the needle is elongated, (the side of the slot *b'* is seen in Fig. 4;) otherwise the needle, when down and through the goods, would prevent any horizontal movement of the needle-plate.

Of course, my device is equally applicable where the material to be sewed is passed entirely around the rod or thing to be covered, and is then to be stitched together on one side only of the rod. This device is also equally applicable where there are two thicknesses of material.

I would at this stage of the description remark that the shape of the concavity *e* of the pressure-foot is to be varied to conform to the shape of the article over which the material is to be sewed. The same is true of the shape of the lip F. Indeed, the lip can frequently be dispensed with. The height of that side of the presser-foot which is next to the raised needle-plate is to be varied as it is desired to make the seam higher upon the thing to be covered or lower down thereon.

My invention is especially applicable in sewing the leather cover on the frame-rods of the dashes of vehicles, fenders, and also on the

filling of whip-handles, &c., or the round part of a harness or any similar work.

The principle of my invention consists in the pressing up or elevation of the leather or other material to be sewed from beneath as far as desired by raising the needle-plate or needle-plate and feed, and by pressing the leather or other material to be sewed down from above as far as desired by using a foot shaped to accomplish the latter purpose.

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

1. The raised needle-plate B, in combination with a presser-foot the bottom of which is shaped to hold the material closely down upon and partially around the body to be covered and down upon that portion of material on the needle-plate, substantially as and for the purpose set forth.

2. The combination of presser-foot E, needle-plate B, elevated above the level of the feed-plate, and lip F, substantially as and for the purposes set forth.

3. The combination of presser-foot E, needle-plate B, elevated above the level of the feed-plate, feed-plate D, and lip F, substantially as and for the purposes set forth.

4. The combination, substantially as specified, of a raised needle-plate, presser-foot, and feed-plate, moving above the table in a plane below that of the needle-plate, and formed to give lateral support to the article undergoing the operation of sewing.

5. The combination, substantially as specified, of a raised needle-plate and a feed-plate moving above the table in a plane below that of the needle-plate, and formed to give lateral support to the article undergoing the operation of sewing.

GEORGE M. PETERS.

Attest:

OSCAR G. PETERS,
SPALDING CUTLER.