

(No Model.)

G. SIMPSON.

WHIPPING GUIDE FOR SEWING MACHINES.

No. 291,100.

Patented Jan. 1, 1884.

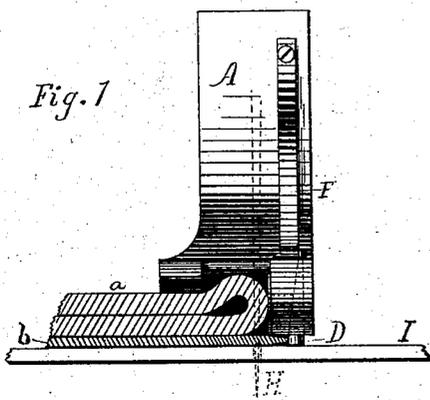


Fig. 2

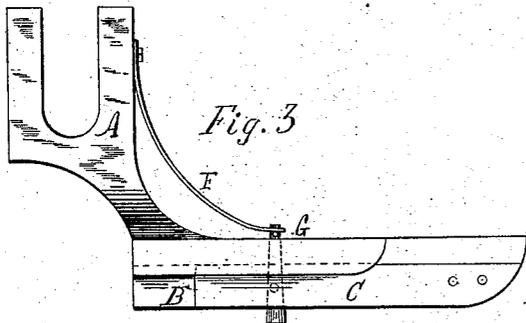
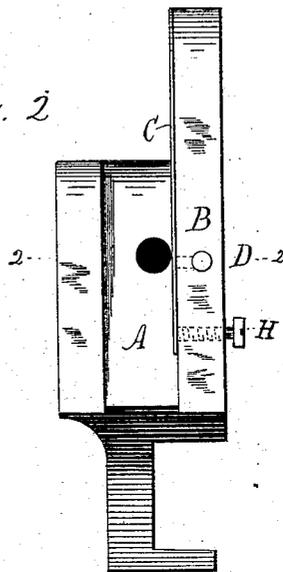


Fig. 4

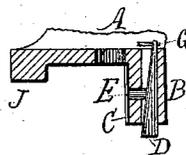
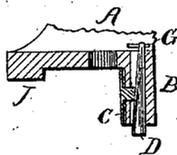


Fig. 5



WITNESSES:

W. P. Robertson  
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INVENTOR

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# UNITED STATES PATENT OFFICE.

GEORGE SIMPSON, OF MORAVIA, NEW YORK, ASSIGNOR OF ONE-HALF TO  
STEPHEN M. TITUS, OF SAME PLACE.

## WHIPPING-GUIDE FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 291,100, dated January 1, 1884.

Application filed June 14, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE SIMPSON, a citizen of the United States of America, residing at Moravia, in the county of Cayuga and State of New York, have invented certain new and useful Improvements in Whipping-Guides for Sewing-Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to that class of sewing-machine guides more particularly adapted to sew or "whip" the linings to boot and shoe uppers; and the invention consists in the peculiar construction, arrangement, and combination of parts, hereinafter more particularly described and claimed.

In the accompanying drawings, Figure 1 shows an end elevation of the foot of a sewing-machine provided with my improvement, and showing the material in position to be "whipped;" Fig. 2, an inverted plan of the foot; Fig. 3, a side elevation; Fig. 4, a section through the line 2 2, Fig. 2; and Fig. 5 is a similar section, showing a modification.

All of the above views are much enlarged, the better to show the details of construction.

A represents a foot of a sewing-machine, provided with any convenient mode of attachment to the pressure-bar, having a rib, B, formed on the under side, to the side of which rib is secured, in any convenient manner, the spring-guide C. Through the rib a tapering or wedge-shaped pin, D, is passed, the inclined side of which bears against one end of a plug, E, whose opposite end bears against the side of the spring-guide C. To the upper part of the foot is fastened a spring, F, whose lower end forces down the pin D. This spring, it is obvious, may be of any convenient form, and be connected to the pin in any suitable manner; but I show it as bearing upon the top of a pin, G, which is passed through the top of pin D.

The operation is as follows: The material to be lined—such as the upper of a shoe, *a*—is doubled along the line to which the lining is to be attached, the lining *b* is placed in its proper position, and the two placed under the foot, as shown in Fig. 1. The machine is then put in operation, and as the upper is fed through the machine the needle H pierces the leather, as shown, whereby the lining is sewed to the

upper in a manner which is well understood, and it is therefore unnecessary to describe it. If the uppers were of exactly uniform substance, there would be no necessity for any adjustment of the guide after it was first adjusted to the material it is designed to sew; but, owing to the various thickness and flexibility of such material, it is necessary that there should be an automatic adjustment for the majority of the work. The automatic adjustment in the form here shown is caused by the tapering pin D, the operation of which is as follows: The pin D, it will be perceived, rests on the cloth-plate I of the machine, and as the foot rises and falls with the varying thicknesses of the material, more or less of the pin passes into the hole in the foot, and the farther the pin D passes into the foot the farther the guide C is pushed away from the rib B; hence the thinner the material and the more the foot descends the farther the guide C is pushed away from the rib B and the nearer the outside of the folded edge of the upper the needle passes through. From this it will be seen that a perfect automatic adjustment of the guide is obtained without any lateral movement of the foot itself, which is a great advantage, for if the adjustment requires any other than a vertical movement of the foot and the presser-bar a peculiar arrangement of the presser-bar is necessary; and hence in most machines the arrangement of the presser-bar would have to be entirely changed, whereas with my improvement all that is necessary to do in most machines is to remove the foot and replace it with another one having my improvement attached. As a means of assisting the guiding of the material, I prefer to form another rib, J, on the bottom of the presser-foot, so as to leave a hollow for the fold of the material to rest in, but do not limit myself to the use of this, nor to the exact construction of any of the parts shown or described, as I am aware that they may be varied without departing essentially from the spirit of my invention.

I sometimes dispense with the automatic adjustment shown and described above by inserting a screw, as shown in Fig. 2, by which the position of the guide can be adjusted by hand. This device will be found useful where a large number of uppers have to be whipped which are of substantially uniform thickness; but

where the materials vary in thickness, as they mostly do, the automatic adjustment will be found much preferable.

5 It is obvious that the plug E may be dispensed with by forming a projection on the side of the spring-guide against which the pin D will act, as shown in Fig. 5.

What I claim as new is—

10 1. The combination, with the presser-foot of a sewing-machine, of a whipping-guide and means whereby said guide is adapted to be automatically adjusted laterally under the presser-foot as the latter rises or falls, substantially as described.

15 2. The combination, with the presser-foot and bed-plate of a sewing-machine and the

guide C, of the adjusting-pin D and intermediate means constructed and arranged to move the guide toward the needle as the foot descends, substantially as described. 20

3. The combination, with the presser-foot and bed-plate of a sewing-machine, of the spring-guide C, the tapering pin D, plug E, and spring F, substantially as and for the purpose specified. 25

In testimony whereof I affix my signature, in presence of two witnesses, this 13th day of June, 1883.

GEO. SIMPSON.

Witnesses:

T. J. W. ROBERTSON,

F. O. McCLEARY.