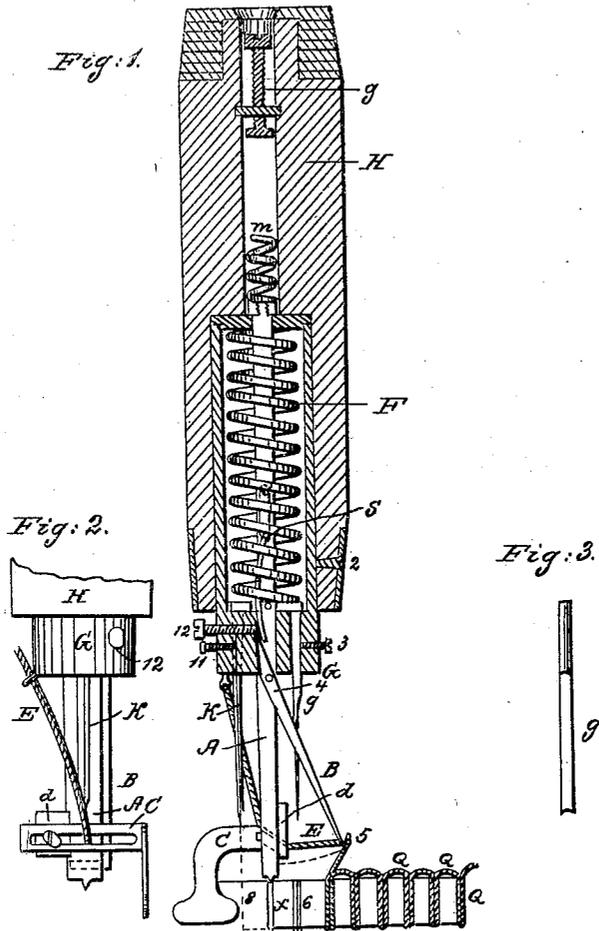


F. H. BROWN.

Sewing Machine for Soling Boots and Shoes.

No. 63,607.

Patented April 9, 1867.



Witnesses:

Geo. L. Chapin.
A. Hayward

Inventor:

Franklin H. Brown

UNITED STATES PATENT OFFICE.

FRANKLIN H. BROWN, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN SEWING-MACHINES FOR SOLING BOOTS AND SHOES.

Specification forming part of Letters Patent No. 63,607, dated April 9, 1867.

To all whom it may concern :

Be it known that I, FRANKLIN H. BROWN, of Chicago, in the county of Cook and State of Illinois, have invented an Improved Sewing Machine for Fastening on the Soles of Boots and Shoes; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and letters of reference marked thereon, making a part of this specification, in which—

Figure I is a sectional elevation of my machine. Fig. II is an elevation of the lower part of the machine, taken transversely to Fig. I. Fig. III is an elevation of the flat side of the punch.

The nature of my invention consists in a device for fastening on the soles of boots and shoes by putting the thread through the leather, after a hole has been made by a common awl, by means of a punch, so arranged as to catch the thread at a point directly over the hole, and force the thread, in a loop, through far enough to hold the layers of leather permanently together; and in the use of a hooked lever for paying out the thread to correspond with the length and depth of the stitch to be made; and in so arranging these devices, by means of suitable mechanical appliances, that the punch will force the thread through one hole while the awl is making another.

This invention is designed more especially for sewing where only one surface of the leather is accessible; but it may be used for stitching or sewing leather when only one side of the same is to have a finish.

I claim that by the use of my machine the difficulty heretofore experienced in sewing the outer thick sole to the inner sole is removed, and that the manufacture of boots and shoes is greatly facilitated thereby.

To enable others skilled in the art to make and use my invention, I will describe the method of construction and operation.

H represents the handle, in which is made a chamber for receiving the spring F, which forces the punch out of the leather after the stitch has been put through. A shows the metallic bar passing through the head of the cylinder G and spring F. This bar rests on

the leather and supports the guide C. *g* represents the punch, the lower part of which is made flat and thin, so as to occupy as little space as possible when putting in the thread. The upper end of the punch passes into the head of the cylinder G, and is held in place by means of the screw *s*. B is the hooked lever secured to the bar A by means of the pin 4.

The lower end of the lever is thrown out by means of the spring S, and the cylinder-head G in descending forces it back at the proper time for the punch *g* to carry the thread through the hole made by the awl K.

The lever B and punch *g* should be made of cast-steel. The other parts can be made of any kind of metal desired.

The machine represented in the drawings is intended to be worked by hand; but when power is applied, the handle and some other unimportant parts may be dispensed with without changing the nature of the device.

The operation of my invention is as follows: Fig. I represents the machine in position for use, resting upon the leather X, the guide C passing over the edge of the sole. E represents the thread passing through the slot in the upper part of the guide and over the hook 5. 6 shows the hole in the leather, in which the loop of thread is to be put. Force must be applied to the top of the handle H, which will cause the lever B to move back toward the bar A, and pass the thread under the thread-punch *g*, at which time the lower end of the punch *g* will catch the thread and force it through the hole shown at 6, while the awl K will make a new hole on the line 8.

Q Q, Fig. IV, represent stitches put through the sole by means of the machine.

The screw 9 passing through the nut 10 can be made to regulate the length of stroke to suit the depth of hole to be made in the leather, and the screw 12 can be turned so as to regulate the extent of vibration of lever B, in order that the required length of thread may be paid out to make the stitch.

Having thus fully described my device, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination of the punch *g* with the lever B, when constructed and operating to

force the thread through the leather after being paid out by said lever, substantially as and for the purpose set forth.

2. The arrangement and combination of the lever B with the cylinder-head G, spring S, and punch *g*, the whole operating substantially as set forth.

3. The lever B, when applied and operated to pay out the thread, as set forth.

4. In combination with lever B, applied and operated as and for the purpose set forth, the screw 12 for adjusting its extent of vibration.

FRANKLIN H. BROWN.

Witnesses:

GEO. L. CHAPIN,
A. HAYWARD.