WILLIAM H. BUSH.

Machine for Dressing Boot and Shoe Heels.

No. 124,482. Patented March 12, 1872.

fig. 1

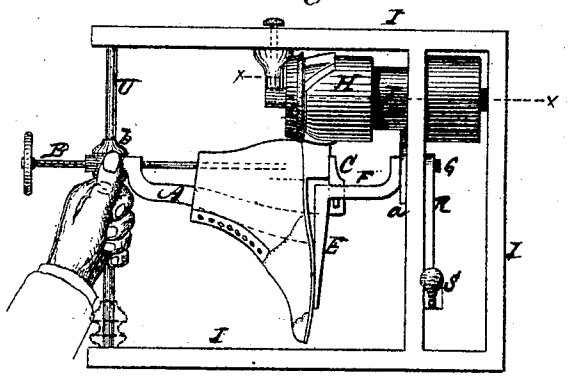


fig. 2

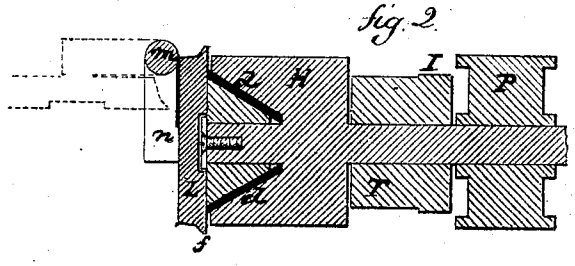
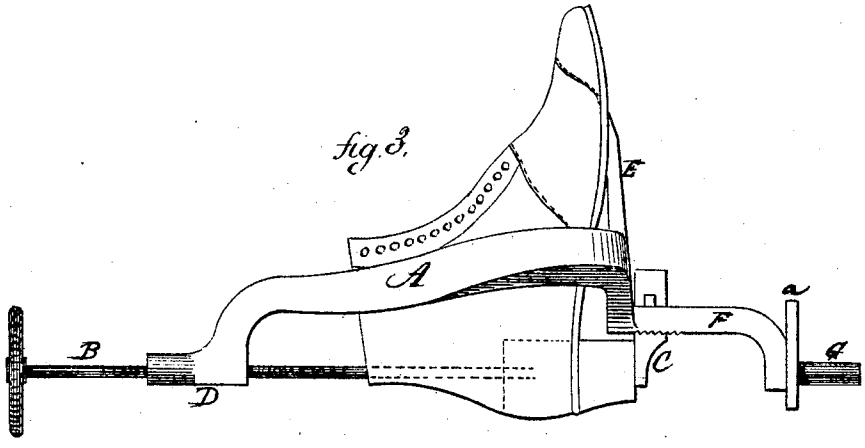


fig. 3.



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UNITED STATES PATENT OFFICE.

WILLIAM H. BUSH, OF NEW HAVEN, CONNECTICUT.

IMPROVEMENT IN MACHINES FOR DRESSING BOOT AND SHOE HEELS.

Specification forming part of Letters Patent No. 124,482, dated March 12, 1872.

To all whom it may concern:

Be it known that I, WILLIAM H. BUSH, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Machine for Dressing Boot-Heels; and I do hereby declare the following, when taken in connection with the accompanying drawing and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawing constitutes part of this specification, and represents, in—

Figure 1 a front view of the machine as in operation; Fig. 2, a transverse section on line *x x;* and in Fig. 3, the holding-clamp detached.

This invention relates to a machine for dressing or finishing the heels of boots and shoes, and chiefly in a device for holding the boot or shoe to be properly presented to the cutters, the object being to so construct the holding-device that it may be readily introduced or taken from the machine, whereby the operator may be aided in dressing the heel, by the employment of a second hand to adjust the boot in the clamp preparatory to the operation of dressing. The invention consists in a clamp of peculiar construction, as more fully hereinafter described, whereby the boot or shoe is firmly fixed and provided with a form to give the required shape to the heel, the said form working in connection with the cutter.

A is the clamp-bar, fitted at one end, D, to receive the set-screw B, and at the other with an adjustable step or jaw, C, upon which the heel of the boot rests, as in Fig. 3, the bar A being formed so as to extend over the boot to the end D, and an arm, E, projects forward in line with the step C, to adjust the sole of the boot. The boot set in position, the last or other device inside or outside the boot or shoe, upon the end of which the screw B bears, clamps the shoe firmly upon the step C and arm E. From the bar A an arm, F, extends, fitted with a bearing, G, and near the bearing G the form *a* is attached, the shape of this form corresponding to the shape of the heel to be produced. This completes the clamp. H is a cutter-head arranged upon a shaft in a suitable frame, I, and caused to revolve by the application of power thereto through the pulley P. Knives or cutters *d* are arranged in the cutter-head H, and outside the head, but in a line axially therewith, a rotating former, L, is arranged, having an edge, *f*, to run on the boot between the sole and upper, as denoted in Fig. 1, and as shown in Fig. 2. The bearing G of the clamp is inserted into a support, R, which is operated by a treadle or other device, S, so as to raise up the bearing G and bring the form *a* against a bearing, T, in such relative position to the cutter that the said form *a*, resting upon the bearing T, and turned thereon, will impart to the clamp a movement relatively to the cutter corresponding to the form *a*, which is the shape of the heel to be produced. On a post, U, or other device relatively to the cutter, I arrange a sliding head, *b*, upon which the end D of the clamp is set, and there held by the operator, as denoted in Fig. 1. The boot rests against the former L, which governs the position longitudinally, and also causes the heel to be presented to the cutter to dress the upper edge in conformity with the shape of the counter, the form *a* governing the shape of the bottom of the heel. Thus placed in the machine, the operator, holding the end D, as shown, takes hold of the boot with the other hand and turns it over, operating the slide *b*, so as to always keep the boot up to the former L, and the form *a* also kept up to place, the heel will be dressed into the form required. It will be understood that variations in the form of the heel at the counter will cause the sliding head *b* to rise or fall, as the case may be, which the operator must observe and allow.

In order to adjust the cutters, or readily remove them from the machine, I insert them from the end of the cutter-head, and therefore attach the former L to an arm, *n*, which is pivoted to the frame at *m*, so that it may be turned from before the cutter-head, as denoted in broken lines Fig. 2, to expose the head and allow the removal of the cutters.

By the employment of the clamp which I have described, the operator, having several of the clamps, and employing a second hand to apply the same to different boots, can keep himself constantly at work dressing the heels.

I claim as my invention—

1. The clamp for holding the boot or shoe, consisting of the bar A, with the threaded end D and screw B, the step C, the former *a*, and bearing G, constructed and arranged, to be applied to the counter, substantially in the manner described.

2. The former L, in combination with the cutter-head H, when constructed so as to be turned away from the cutter, substantially as specified.

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Witnesses:
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