(No Model.)

J. WELSH.

DEVICE FOR TRIMMING THE SOLES OF BOOTS OR SHOES.

No. 302,302. Patented July 22, 1884.

Fig. 1.

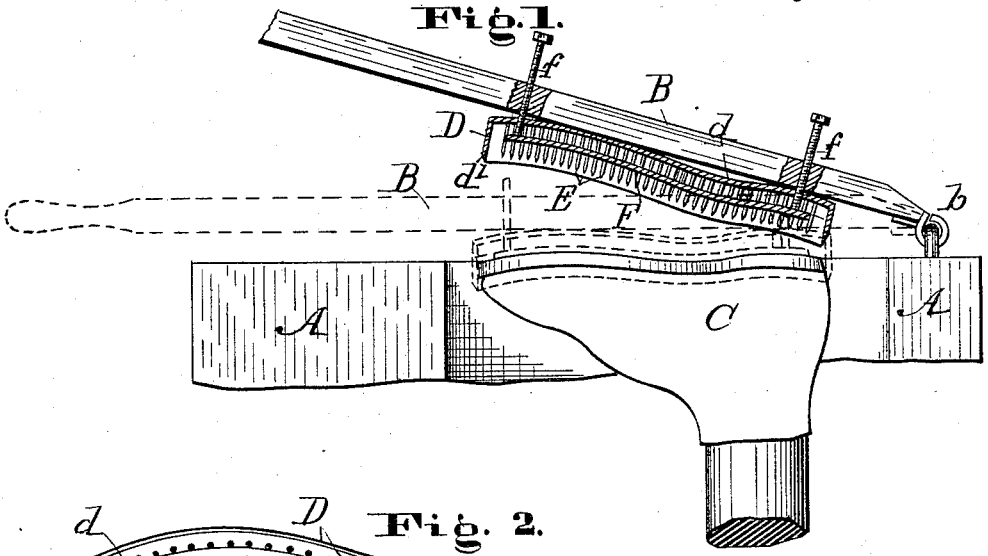


Fig. 2.

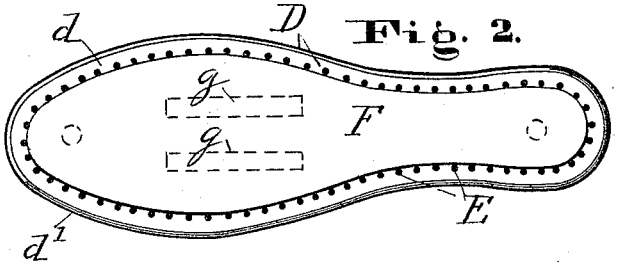


Fig. 3.

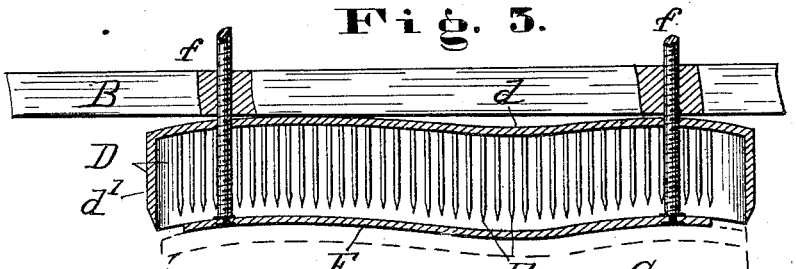


Fig. 4.

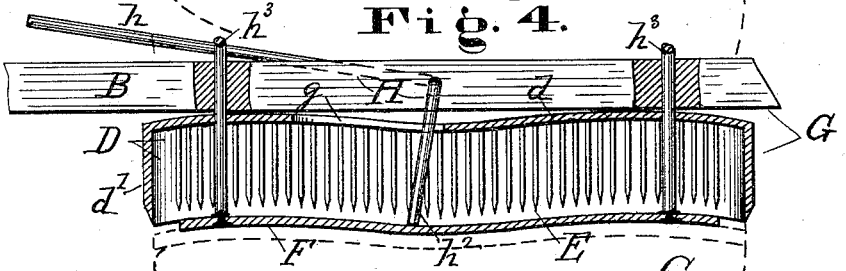
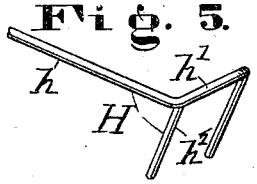


Fig. 5.



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UNITED STATES PATENT OFFICE.

JAMES WELSH, OF PLYMOUTH, PENNSYLVANIA.

DEVICE FOR TRIMMING THE SOLES OF BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 302,302, dated July 22, 1884.

Application filed May 29, 1884. (No model.)

To all whom it may concern:

Be it known that I, JAMES WELSH, a citizen of the United States, residing at Plymouth, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Press-Knives; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The invention relates to the art of making pegged boots or shoes; and its object is to construct a device by which the edges of the soles may be properly trimmed, and the awl-holes for the pegs be made at the same time and by one action of the said device.

The invention consists in attaching to the lower surface of a lever, hinged or pivoted by its rear end to the work-bench, a box-shaped knife the lower cutting-edge of which has the contour of a shoe-sole, the top plate of the box being fixed along its central longitudinal line to the lever. A number of peg-awl points depend from the under or inner surface of the top plate, and are arranged in such manner as to enter the sole in the usual way and form thereon the usual curved line of holes. The shoe or boot is sustained by a proper support sole upward, the latter resting on a plate which fits inside the line of awl-points, and is properly adjustable for the latter to enter the sole to any desired distance.

In the accompanying drawings, forming part of this specification, Figure 1 represents a side view of the invention, the cutter being in section. The dotted line shows the device brought down upon a boot, partly broken away to show a support. Fig. 2 is a reversed plan of the cutter with the retaining-plate in place. The dotted rectangular lines show slots in the top of the cutter used in a modification of the device. Fig. 3 is a longitudinal section of one modification of the attachments to the plate that disengages the boot. Fig. 4 is a similar view of the other modification of the same, and Fig. 5 is a perspective view of the lever used with the second modification.

In the accompanying drawings, A represents a proper work-bench, with the lever B hinged or pivoted thereto by its rear end, *b*.

C is a boot or shoe in suitable position to be operated on and resting on any proper support. The said support should be in the form of a tree with a proper inside plate to fit against the inner surface of the sole.

D is the box-shaped cutter, consisting of the top plate, *d*, fixed along its central longitudinal line to the under surface of the lever B, and the side plate, *d'*, depending from the edge of the former. The plate *d* and the lower edge of the side plate, *d'*, have contours similar to that of the sole of a boot or shoe, the said lower edge being properly beveled to form the cutting-edge of the device.

E E are pegging-awl points, depending from the inner surface of the plate *d*, and arranged in a line having a contour similar to that of a shoe-sole, which line is situated concentrically within the side plate, *d'*.

F is a plate fitting against the inner surface of the plate *d* and within the line of the awl-points. The plate F is actuated and made adjustable with reference to the plate *d* by the screws *f f*, the lower ends of which pivot to and turn in it near its front and rear ends. The said screws engage in vertical internally-threaded holes in the lever B', and pass through openings in the plate *d*. By means of the screws *f f* the plate F is set in position to allow the awl-points to enter the sole to a greater or less depth as the lever B and attached cutter descend. They also press the plate F and bar out when the support is removed, so as to disengage the boots from the awl-points and cutter.

G is a modification of the means of adjusting the position of and pressing out the boot. In this modification the top plate, *d*, of the cutter is provided with two longitudinal slots, *g g*, on each side of and at equal distance from its longitudinal axis.

H is a lever having the actuating-arm *h*, the transverse portion *h'*, which turns in a proper bearing in the lever above the plate *d*, and two arms, h^2 h^2, at right angles to the said transverse portion, each of which enters one of the slots *g* and bears on the upper surface of the plate F, so that when the arm *h* is depressed the latter is pressed out of the cutter by the

arms h^2 h^2, it being held in place and its motion directed by the vertically-sliding rods h^3 h^3, situated in similar positions to the screws f f, and having their lower ends fastened to the plate F, as shown. The rear end of the cutter is situated at some distance from the hinge or pivot b, to allow the rear edge of the heel of the boot to pass between them as the cutter descends.

The operation of my device is as follows: The boot, having its rough sole attached by tacks or nails in the usual manner, is placed on its proper support directly under the cutter, the plate F being adjusted by the screws f f (or in the modification G by the lever H) for the awl-points to enter the sole to the desired depth. The lever B and attached cutter are then depressed, the awl-points entering the sole to the required depth, and the cutting-edge trimming the edge of the same in the desired manner.

To disengage the boot, the plate F is driven out of the cutter by means of the screws f f or the lever H, as hereinbefore described.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a device for trimming boot or shoe soles, the combination, with the cutter D, composed of the top plate, d, and cutting side plate, d', the lower cutting-edge of which has a contour similar to that of a boot or shoe sole, of the actuating-lever B, carrying said cutter and pivoted to a proper fulcrum at b, in such manner as to swing the cutter and make it act on the sole of a boot or shoe held in position by any suitable support, substantially as specified.

2. In a device for trimming boot or shoe soles, the combination, with the cutter D, composed of top plate, d, and cutting side plate, d', and the pegging-awl points E E, depending from the plate d, and arranged concentrically within the plate d' on a line having a contour similar to that of a boot or shoe sole, of the actuating-lever B, carrying said cutter, and pivoted to a proper fulcrum at b, in such manner as to swing the cutter and make it act on the sole of a boot or shoe held in position by any suitable support, substantially as specified.

3. In a device for trimming boot or shoe soles, the combination, with the pegging-awl points E E and cutter D, composed of top plate, d, and cutting side plate, d', of the actuating-lever B, plate F, and screws f f, all constructed and arranged as shown and described, for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES WELSH.

Witnesses:

F. E. PRINGLE,

JOHN GOLIGHTLEY.