

J. R. MOFFITT.
 Apparatus for Shaping Counter-Stiffeners for
 Boots and Shoes.

No. 159,835.

Patented Feb. 16, 1875.

Fig. 1.

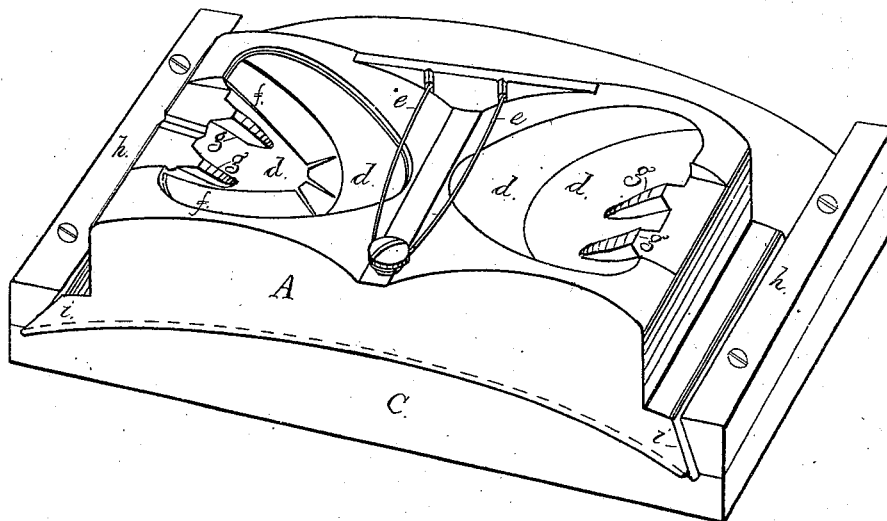


Fig. 2.

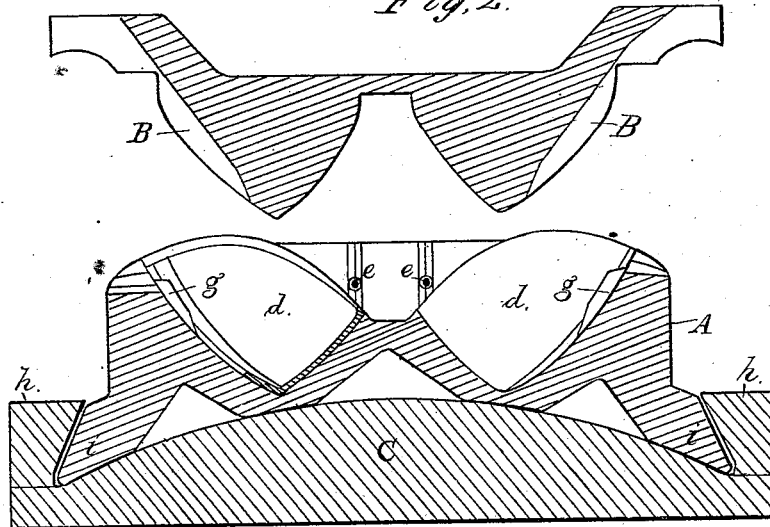
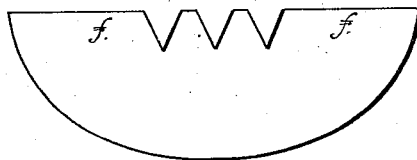


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN APPARATUS FOR SHAPING COUNTER-STIFFENERS FOR BOOTS AND SHOES.

Specification forming part of Letters Patent No. **159,835**, dated February 16, 1875; application filed January 13, 1875.

To all whom it may concern :

Be it known that I, JOHN R. MOFFITT, of Chelsea, in the State of Massachusetts, have invented an Improved Apparatus for Shaping Heel Counters or Stiffeners from Blanks; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

My improvements relate to machinery or apparatus for pressing to their ultimate shape, as heel stiffeners or counters, blanks made of leather, leather-board, paper-board, or other rigid composition or material.

These improvements consist in providing the mold or die with a guard to prevent the blank from rising out of place when the plunger is acting on the blank in the act of shaping it; in providing the mold or die with spurs or guards, acting as stops to prevent the edges of that part of the blank which is to form the heel-seat from being forced too close to each other; in providing the mold with projections or flanges at both sides or ends of its base to permit a series of them to be held to place by strips or bars on the steam-chest or heated floor.

In the drawings, Figure 1 is a perspective view of a mold and its heating-bed made in accordance with my invention, a shaped counter being shown in one of the mold-beds; Fig. 2, a longitudinal vertical section of the mold and its bed, and also of the plunger; and Fig. 3, a blank to be pressed to shape.

A is one of my molds, preferably adapted for shaping two counters at once. It is made of metal, and strong enough to withstand any required pressure. B is its corresponding die or plunger, and C represents the steam-chest or floor from which the heat is to be imparted to the mold, and which may be heated in any convenient manner.

The cavities *d* of the mold have a shape adapted to give the proper form to the blank for the outside of the finished counters, and the plungers B are correspondingly adapted

to shape them on the inner side. Across the cavity *d* is a guard, stopping-bar, or wire, *e*, which serves, when the blank has been laid in, and is being pressed to shape, to arrest its upward movement at that side of the mold, and thus prevent its being so displaced as to make an imperfect counter, the edge of the bend of the upper part of the back of the counter resting against this guard.

To insure that those parts which form the heel-seat, and which are designated in the blank at *f f*, shall not be forced too near to each other, and thus produce a misshapen counter, and with its heel-seat too broad, spurs or projections *g g* are cast or made in the mold, against which the edges of *f f* may abut when the pressure is given, and beyond which they cannot be forced. This also insures uniformity in all the counters in this respect, while at the same time consequentially causing the proper bending and shaping of its other parts.

While in making counters formed in whole or in part from rubber or other plastic material heat has been used to soften and partially melt the material, so that it may run and be squeezed out into all parts of the mold, I am not aware that heat has ever before been used in shaping into counters blanks made of rigid material, such, for instance, as leather-board.

In my apparatus I employ a steam-chest or floor, indicated at C; and in order to apply directly upon this a series of molds, such as above described, I provide it with strips or bars *h*, having projecting ends or flanges beneath which to insert the projections or flanges *i* on the mold, the molds being slid to place, and thus held closely to the heated chest or floor. This mode of connecting them permits a row or series of molds to be readily applied to or removed from the chest, and prevents the need of bolting each mold to the steam-chest. It also allows of the ready substitution of molds for different sizes of counters, as may be desired.

I claim—

1. In combination with a mold for shaping

heel counters or stiffeners from blanks, a guard, *e*, substantially as and for the purpose set forth.

2. A mold for shaping heel counters or stiffeners from blanks, provided with the spurs or stops *g g*, substantially as and for the purpose set forth.

3. A mold for shaping heel counters or stiff-

eners from blanks, provided with external projections *i i*, in combination with strips or bars on the steam-chest or heater-floor, substantially as and for the purpose set forth.

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Witnesses:

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