

(No Model.)

A. L. F. MITCHELL.

HEEL MOLD.

No. 374,368.

Patented Dec. 6, 1887.

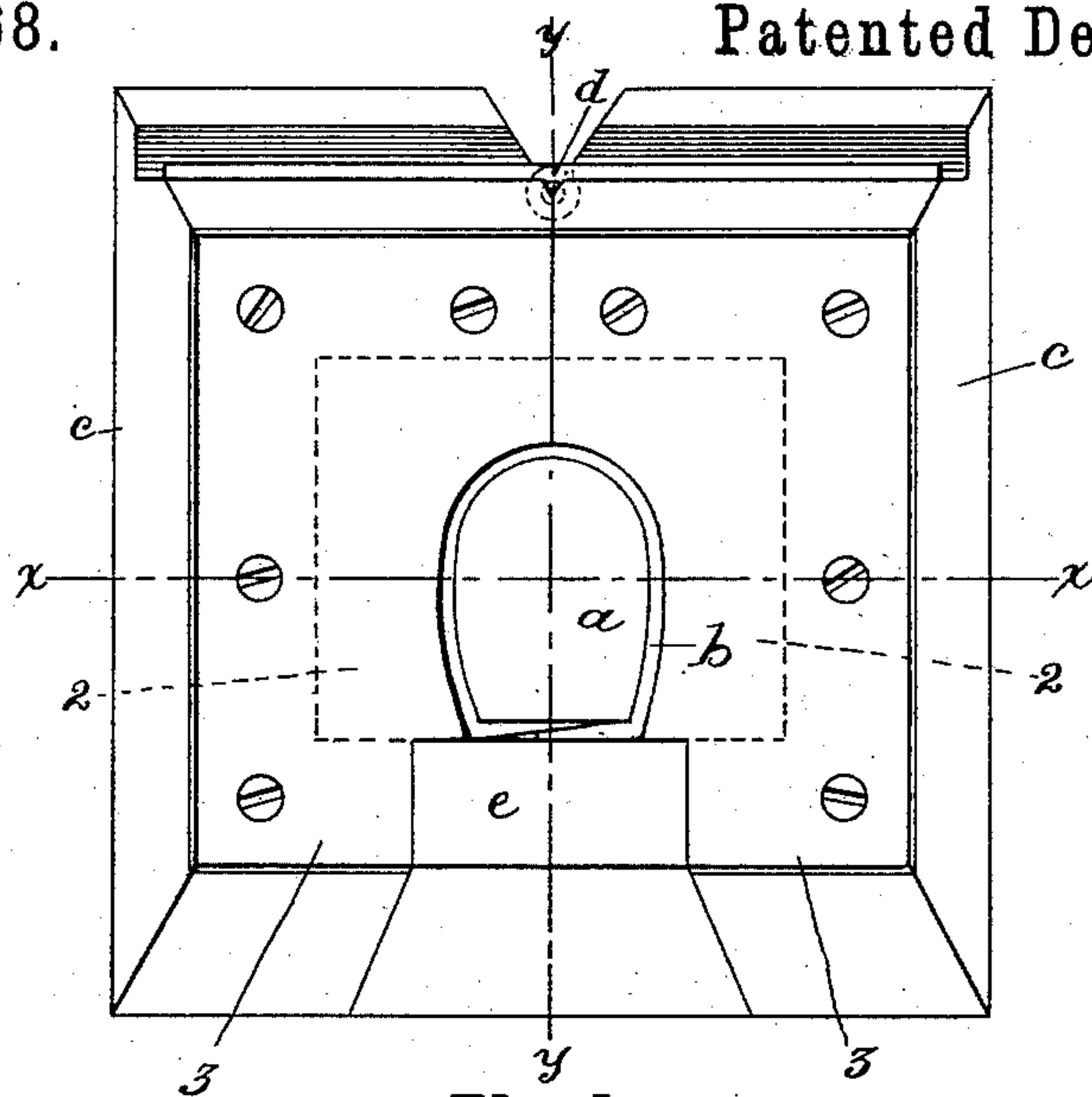


FIG. 1.

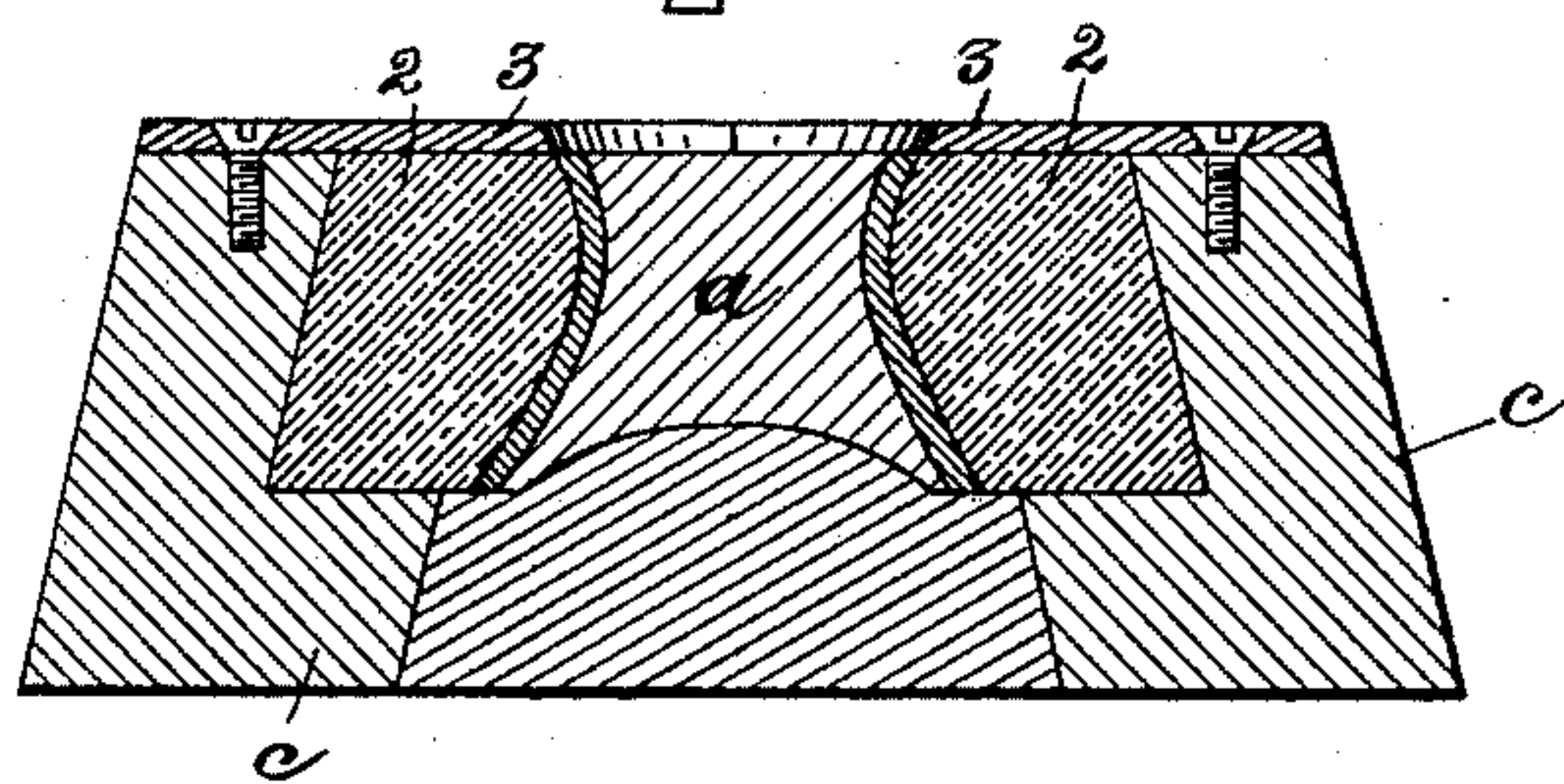


FIG. 2.

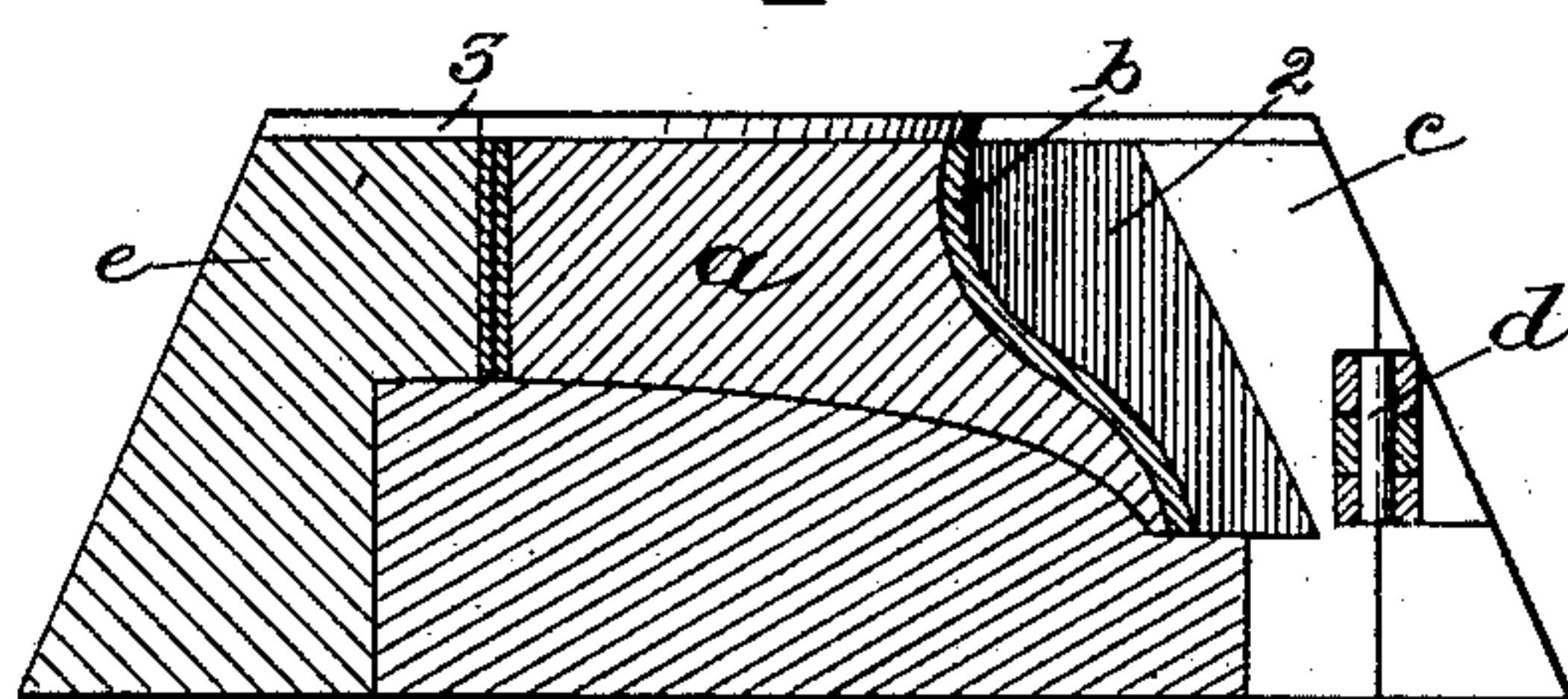


FIG. 3.

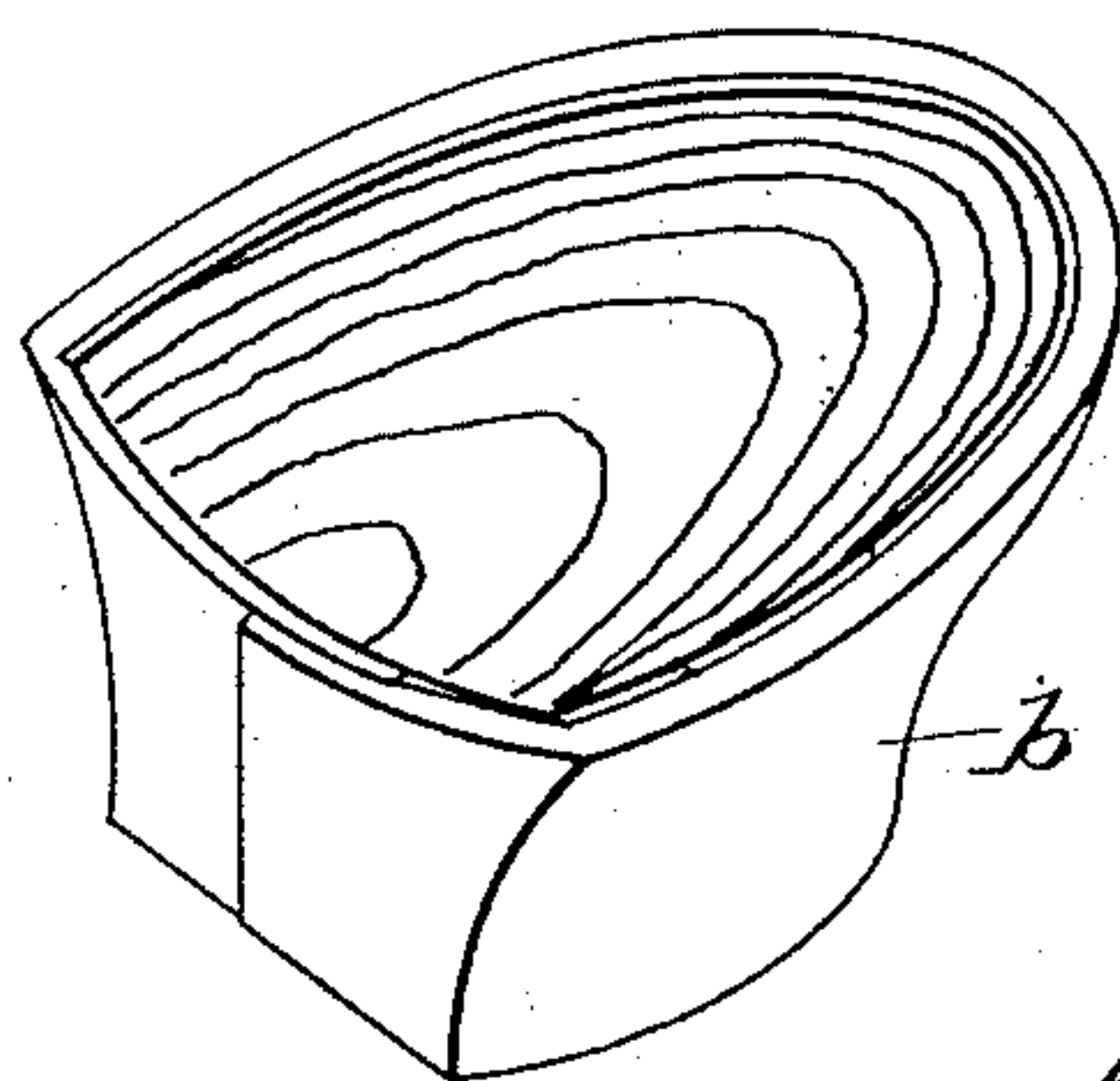


FIG. 4.

WITNESSES.

A. D. Grover  
J. T. Ball.

INVENTOR.

A. L. F. Mitchell  
by night Brown Conley  
Atty.



# UNITED STATES PATENT OFFICE.

ALBION L. F. MITCHELL, OF LYNN, MASSACHUSETTS.

## HEEL-MOLD.

SPECIFICATION forming part of Letters Patent No. 374,368, dated December 6, 1887.

Application filed May 23, 1887. Serial No: 239,067. (No model.)

*To all whom it may concern:*

Be it known that I, ALBION L. F. MITCHELL, of Lynn, in the county of Essex, and State of Massachusetts, have invented certain new and  
5 useful Improvements in Heel-Molds, of which the following is a specification.

This invention relates, principally, to molds used in forming a piece of leather into a shell having the form of a boot or shoe heel, said  
10 shell being placed upon and cemented to a wooden core, as shown, for example, in Letters Patent to E. J. Le Gay, No. 324,127, August 11, 1885. In molding said shell a solid male mold is employed and a sectional female  
15 mold, the latter being in separable sections, said molds being formed to give the required shape to a piece of leather placed between them. Heretofore these molds have been rigid and unyielding, so that in case there is even a  
20 slight variation in the thickness of the leather strip of which the shell is formed the thicker parts will be subjected to excessive and injurious pressure while the thinner parts will be insufficiently pressed.

25 My invention has for its object to obviate this objection and to enable the mold to conform to variations in the thickness of the leather shell without injuring the thicker or failing to adequately press the thinner parts;  
30 and to this end it consists in a mold adapted to bear on the shell with a yielding pressure, as I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents  
35 a top view of a mold having my improvements. Fig. 2 represents a section on line *x x*, Fig. 1. Fig. 3 represents a section on line *y y*, Fig. 1. Fig. 4 represents a perspective view of the heel.

40 The same letters and figures of reference indicate the same parts in all the figures.

In the drawings, *a* represents the male mold, upon which the shell *b* is formed, said mold being of metal.

45 *c c* represent the parts or sections of the female mold, said sections being connected by a hinge, *d*.

*e* represents the block which presses the breast portion of the shell.

50 In carrying out my invention I have made the female mold capable of yielding, to con-

form to inequalities in the thickness of the shell *b*. This result is accomplished by inserting in the holders or sections *c c* jaws, blocks, or facing-pieces, 2 2, of rubber, vul- 55 canized to semi-hardness, said pieces having about the same elasticity as ordinary rubber car-springs. The molding-surfaces are formed on said elastic pieces, which are of considerable thickness, as shown in Figs. 2 60 and 3. The holders or sections *c c* are made of metal or other material suitably strong and rigid to adequately back and support the elastic facing-pieces or jaws 2 2, and recessed to receive said pieces. Metal plates 3 3, 65 screwed upon the upper surfaces of the sections *c c*, cover the upper sides of the elastic facing-pieces, said plates being cut away to form an aperture coinciding with the top lift of the heel. 70

It will be seen that by the described improvement I am enabled to use the same mold for forming shells of different thickness.

I claim—

1. A heel-mold member herein described, 75 composed of rigid sections or holders *c c*, hinged together, and the elastic rubber jaws secured to said holders, and having molding-surfaces which are the converse of the external shape of the heel to be molded. 80

2. In a heel-mold, the combination of the heel-shaped rigid male mold *a* and the female mold composed of the rigid sections *c c*, hinged together, and the elastic jaws or facing-pieces 2 2, secured to said sections, and having mold- 85 ing-surfaces which are the converse of the shape of the heel, as set forth.

3. A heel-mold member composed of the rigid sections or holders *c c*, hinged together and having internal recesses, and yielding 90 rubber jaws or blocks secured to the rigid sections in said recesses, and having molding-surfaces which are the converse of the shape of the heel to be molded, as set forth.

In testimony whereof I have signed my name 95 to this specification, in the presence of two subscribing witnesses, this 19th day of May, A. D. 1887.

ALBION L. F. MITCHELL.

Witnesses:

C. F. BROWN,

A. D. HARRISON.