

(No Model.)

A. R. WELLMAN.

BOOT TREE.

No. 441,116.

Patented Nov. 18, 1890.

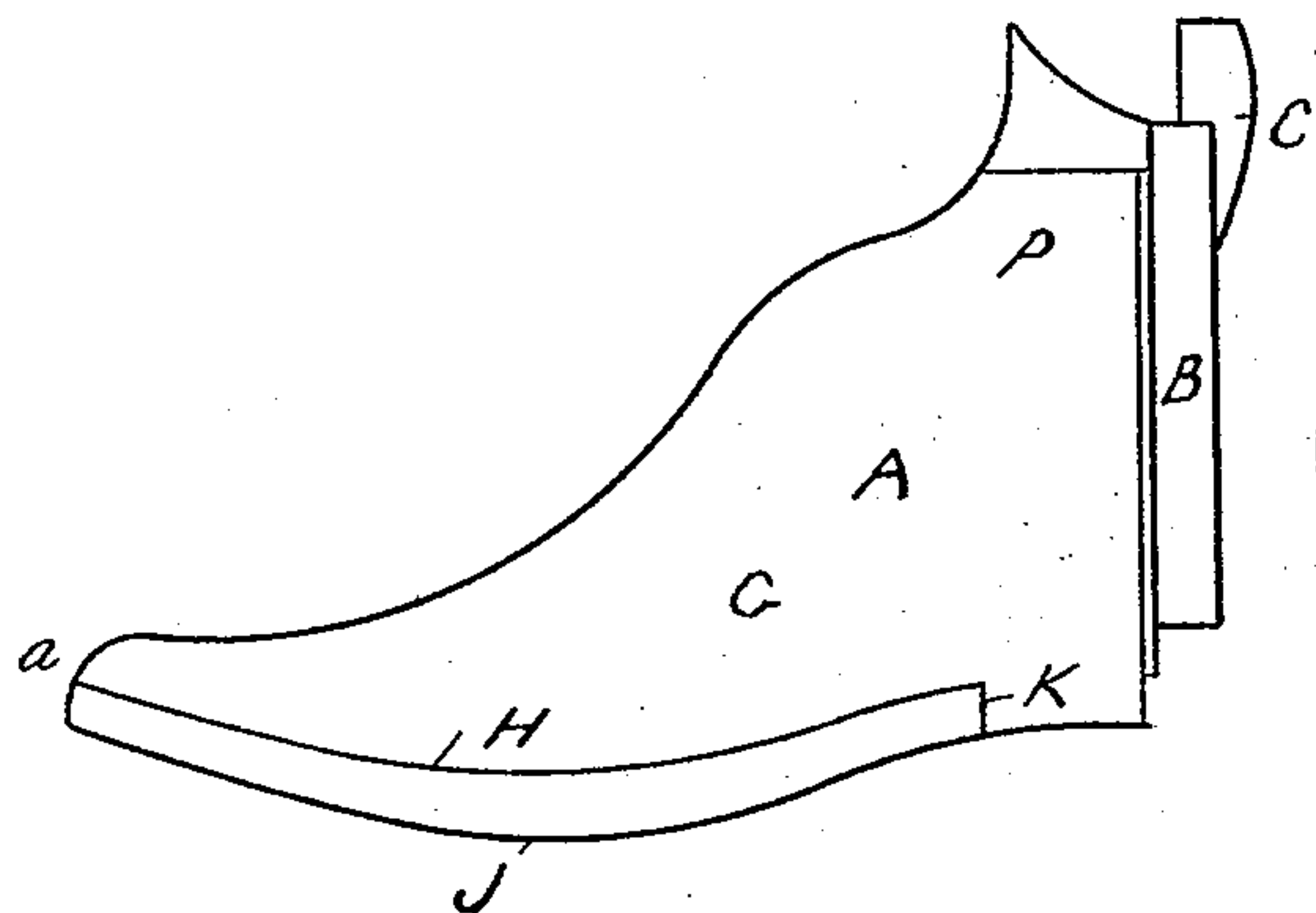


Fig. 1.

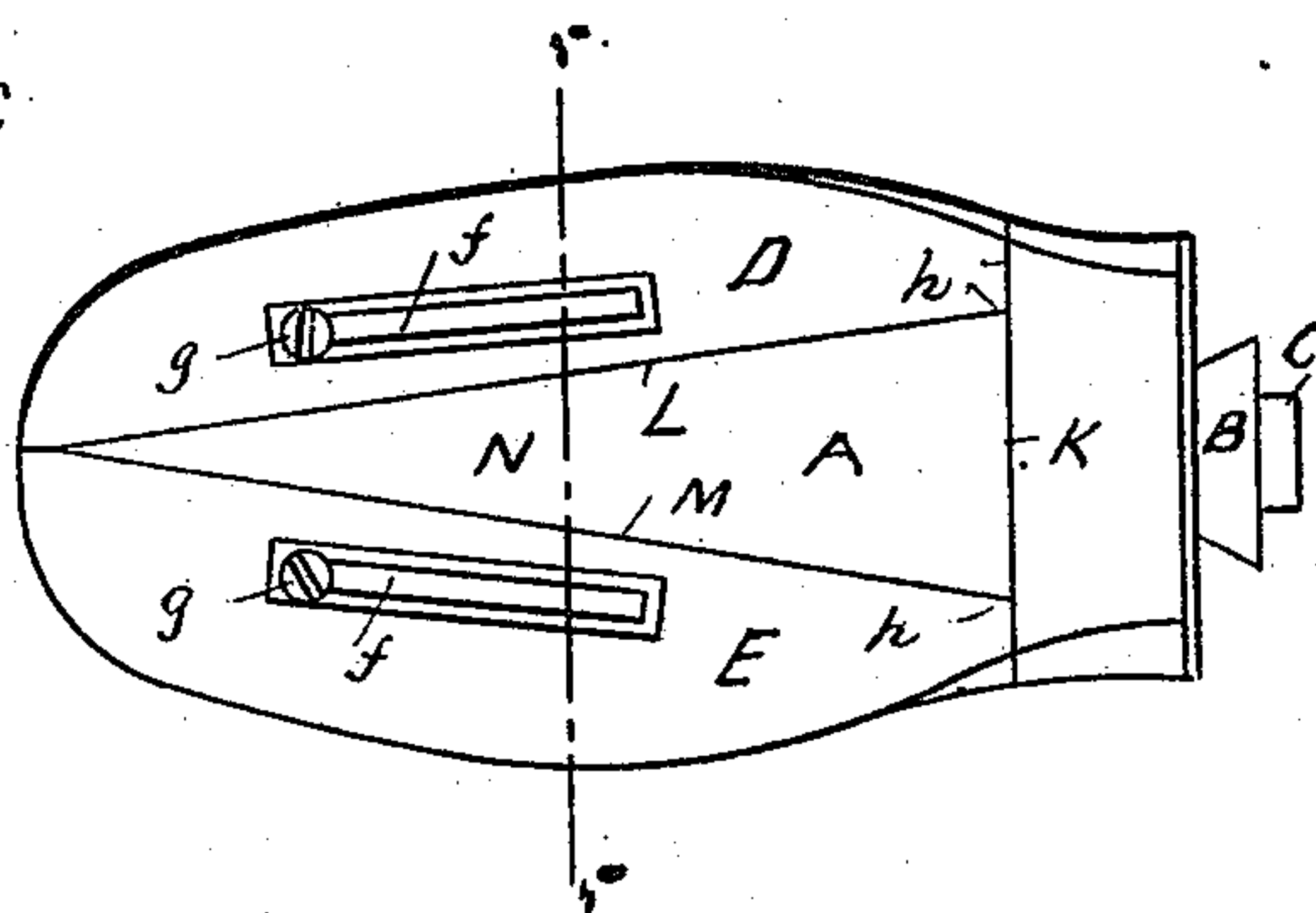


Fig. 2.

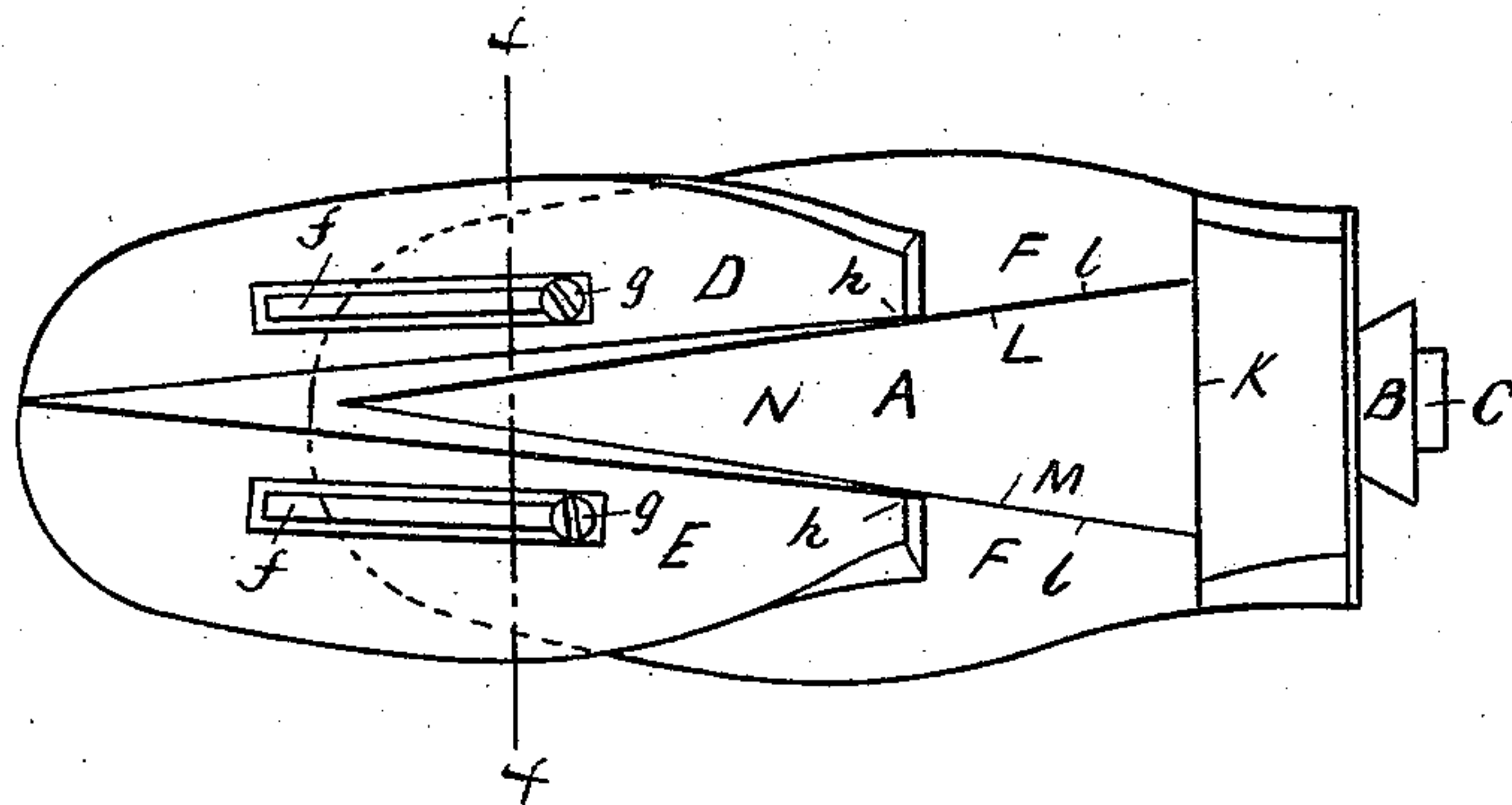


Fig. 1.

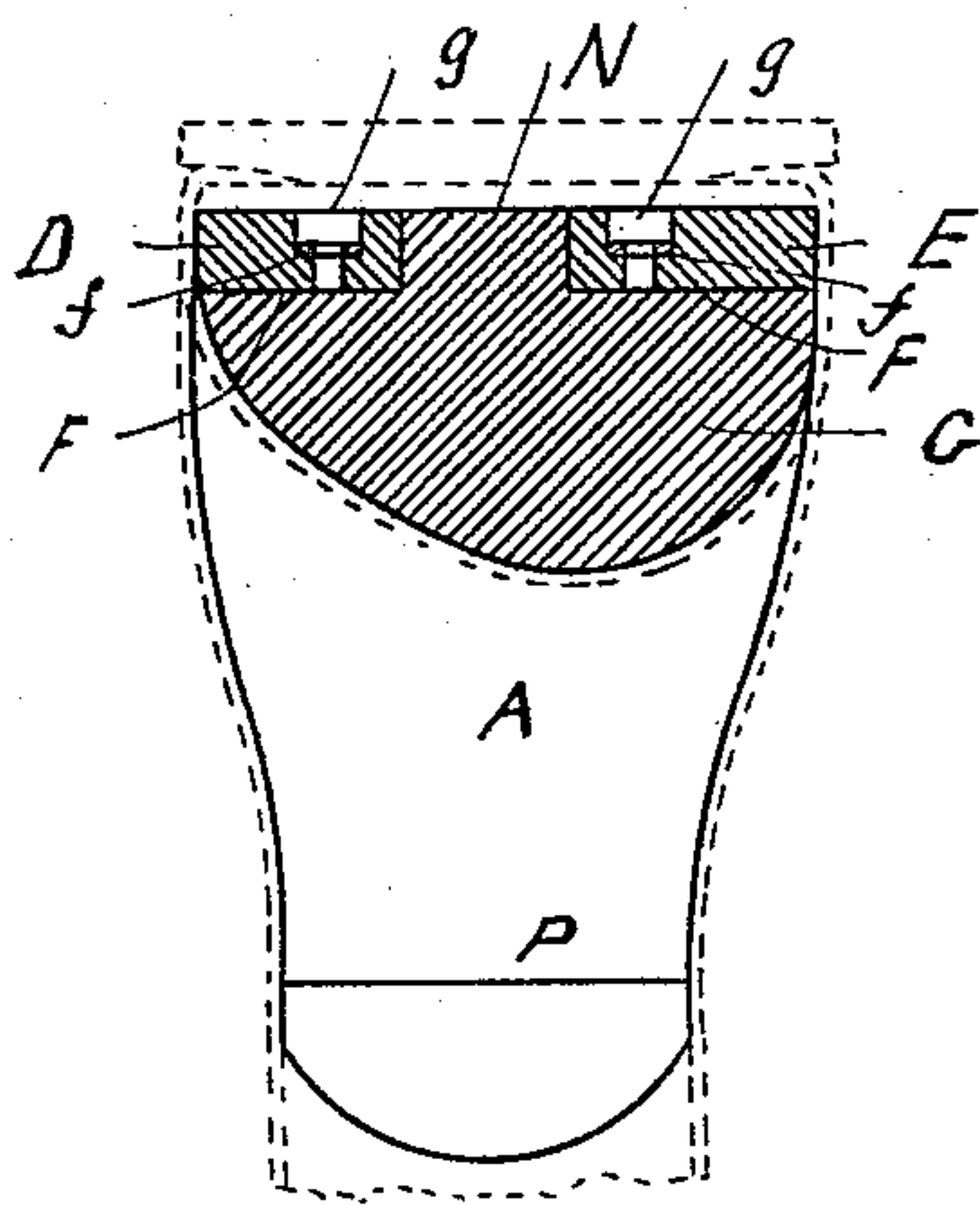


Fig. 4.

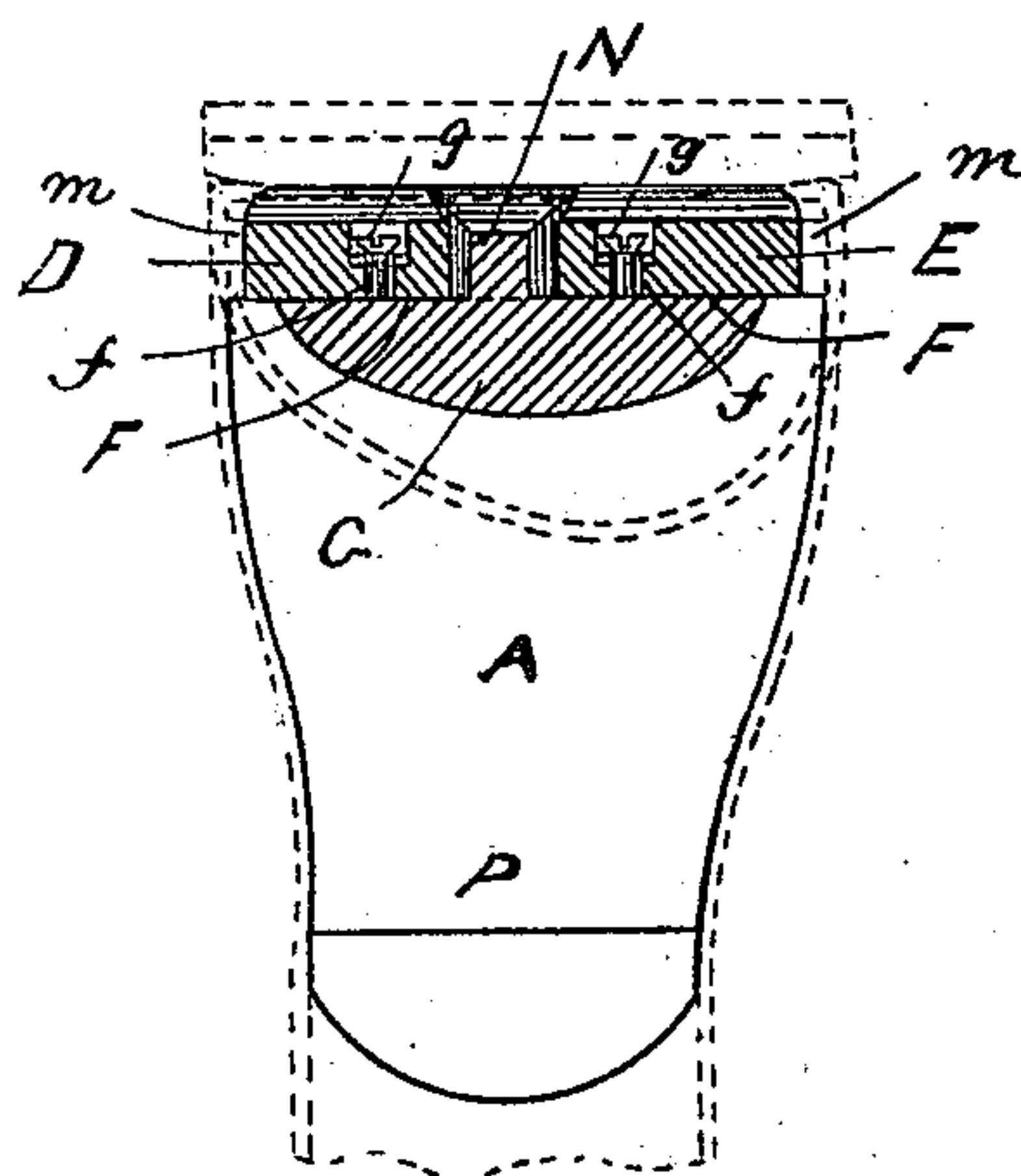


Fig. 5.

WITNESSES.

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UNITED STATES PATENT OFFICE.

ALEXANDER R. WELLMAN, OF BROCKTON, MASSACHUSETTS, ASSIGNOR TO
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BOOT-TREE.

SPECIFICATION forming part of Letters Patent No. 441,116, dated November 18, 1890.

Application filed December 2, 1885. Serial No. 184,489. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER R. WELLMAN, of Brockton, in the county of Plymouth and State of Massachusetts, have invented certain new and useful Improvements in Boot-Trees, of which the following is a full, clear, and exact description.

The object of my invention is to provide a foot-piece for a boot or shoe tree so constructed that after it has been inserted in the boot or shoe and the boot or shoe treed the foot-piece can be easily removed therefrom without injuring the form of the boot or shoe upper; and the invention consists of a foot-piece for a boot or shoe tree consisting of a body portion having a recess on each side on the sole-surface, a central piece formed by said recesses and tapering from the heel toward the toe, and correspondingly tapering bottom sections or side pieces, each adapted to fit its respective recess and arranged to move forward and backward therein, substantially as hereinafter described, and for the purpose specified.

In the accompanying plate of drawings, Figure 1 is a side view of a foot-piece for a boot or shoe tree constructed according to this invention; Figs. 2 and 3, bottom views of the foot-piece with the sectional side pieces in their normal and forward positions, respectively; and Figs. 4 and 5, cross-sections on lines 4 4 and 5 5, respectively, Figs. 2 and 3.

In the drawings, A represents a foot-piece for a boot or shoe tree, adapted to be secured to the back of the boot-tree by the dovetail piece B and part C, on which a hook is to be made, all as usual in foot-pieces for boot or shoe trees.

D and E are two longitudinal sections or side pieces of the bottom of the foot-piece, one on each side, and each adapted to move forward and backward in its respective seat F in the body portion G of the foot-piece.

In the manufacture of this foot-piece it is made of the shape and form desired in any of the usual ways, and then it is sawed through the width along the line H from its toe *a* toward the heel portion as far as the cross-line K, where it is sawed off, such line H being substantially in the line of a circle and corresponding to the general line of the

longitudinal curvature of the bottom surface J of the foot-piece. This bottom piece is then sawed into three pieces through its thickness, along the lines L M in Fig. 2, making the two sectional side pieces D E and a central or intermediate tapering piece N. The central piece N is then placed on the body portion from where it was taken and there secured by nails, screws, glue, or in any suitable manner. Each of the sectional side pieces has a longitudinal slot *f* cut through it, by which it is secured in its place by its respective screw *g* on the body portion of the foot-piece—one each side of the central piece N. The slots *f* allow the sectional pieces to move forward and backward, and the direction or line of each slot is so arranged in relation to the central piece that each sectional piece by its end *h* will bear and slide along the edge *l* of the central piece next to it, and in such forward movement their inner ends *h* following such edges will move toward each other or toward the central longitudinal line of the foot-piece, the tapering sides of the central piece allowing such lateral movements, whereby the foot-piece will be contracted laterally or reduced in width at the ball of the foot-piece, which is shown more particularly in cross-section, Fig. 5, at *m*, also in Fig. 2.

In removing the foot-piece from the boot the body portion G slides along the sectional pieces D E, which moves them nearer together, as described, and consequently relieves them from pressure upon or contact with the sides of the upper at or about the ball portion of the boot, more especially when the whole foot-piece can then be easily and readily removed from the boot. This relieves the boot from any strain on or liability to injure the form of the upper in removing the foot-piece after the boot has been treed, which is the particular advantage of this invention.

The sectional pieces can be made separately from the body portion and the body portion made to receive them in other ways than as described, the invention not being limited to any particular manner of preparing them and the body portion, but, as described, is practical and satisfactory. They also need not be attached to the body por-

tion; but it is preferable to have them attached in some manner, as they are always in place and not liable to be lost.

Although this invention is particularly described in connection with a foot-piece of a boot or shoe tree, it is also applicable as well to a boot or shoe last.

The central piece N can be integral with the body portion, or it can be dispensed with and the pieces D E adapted to be held in proper position by other means—for instance, by lengthening the slots and having two guiding-screws *g* for each slot to allow the proper movements of the pieces, and to hold them in the desired expanded position when in the boot; but it is preferable to have the central piece, as it fills up the space between the two side pieces. The line of movement of the sectional pieces can be in more of a diagonal direction or across the foot-piece, the invention not being limited to the precise line of movement of the side pieces described, as it can be varied more or less; and yet produce good results, the essential feature of the invention being to have the side pieces move in such direction as will contract or diminish the width of the ball of the foot-piece, for the purpose specified. The side pieces need not extend back so far, as they can be shorter; but it is preferable to have them about as long as shown.

In Figs. 4 and 5 the foot-piece is shown in cross-section within a boot or shoe, which is in dotted lines, Fig. 4 showing the foot-piece wholly within the boot in position for the

boot to be treed, and in Fig. 5 with the body portion of the foot-piece drawn back as far as the slots in the side pieces will allow, showing the side pieces as moved nearer together and away from the sides of the upper.

Having thus described my invention, what I claim is—

1. A foot-piece for a boot or shoe tree, consisting of a body portion having a recess on each side on the sole-surface, a central piece formed by said recesses and tapering from the heel toward the toe, and correspondingly-tapering bottom sections or side pieces, each adapted to fit its respective recess and arranged to move forward and backward therein, substantially as and for the purpose specified.

2. A foot-piece for a boot or shoe tree, consisting of a body portion having a recess on each side on the sole-surface provided with screws *g*, a central piece formed by said recesses and tapering from the heel toward the toe, and bottom sections or side pieces corresponding in shape to the recesses and arranged to move forward and backward thereon, and each provided with a slot for engagement with the screws *g*, substantially as and for the purpose specified.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ALEXANDER R. WELLMAN.

Witnesses:

O. A. MILLER,

C. D. FULLERTON.