

J. DALTON
Boot and Shoe Heels.

No. 199,801.

Patented Jan. 29, 1878.

Fig. 1.

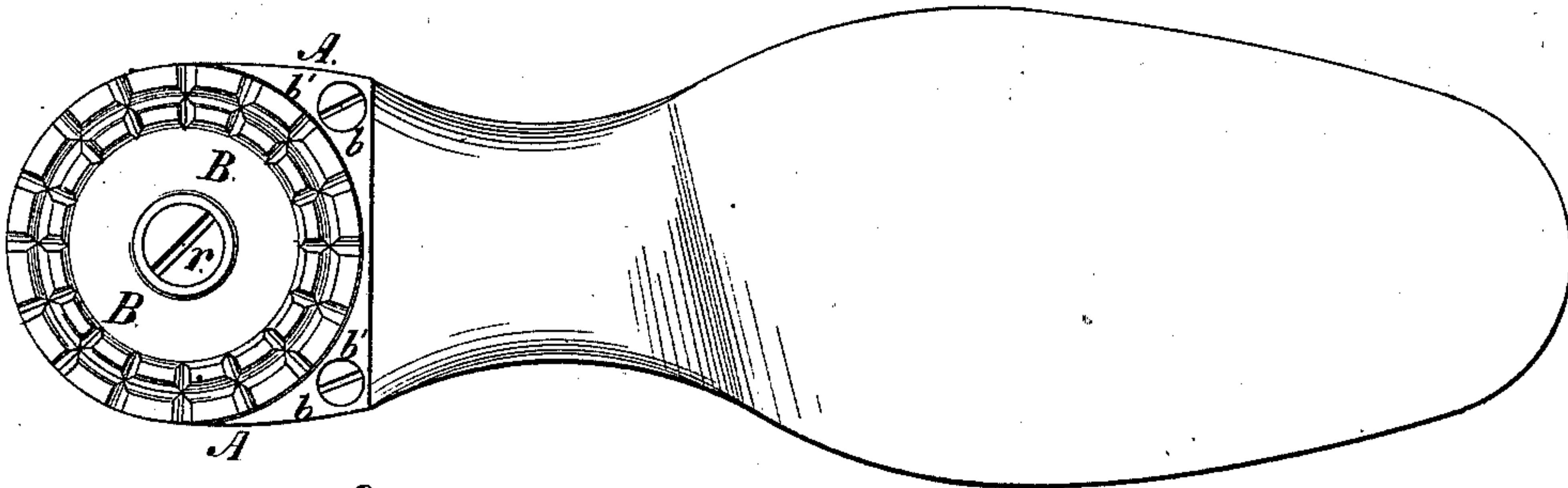


Fig. 2.

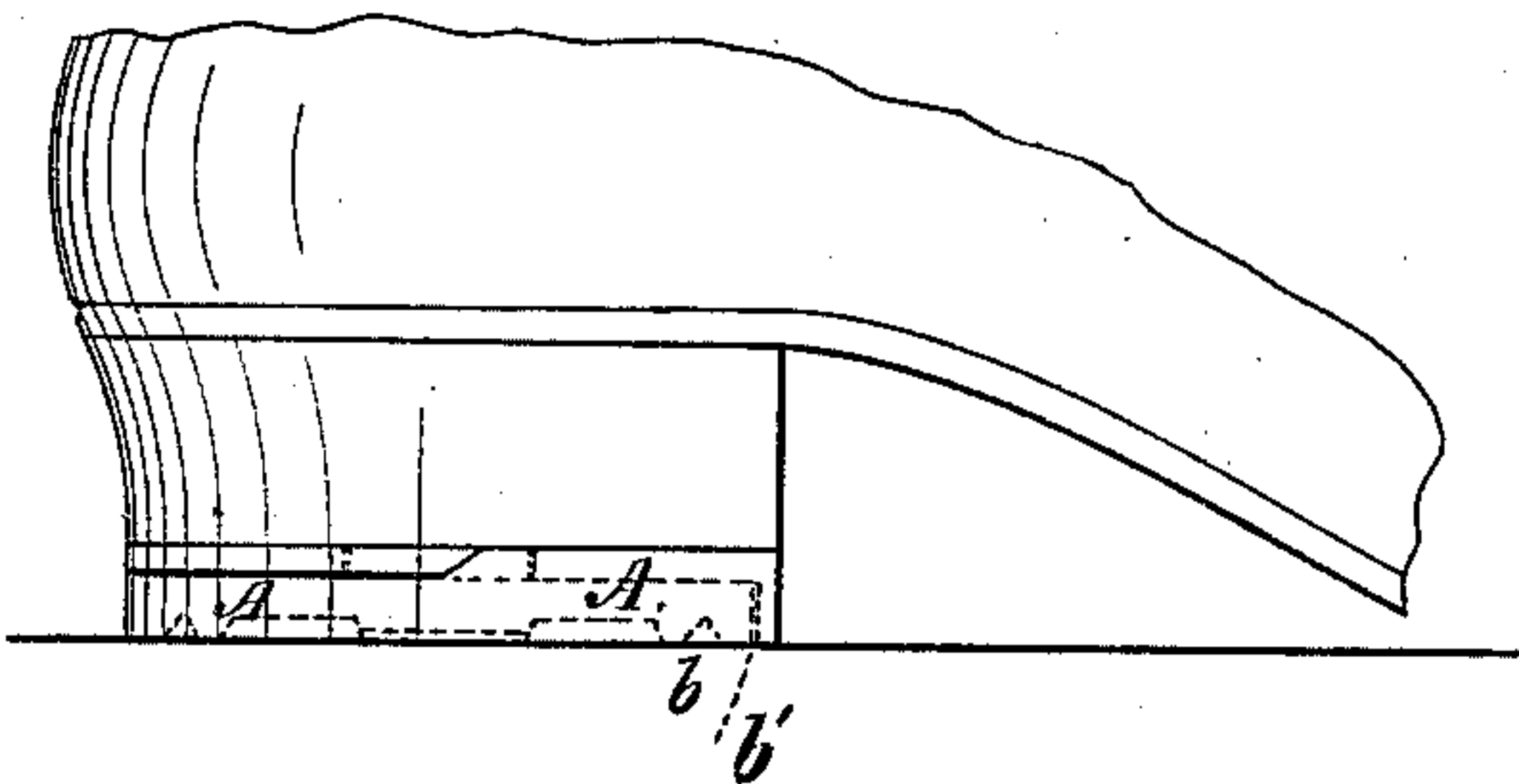


Fig. 3.

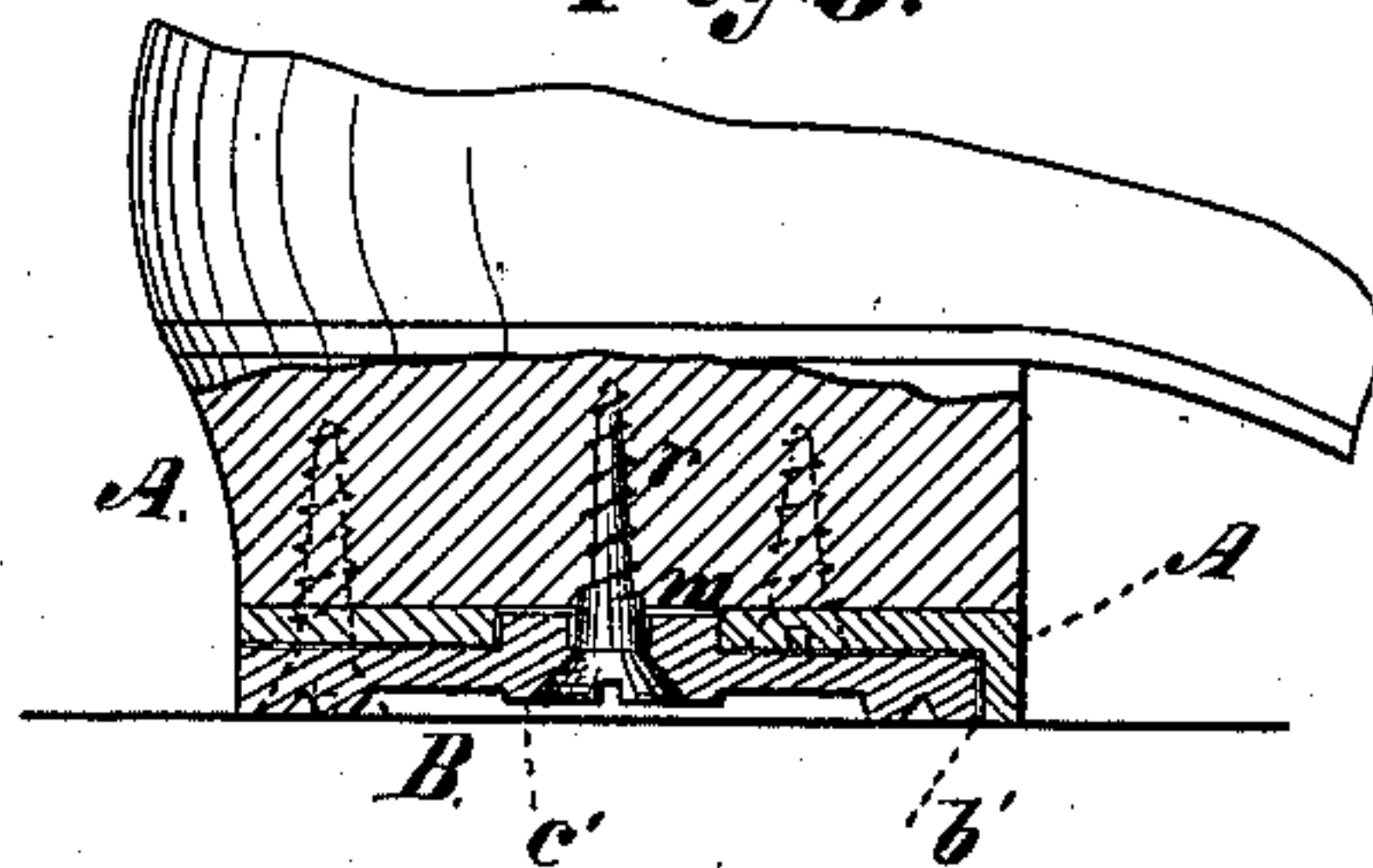


Fig. 4.

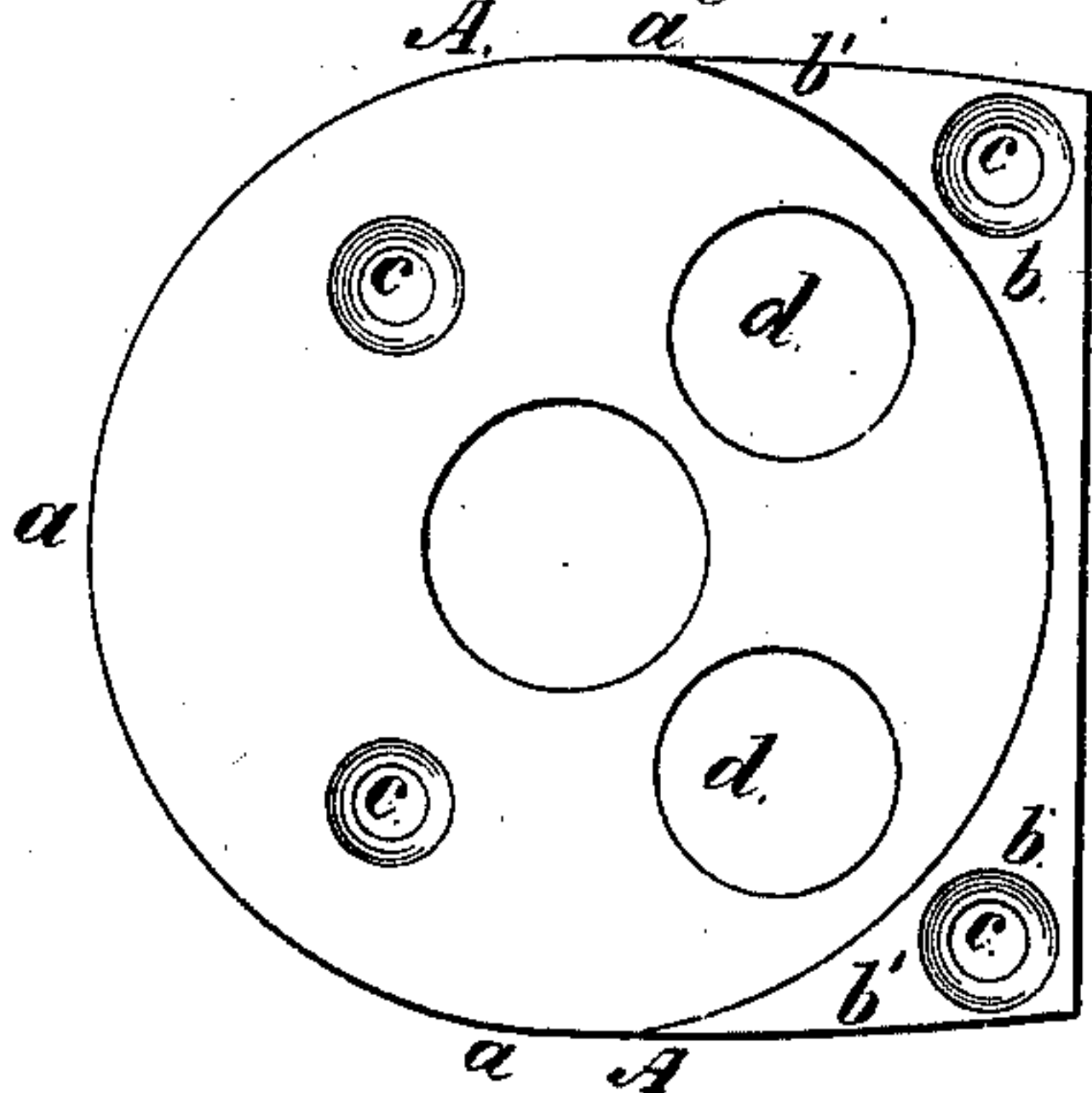


Fig. 5.

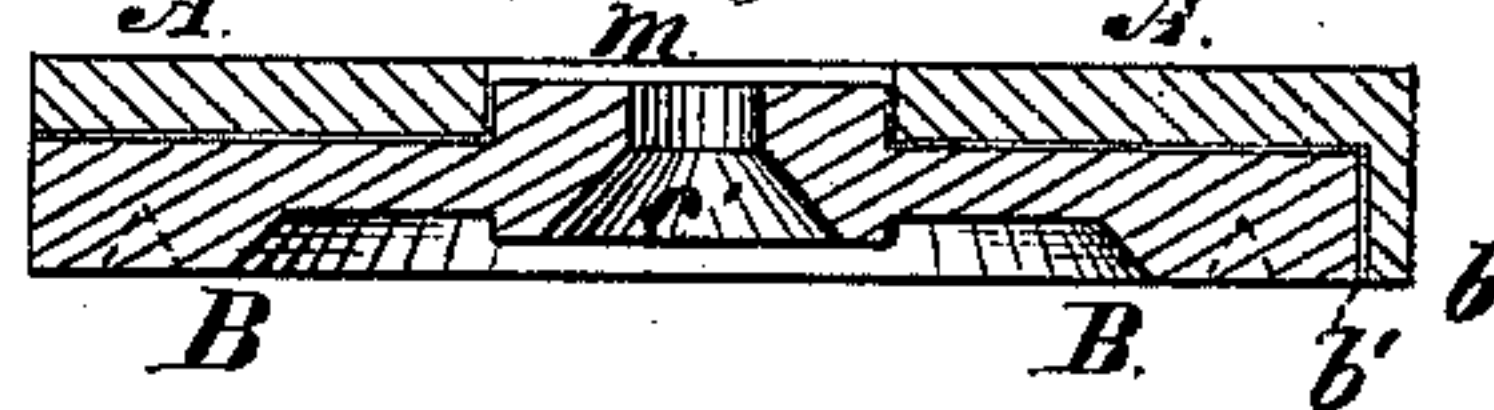
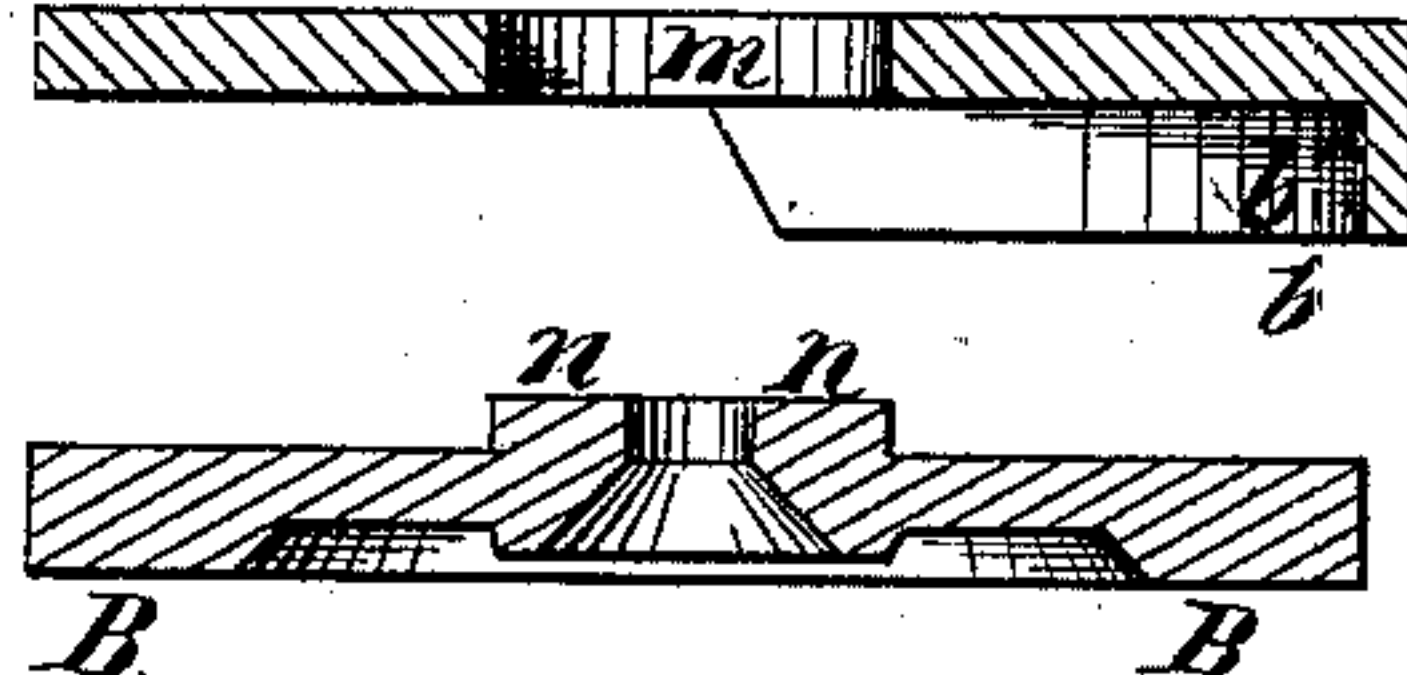


Fig. 6.



Witnesses:
Henry Eichling.
H. Wells Jr

Inventor
Joseph Dalton
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UNITED STATES PATENT OFFICE.

JOSEPH DALTON, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF HIS
RIGHT TO GUSTAVE SIMON, OF SAME PLACE.

IMPROVEMENT IN BOOT AND SHOE HEELS.

Specification forming part of Letters Patent No. **199,801**, dated January 29, 1878; application filed
December 20, 1877.

To all whom it may concern:

Be it known that I, JOSEPH DALTON, of the city, county, and State of New York, have invented an Improvement in Adjustable Heels for Boots and Shoes, of which the following is a specification:

The object of this invention is to provide an adjustable heel, of metal or other suitable material, for boots and shoes, in which the wearing plate or disk shall be more firmly and securely held and supported against lateral thrust and displacement than has been found possible with any construction previously adopted; and the said invention comprises a novel combination of parts, whereby this object is effected.

Figure 1 is an inverted plan of a boot or shoe fitted with a metallic heel made according to said invention. Fig. 2 is a side view, and Fig. 3 a vertical longitudinal sectional view, of the same. Fig. 4 is an inverted plan of one of the parts. Fig. 5 is a sectional view, on a somewhat larger scale, of the invention detached from the boot or shoe; and Fig. 6 comprises like sections of the frame and plate or disk of the metallic heel detached from each other.

A is the frame of the boot-heel, made according to said invention, the rear half of the circumference of which is of semicircular form, as shown at *a* in Figs. 1 and 4, to conform to the corresponding portion of the ordinary leather heel of the boot or shoe upon which it is placed. The inner portion of the frame aforesaid is provided with a downwardly-projecting wearing-surface, *b*, the inner edge *b'* of which forms a semicircular shoulder opposite the rearmost circumferential portion *a*. This frame is provided with a suitable number of countersunk holes, *c*, through which screws may be passed to attach the said frame firmly and rigidly to the common or leather heel of the boot or shoe. In order to lessen the weight of this frame, portions may be cut away, as shown at *d* in Fig. 4. It is to be particularly noted that in this frame A, at the axis of the circle described by the circumferential portion *a* and the shoulder or edge *b'*, is provided a circular orifice or socket, *m*, which secures the hub *n*

of the plate or disk B. This latter is flat, of circular form, and of a diameter sufficient to fit easily upon that portion of the frame A circumscribed by the circle *a b'*, and of a thickness sufficient to bring its outer surface about coincident with the wearing-surface *b* of the frame A. Upon this plate or disk B is provided the central circular hub *n* just mentioned, which fits within the socket *m* of the frame A, and, coming in contact with the straight or vertical sides of the said socket, effectually prevents the plate or disk B from being laterally displaced by blows, thrust, or pressure exerted from any direction upon the edge or circumference of the said plate or disk. Provided centrally in said plate or disk is a countersunk hole, *c'*, through which, in the attachment of this heel to the boot or shoe, is passed a screw, *r*, as indicated in Fig. 1, and shown more fully in Fig. 3, the head of the screw fitting into the countersink of the hole *c'* so as to be flush with the outer surface of the plate or disk, and at the same time retaining or suspending the disk or plate upon the frame—in other words, preventing the detachment of the plate or disk, while the screw itself is relieved from lateral strain, the latter being borne or taken up by the hub *n*, fitted into the socket *m*, as hereinbefore explained. The plate or disk B, which receives the greater portion of the wear when the device is in use, may be readily turned to bring any desired portion of its circumference coincident with any desired portion of the circumference of the common or leather heel of the boot or shoe to which it is affixed, and the wearing away of one portion of the said plate or disk may be readily compensated by turning an unworn portion thereof to the position wherein the greatest wear is incurred.

It is to be observed that the plate or disk, and also the frame, may be made of metal or any other suitable material, and that the plate or disk itself, instead of being of circular, may be of octagonal or other shape.

It will further be observed that the invention provides an adjustable heel, which sustains in all its bearings or particulars the unaltered shape of the shoe-heel in general use.

In other words, the shoe-heel with my invention applied thereto retains its ordinary form, at the same time that it secures the advantages arising from my invention.

What I claim as new, and desire to secure by Letters Patent, is—

The plate or disk constructed with the central circular hub *n*, in combination with the frame *A*, constructed with the central circular socket *m*, provided to receive the said hub, and having

the countersunk hole *c'*, the parts being made and arranged substantially as herein set forth, to sustain the plate or disk against lateral strain by the action of the hub in conjunction with the walls of the socket, as described.

J. DALTON.

Witnesses:

EDWARD HOLLY,
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