

(No Model.)

A. M. LEIGHTON.  
BOOT OR SHOE LAST.

No. 407,081.

Patented July 16, 1889.

FIG. 1.

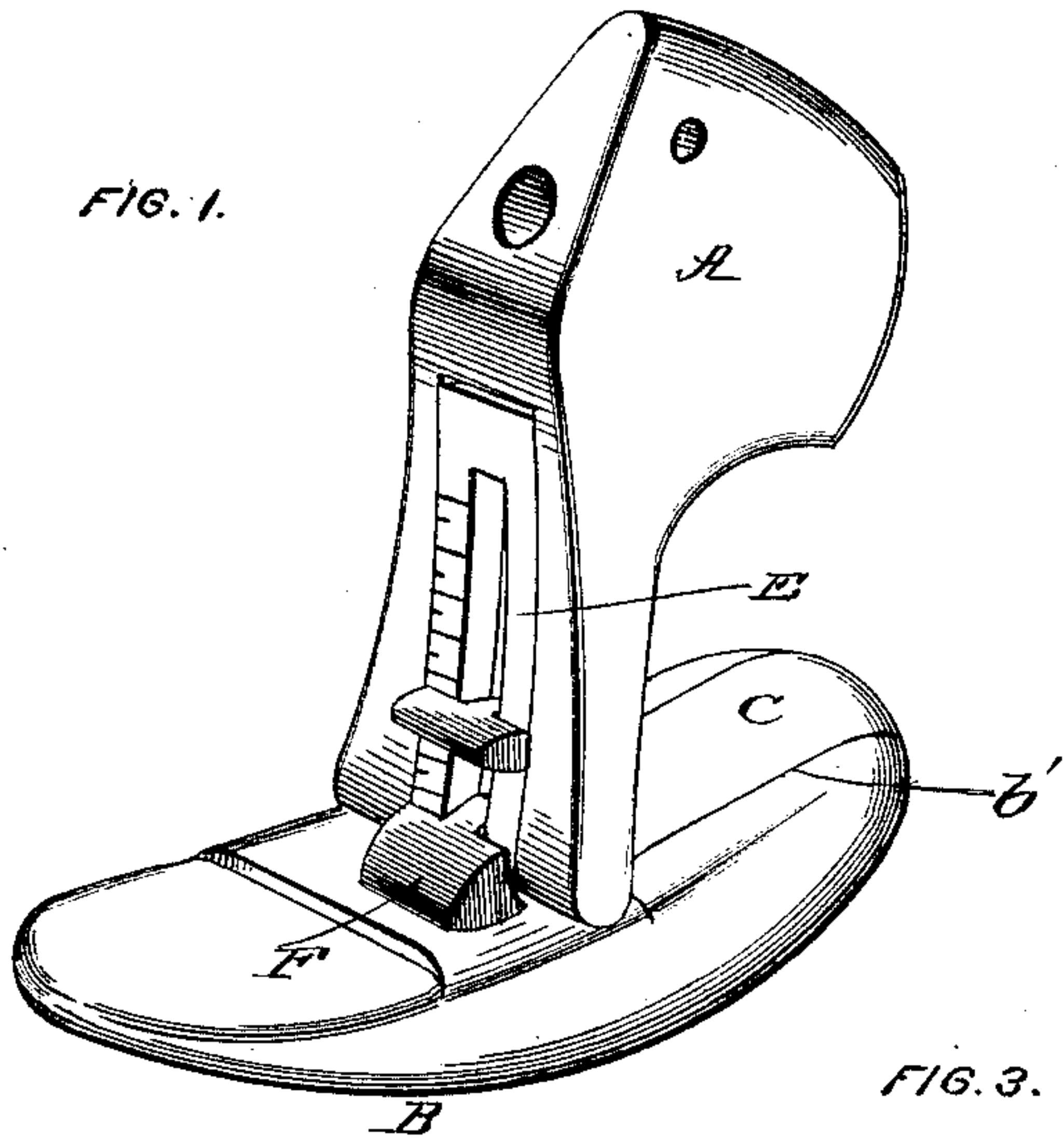


FIG. 3.

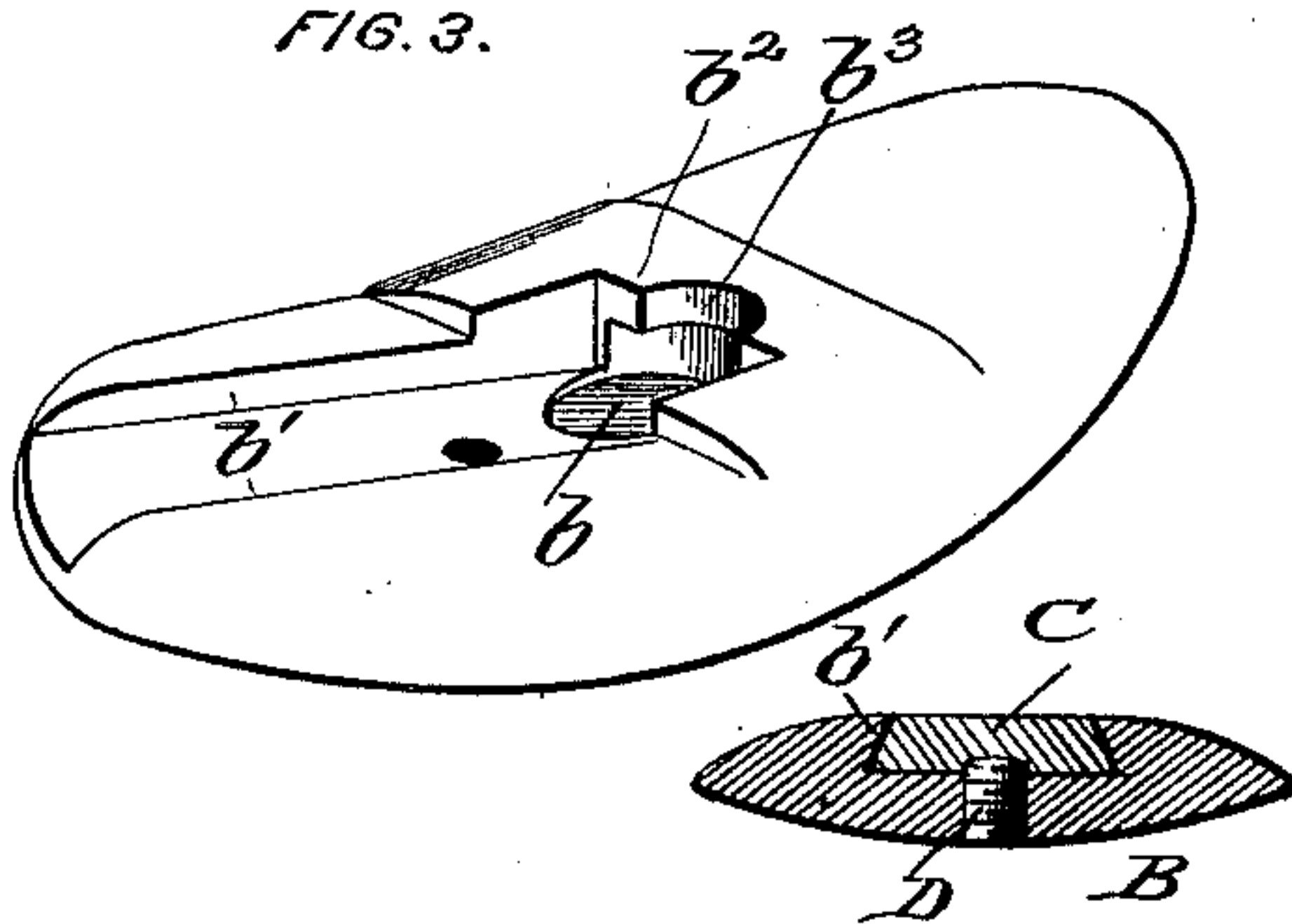


FIG. 2.

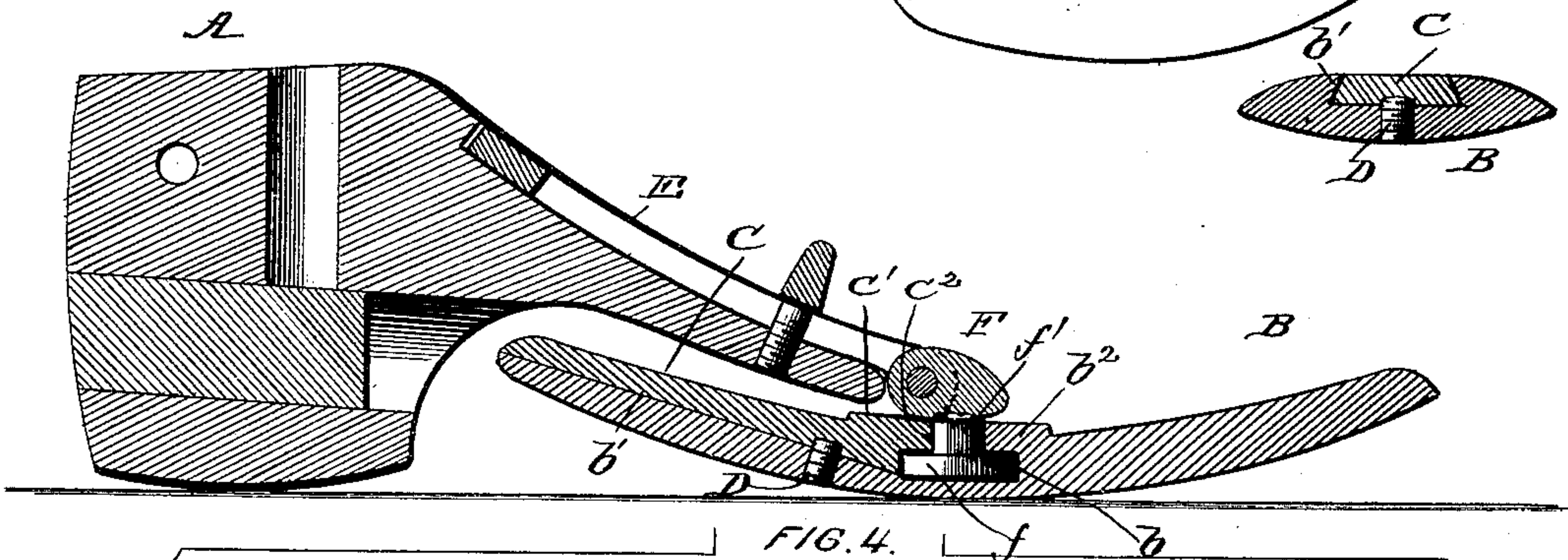
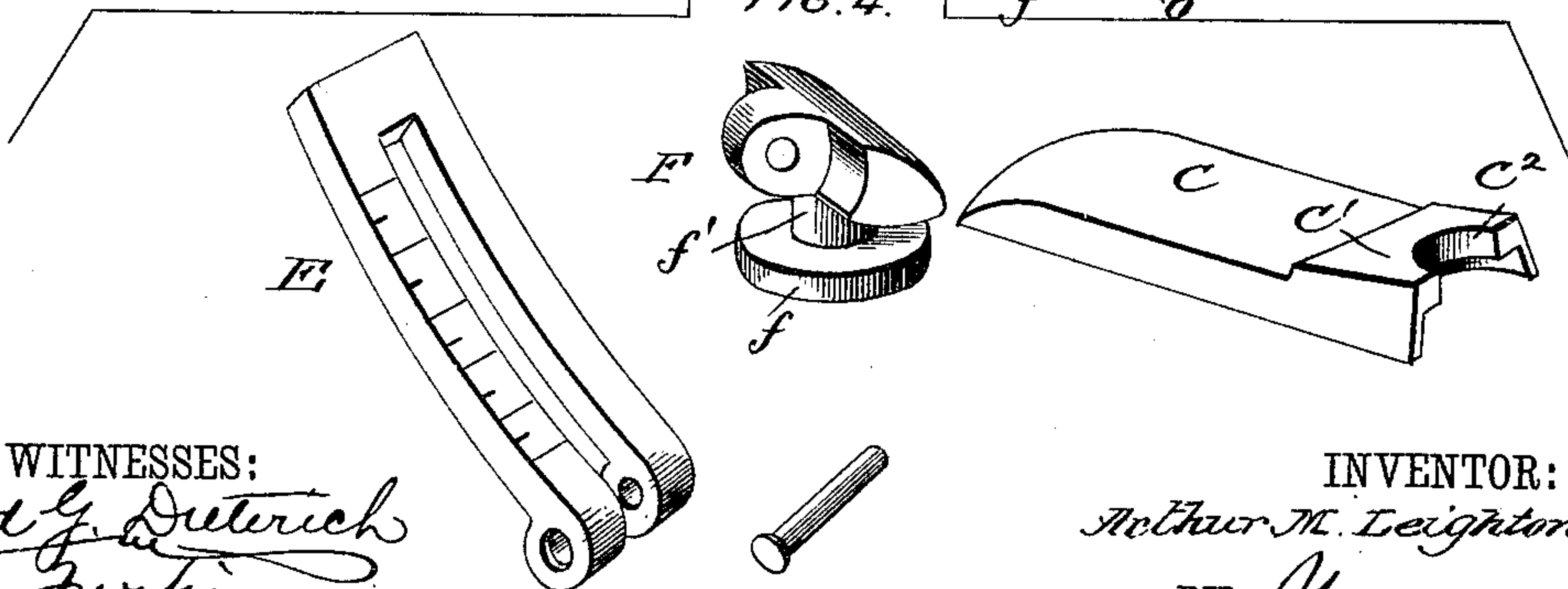


FIG. 4.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

ARTHUR M. LEIGHTON, OF PORT TOWNSEND, WASHINGTON TERRITORY,  
ASSIGNOR OF ONE-HALF TO JAMES H. LIVERMORE, OF SAME PLACE.

## BOOT OR SHOE LAST.

SPECIFICATION forming part of Letters Patent No. 407,081, dated July 16, 1889.

Application filed March 1, 1889. Serial No. 301,608. (No model.)

*To all whom it may concern:*

Be it known that I, ARTHUR M. LEIGHTON, of Port Townsend, in the county of Jefferson, Washington Territory, have invented a new and useful Improvement in Boot or Shoe Lasts, of which the following is a specification.

My invention is an improvement in adjustable lasts which have the foot part pivoted between its ends so it can be turned end for end, and has for an object to provide novel constructions in the pivoting of such foot-piece.

The invention consists in certain novel constructions and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is a perspective, and Fig. 2 a longitudinal section, of the last. Fig. 3 is a detail view of the foot or toe piece, and Fig. 4 represents several of the parts in detail.

The last comprises the heel part A, the foot-piece B, and connections between said parts A and B. The foot-piece B is formed in its upper side with a circular socket  $b$ , from one side of which extends a groove  $b'$ , the walls of which are undercut or beveled, as shown. The said groove  $b'$  extends to the edge of the foot-piece. It will be noticed that the socket  $b$  is cut below the base of groove  $b'$  at the inner end of such groove, and so forms a shoulder at such end of groove  $b'$ , as shown in Fig. 2. At the side of socket  $b$  opposite groove  $b'$  the foot-piece is formed with a projecting ledge  $b^2$ , which laps over the socket  $b$ , and has in its edge a semicircular notch or recess  $b^3$  formed on an arc concentric with the socket  $b$ . The fastening section or plate C is formed to fit the groove  $b'$ , and is provided at its inner end with a ledge or projection  $C'$ , having a recess  $C^2$ , such ledge  $C'$  being similar to the part  $b^2$ . When this plate C is slipped down in its position in groove  $b'$  and is secured by headless screw D, turned from below through the foot-piece and bearing against the inner side of the fastening-plate, there is formed in the foot-piece a circular socket having a narrow neck-like portion, as shown clearly in Fig. 2.

The connection between the heel portion and the foot-piece is effected by the bar E, secured at its rear end to the heel portion and provided at its forward end with a stud-like portion F, having at its lower end a flat head  $f$  fitted to socket  $b$ , and provided above such head with a small shank fitted to the opening formed by the recesses  $b^3$   $C^2$  in ledges  $b^2$  and  $C'$ , so that the said stud-like part may revolve freely in the socket of the foot-piece and yet be held in connection with such part.

It is preferred to hinge the main portion of part E to the stud-like portion, as shown, so the last may be adjusted to the position shown in Fig. 1 to facilitate the insertion and removal of the last from a boot or shoe.

To apply the stud to the foot or toe section the plate C should be slipped back in or removed from the groove  $b'$ , when the stud may be slipped in, its head  $f$  sliding down into socket  $b$  and its shank  $f'$  fitting in the recess  $b^3$ , when by slipping the plate C to the position shown in Fig. 2 it will hold the stud in the body of the foot-piece. The plate C may then be secured by screw D or in other suitable manner.

It will be seen that the foot or toe piece is shaped differently at its opposite ends so it may fit different-shaped shoes when adjusted to correspond therewith; also that the foot-piece may be conveniently detached from the stud when it is desired to use a different-sized foot-piece, as is sometimes desirable.

I do not in this application claim the combination of a heel part formed with a longitudinal recess, a double-pointed toe part, a hinge pivotally secured at one end to the foot part and having its other end formed with a longitudinal slot and the retaining screws, for the reason that such construction forms a part of the subject-matter of another application for patent filed by me January 18, 1889, Serial No. 296,773.

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

1. A last comprising a heel piece or portion and the improved foot-piece having a socket  $b$ , a groove extended from one side of such socket, and a ledge overlapping the

socket at the side opposite said groove, combined with the stud having a head fitted to said socket, and the fastening-plate, whereby to secure the stud in such socket, substantially as set forth.

2. A last comprising a heel portion, the foot or toe piece provided in its upper side with a circular socket and having a ledge  $b^2$  overlapping one edge of such socket, the connection piece or bar secured at one end to the heel-piece and provided at its opposite end with the stud having a head fitted to the socket of the foot-piece, and the fastening-plate by which to secure the stud in such socket, substantially as set forth.

3. The improvement in lasts, substantially as herein described, comprising the heel-piece,

the bar secured at one end thereto and provided at its opposite end with a headed stud, the foot-piece having in its upper side a socket  $b$ , fitted to receive said stud and provided with a groove  $b'$  leading from and a ledge  $b^2$  overlapping such socket, and the fastening-plate  $C$ , fitted to groove  $b'$  and having at its inner end a ledge  $C'$ , all substantially as and for the purpose specified.

The above specification of my invention signed by me in the presence of two subscribing witnesses.

ARTHUR M. LEIGHTON.

Witnesses:

P. B. TURPIN,  
SOLON C. KEMON.