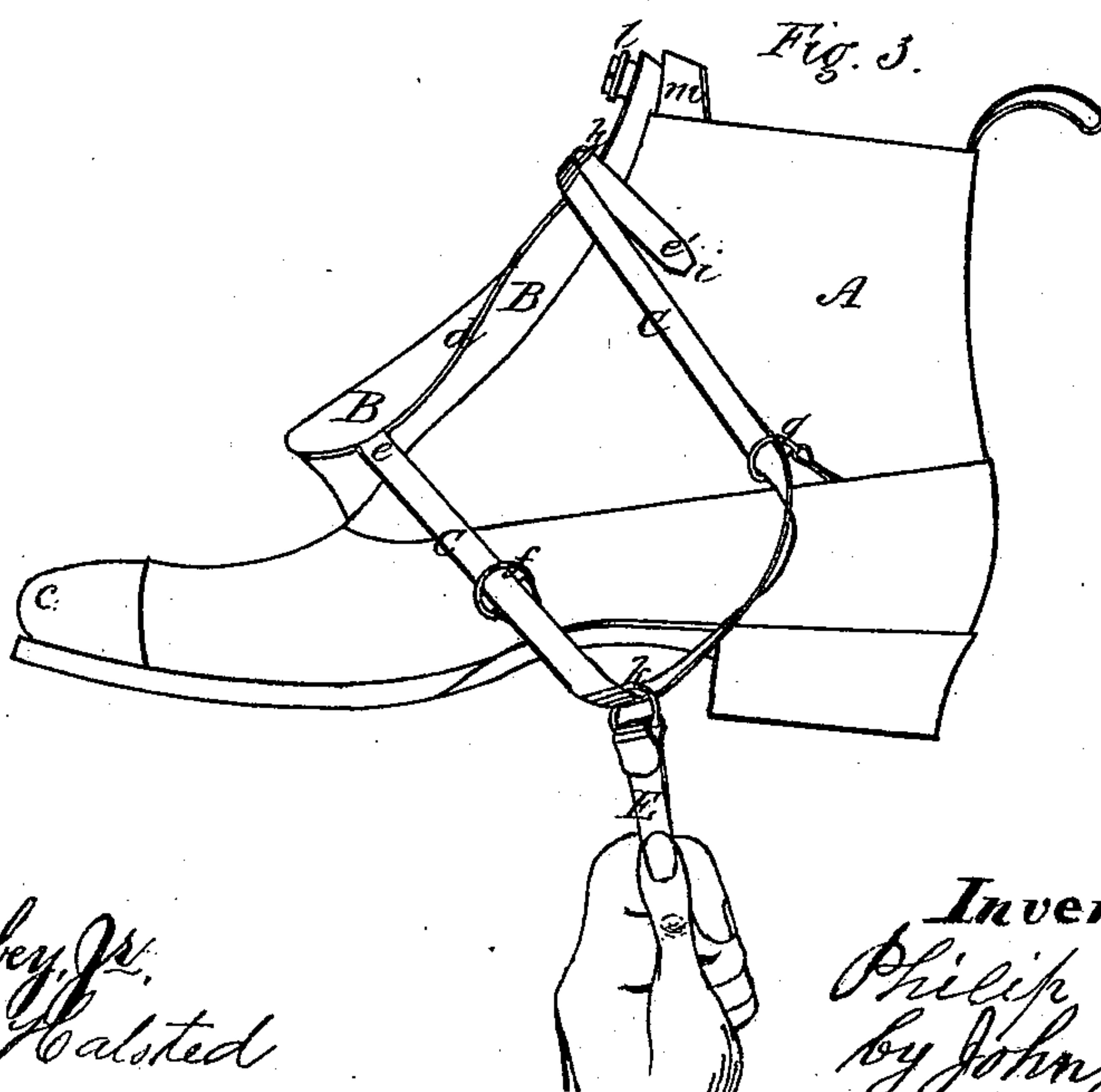
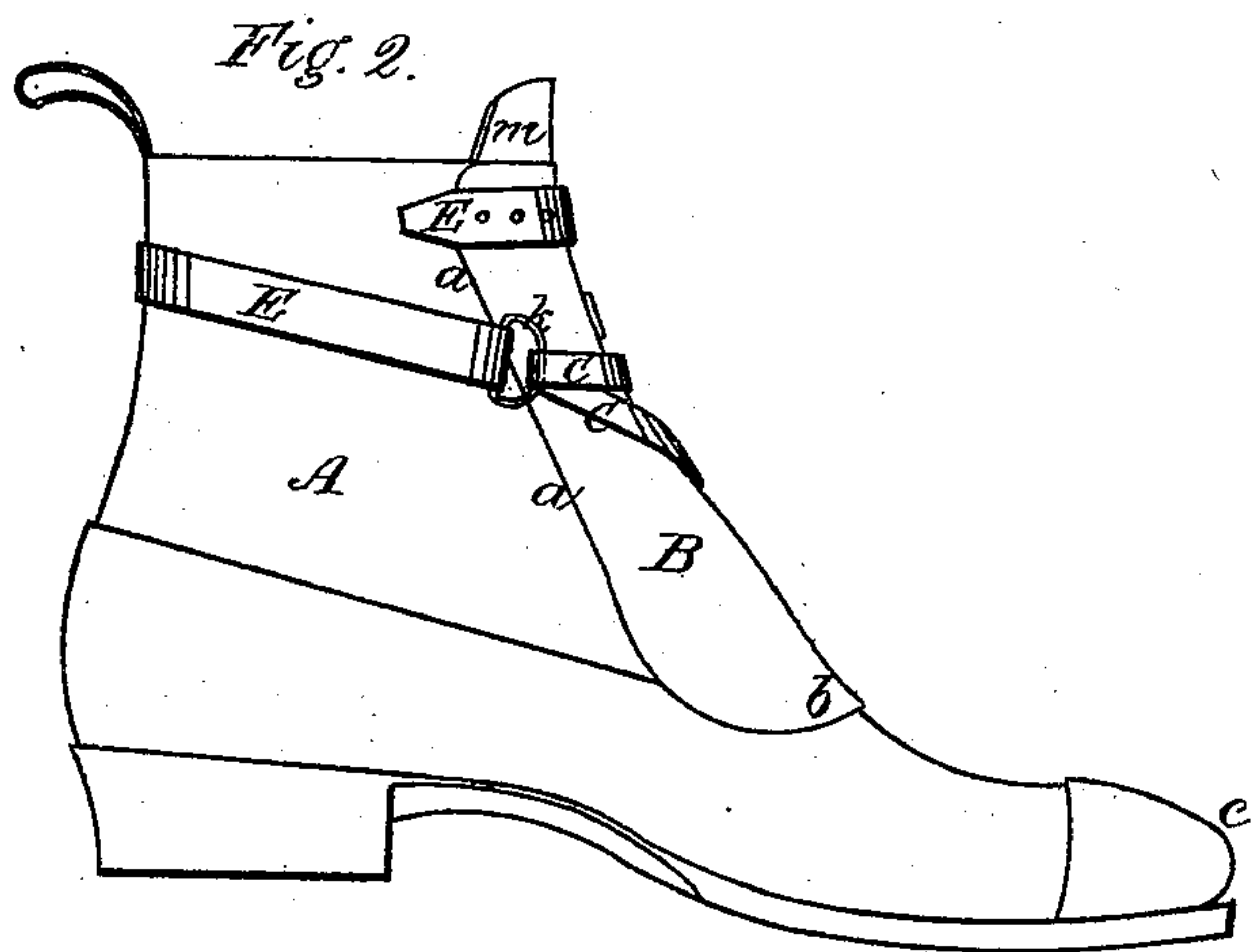
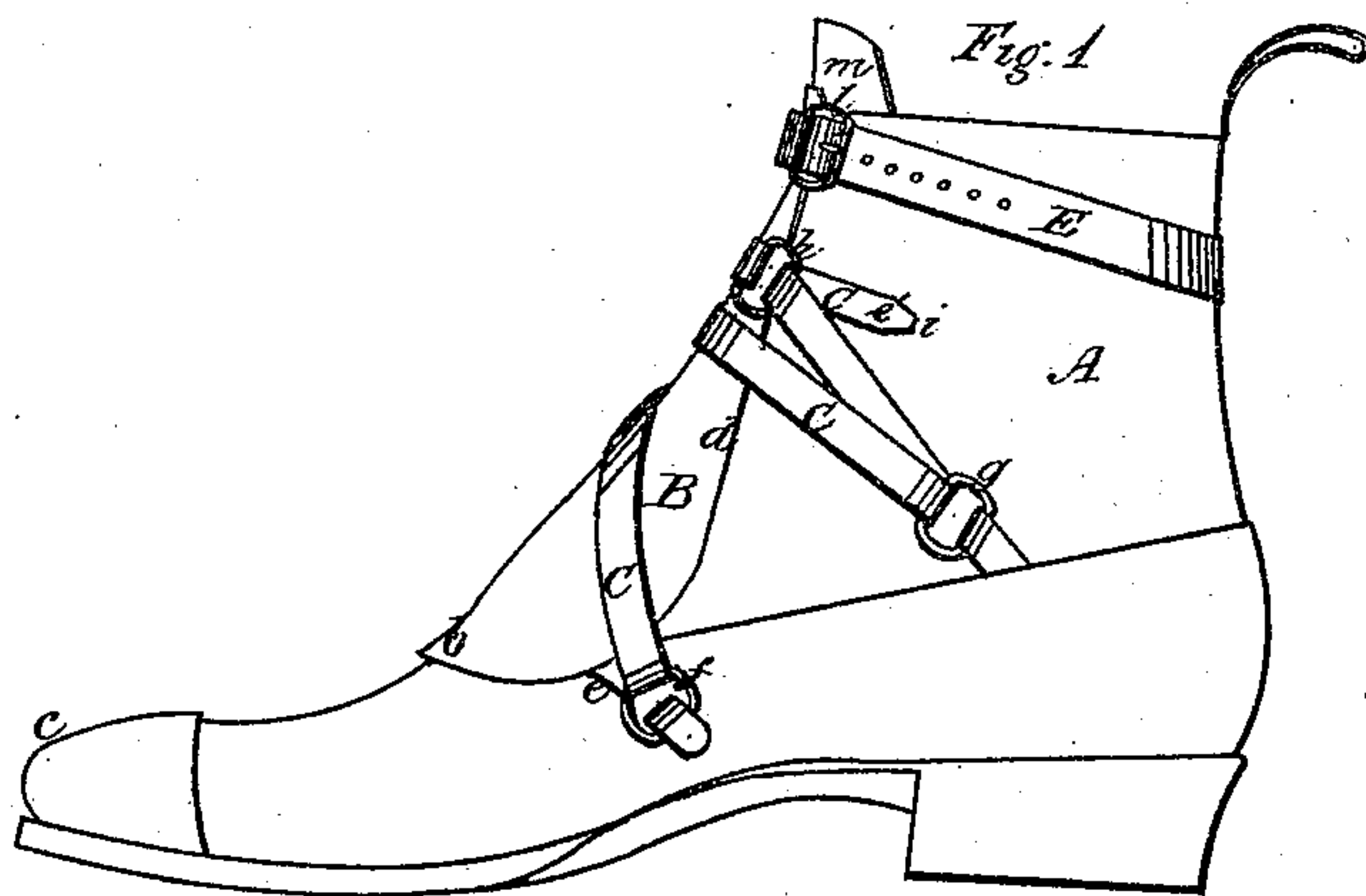


P. HARRIS.
SHOE-FASTENING.

No. 177,396.

Patented May 16, 1876.



Witnesses
John Robey, Jr.
Pennington Halsted

Inventor
Philip Harris
by John J. Halsted

UNITED STATES PATENT OFFICE.

PHILIP HARRIS, OF CHATHAM, ENGLAND.

IMPROVEMENT IN SHOE-FASTENINGS.

Specification forming part of Letters Patent No. **177,396**, dated May 16, 1876; application filed April 4, 1876.

To all whom it may concern:

Be it known that I, PHILIP HARRIS, lieutenant-colonel royal marines, light infantry, of Chatham, in the county of Kent, England, have invented certain Improvements in Closing and Fastening Boots, and in the means or apparatus employed therefor, of which the following is a specification:

This invention consists in closing and fastening boots by the employment of a "bowline" strap and runner-buckle, whereby the boot is fastened with facility and by one operation without undue looseness and tightness.

To make my invention better understood, I will proceed to describe the same by reference to the accompanying drawing, in which—

Figure 1 is an elevation of the inside of a boot made according to my improvements, and shown closed and fastened on the foot; Fig. 2, an elevation of the outside of the same, and Fig. 3 is an elevation of the boot before being closed and fastened.

Similar letters in all the figures represent similar parts.

I take as the basis for carrying out my invention the old lace-up boot without any holes being made in it for laces. Instead of holes, and to fasten the boot A on the foot, I use a flap of leather, B, somewhat in the shape of the letter D, blocked to fit the instep. This flap B is securely stitched into that side of the upper of the boot commonly known as the "outside" of the foot, as seen at *a a a*, Fig. 2, by one of its edges only, the bow part *b* of the flap B being downward toward the toe *c*. Onto the flying or inner side *d* of the flap B I attach, by one of its ends *e*, a strap of leather, C, which I call the bowline-strap. The bowline-strap C is passed through two **D** buckles or rings, *f g*, fixed to the inside of the boot, and also through a **D** buckle or ring, *h*, fixed to the flying or inner side of the flap B, and the end *e'* of the strap C is stitched to the inside of the boot at *i*. The strap *c* also passes through a runner-buckle, *k*, Figs. 2 and 3, between the buckles *f g*. A strap, E, which I call the ankle-strap, is attached to the runner *k*, and may be worked freely along the

bowline-strap by means of the said buckle *k*. To the flying or inner side *d* of the flap B, and at the upper end thereof, I also fix a buckle, *l*, which I call the instep-buckle, for fastening the ankle-strap E when the boot has been closed and tightened. *m* is the ordinary leather tongue employed with this class of boot.

Fig. 3 shows the boot placed on the foot ready to be closed and fastened. To close the boot the ankle-strap E must be pulled downward, as shown in this figure, so as to draw the bowline-strap C through the runner-buckles *f g*, and thus draw down the flap B. The bowline-strap C is then brought, by means of the ankle-strap E, upward and toward the outside of the foot, and will cause the flap B to be drawn down toward the inside in two parallel directions—viz, from the fore part of the instep to the hollow of the foot, and from the bend between the instep and ankle toward the heel. The flap B is now held securely down over the instep, and effectually closes the boot, and the fastening process is continued by pulling the ankle-strap E round the outside of the instep and the ankle, as shown in Fig. 2, and so on toward the inside until it meets the instep-buckle *l*, through which it is passed and fastened.

For heavy boots the tongue *m* may be dispensed with, and the runner-buckle *h* also, in which case the end *e'* of the bowline-strap C would be attached to the flying or inner side *d* of the flap B.

By these improvements not only may the boot be fastened on by one operation, but any undue looseness or tightness in buckling is obviated by the readiness with which, by the use of the bowline-strap and runner-buckle, the looseness or tightness distributes itself all over the fastening apparatus and the boot itself.

The fastening on or pulling off this boot may also be effected in a position most easy and natural to the human frame, because the inside of the foot is the part operated on, and a person can place one foot on the opposite knee, and so fasten on the boot with a com-

fort hitherto unattainable. In case of swelling, dampness, soreness, or wounds this is of great importance.

Having thus described my invention, and the manner of performing the same, what I claim is—

The flap B, in combination with strap C and ankle-strap E, provided with a runner,

k, for closing boots or shoes, substantially as shown and described.

PHIL. HARRIS,
Lieut. Colonel R. M. L. I.

Witnesses:

G. J. REDFERN,
W. AIMÉ.