(No Model.)

G. C. McEWEN.

ANKLE SUPPORT.

No. 332,728. Patented Dec. 22, 1885.

Fig. 1.

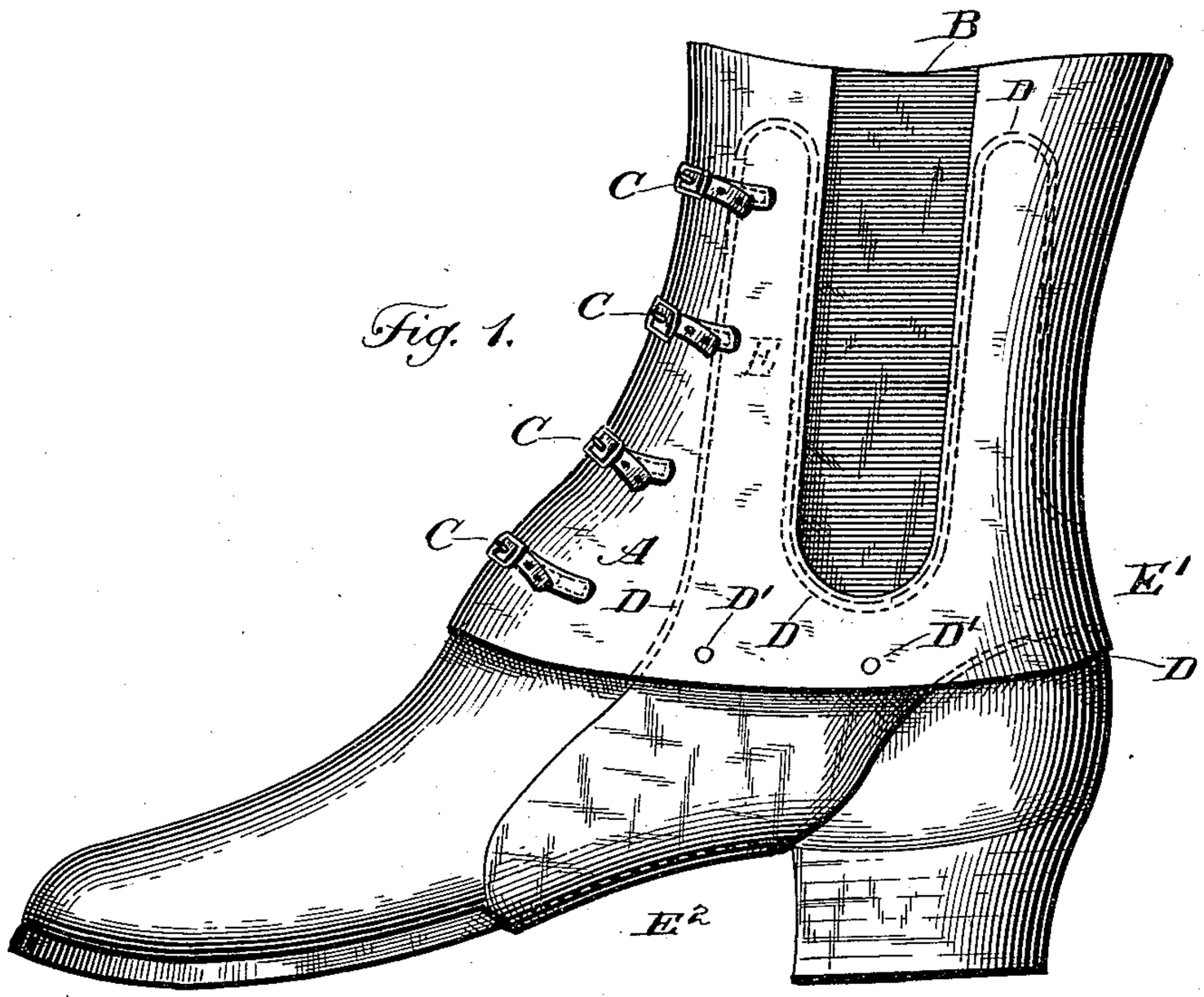


Fig. 3.

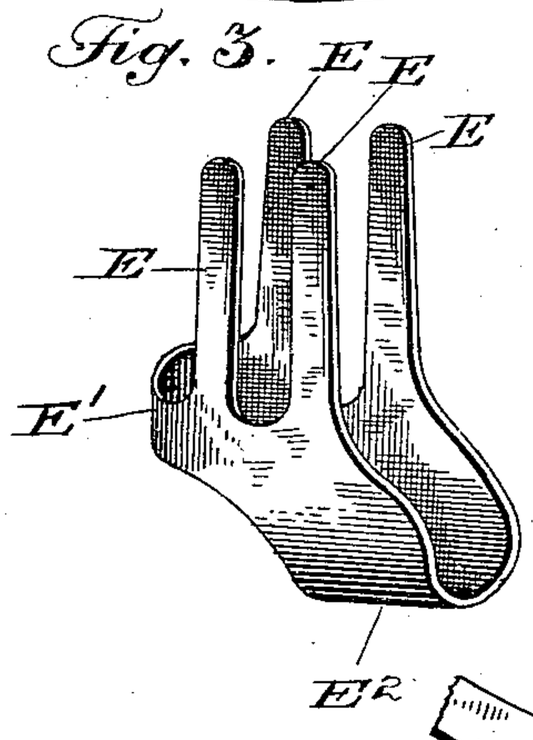
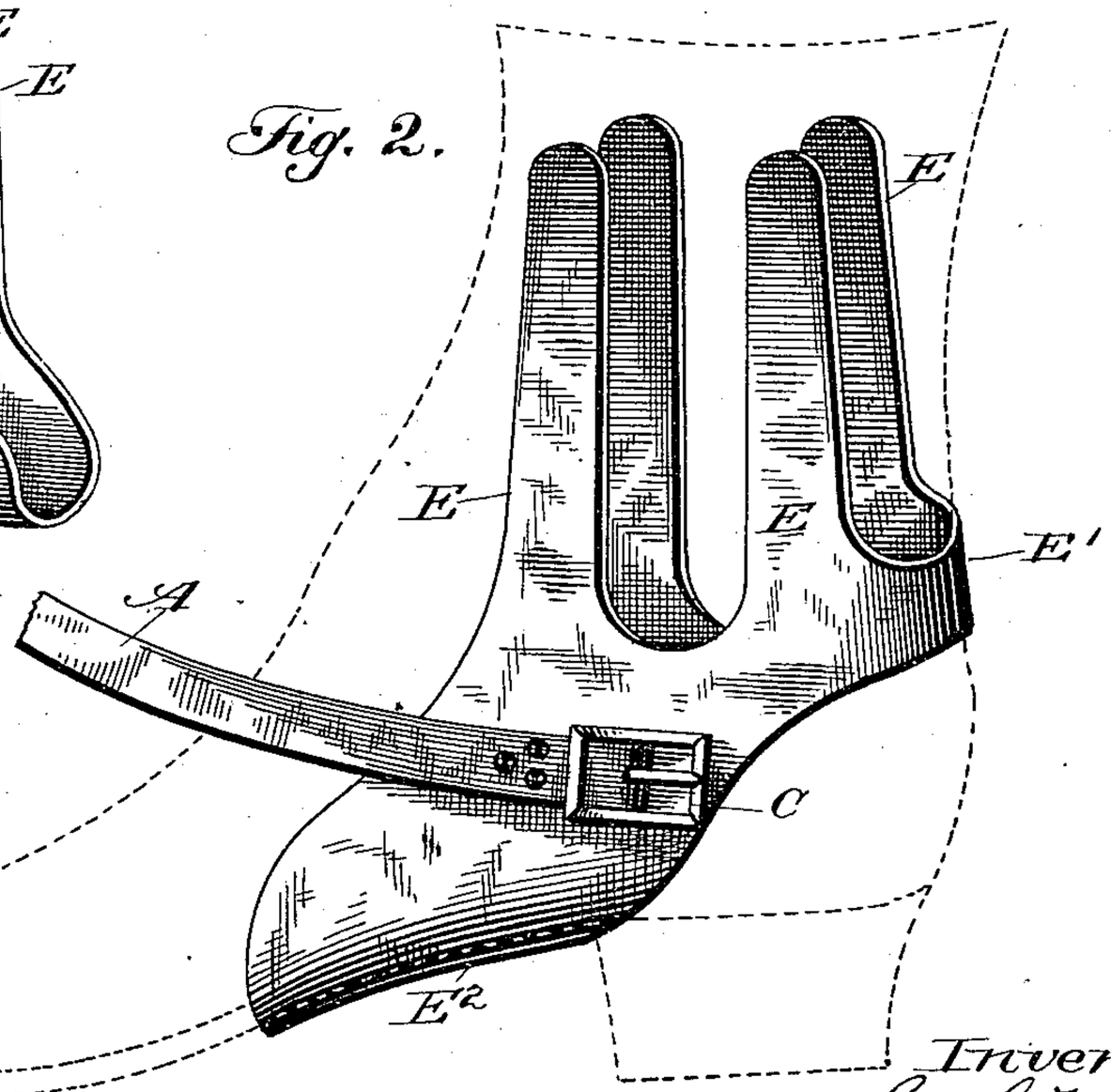


Fig. 2.



Witnesses:
L. C. Hills
J. Hobbam

Inventor:
Geo. C. McEwen
By E. B. Stocking
Atty.

UNITED STATES PATENT OFFICE.

GEORGE C. McEWEN, OF NEWARK, NEW JERSEY.

ANKLE-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 332,728, dated December 22, 1885.

Application filed March 12, 1885. Serial No. 158,587. (No model.)

To all whom it may concern:

Be it known that I, GEORGE C. MCEWEN, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Ankle-Supports, of which the following is a specification, reference being had to the accompanying drawings.

This invention has relation to ankle-supports, and is designed especially to be applied to the outside of the boot or shoe of the wearer, and to support the ankle against motion sidewise, and to strengthen the same either for physical purposes or use in roller and blade skating.

It is well known that in the use of roller and blade skates the ankle is subjected to an unusual strain, and the object of my invention is to provide means whereby injuries from said strain may be prevented and a stiffness of the ankle-joint may be secured, and proficiency and ease in skating may be acquired.

The invention consists in certain features of construction hereinafter specified, and particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a side elevation of an ankle-support constructed in accordance with my invention represented in position upon a boot or shoe. Fig. 2 is a side elevation of the same adapted to be used independently of the body portion shown in Fig. 1. Fig. 3 is a perspective of the form of support illustrated in Fig. 2.

Like letters indicate like parts in all the figures.

A represents the body portion of the support, which is provided with sections or gores B of elastic fabric, and with fastening devices, C, whereby the body portion may be adjustably secured to boots of different sizes. Within the body portion, or between the plies thereof, by means of rows of stitches D′, pockets are formed for the reception of strengthening-ribs D, which are formed in this instance as a part of the more rigid portion of the protector as a whole. The said portion is or may be constructed of sheet metal, paper, or paper-board, leather, or any other suitable and sufficiently rigid material, the ribs E thereof being more or less resilient and adapted to conform to the irregular contour of the ankle of the wearer when bound thereto by means of the body portion A or its equivalent as hereinafter described. I shall herein designate said portion of the supporter as the "frame-work" thereof, said frame-work consisting of a heel-band, E′, and an instep-band, E², connected one to the other, the connecting portion being provided with the upwardly-projecting resilient strengthening-ribs E.

When the frame-work is made of light material—such, for example, as paper-board—separate strengthening-ribs of more resilient material may be applied to or embedded in the ribs E, substantially in the manner shown in companion application filed herewith. In the form shown in Fig. 1 the strengthening-ribs E are inserted in the pockets formed by the rows of stitches D. So also is the heel-band E′, while the instep-band is arranged beneath the instep portion of the sole of the boot or foot of the wearer.

If desired, additional stitches or rivets or any other suitable fastening devices may be employed, as shown by dotted lines D′, Fig. 1, as a further means of retaining the frame-work within the pockets or the body portion upon the support.

In the modification illustrated in Fig. 2 I substitute for the textile or other body portion having the elastic web B a strap secured at one side of the frame-work, and between the heel and instep bands, of sufficient length to be coiled or tightly bound spirally around the ankle upward to the upper end of the strengthening ribs or prongs E, and from thence spirally downward to the place of beginning, where it is fastened by the buckle C. In this manner a more firm binding of the ribs or prongs and the bands E E′ to the foot, boot, or shoe is possible than in the modification shown in Fig. 1, while at the same time the well-known capability of elastic webbing to snugly conform to the contour of the ankle is availed of to insure firmness and strength of the ankle, for the purposes specified.

I do not herein claim, specifically, the construction of the body portion as illustrated in Fig. 1, as that is made the subject-matter of the companion application above mentioned.

The number of prongs E may be increased at each side of the frame-work, if desired—that is to say, I prefer no less than two, but

may use more. The objections of having a single wide prong is that it does not conform to the irregular contour of the ankle, as would one formed with two or more prongs.

I do not limit my invention to its use outside of a boot or shoe, but deem it as comprehending such modifications of proportions as will adapt it to fit the foot and ankle of the wearer for either physical treatment and purposes or for use in connection with skates.

Having described my invention and its operation, what I claim is—

1. An ankle-support formed of a single piece of material, and consisting of an instep-band and upwardly-projecting prongs at each side thereof, substantially as specified.

2. In an ankle-support, the combination, with the frame-work comprising instep and heel bands and upwardly-projecting strengthening ribs or prongs, of a body portion or its described equivalent mounted thereon and adapted to be bound around the ankle, substantially as specified.

3. In an ankle-support, the combination of a body portion having an elastic web forming a part thereof, fastening devices, and strengthening-rib-receiving pockets, with a frame-work formed in a single piece and comprising strengthening ribs or prongs, a heel-band, and an instep-band, the whole being adapted for use outside of a boot or shoe, substantially as specified.

4. The combination of the instep-band E^2, the heel-band E′, and the upwardly-projecting resilient strengthening-ribs E with a fastening device or body portion, as A, substantially as shown and described.

5. The combination of the body A, provided with the fastening devices C, the web B, and pockets formed by stitches D′, of the frame-work comprising the prongs E and heel-band E′, secured in said pockets, and the instep-band E^2, projecting below said body, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE C. McEWEN.

Witnesses:

E. B. STOCKING,

J. H. HAHN.