E. DAHL.

BRACE FOR CORRECTING FOOT ANGLES.

APPLICATION FILED JUNE 23, 1919.

1,340,700.

Patented May 18, 1920.

Fig. 1

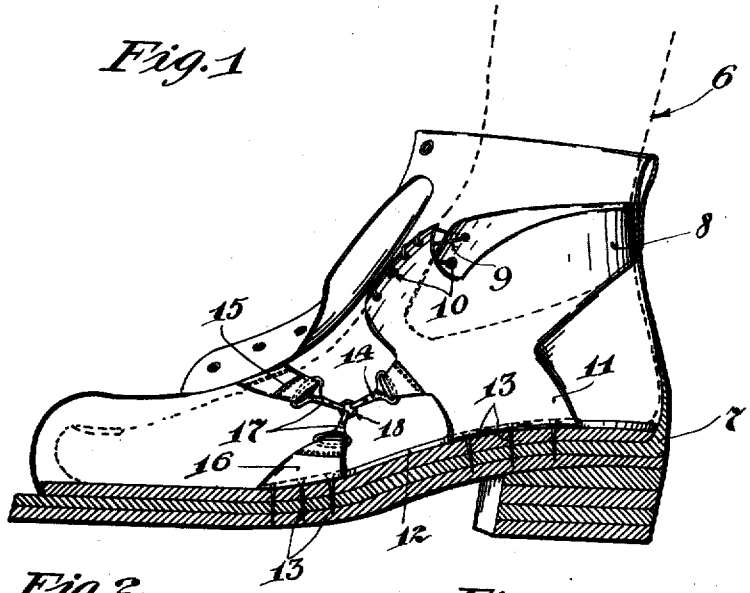


Fig. 2

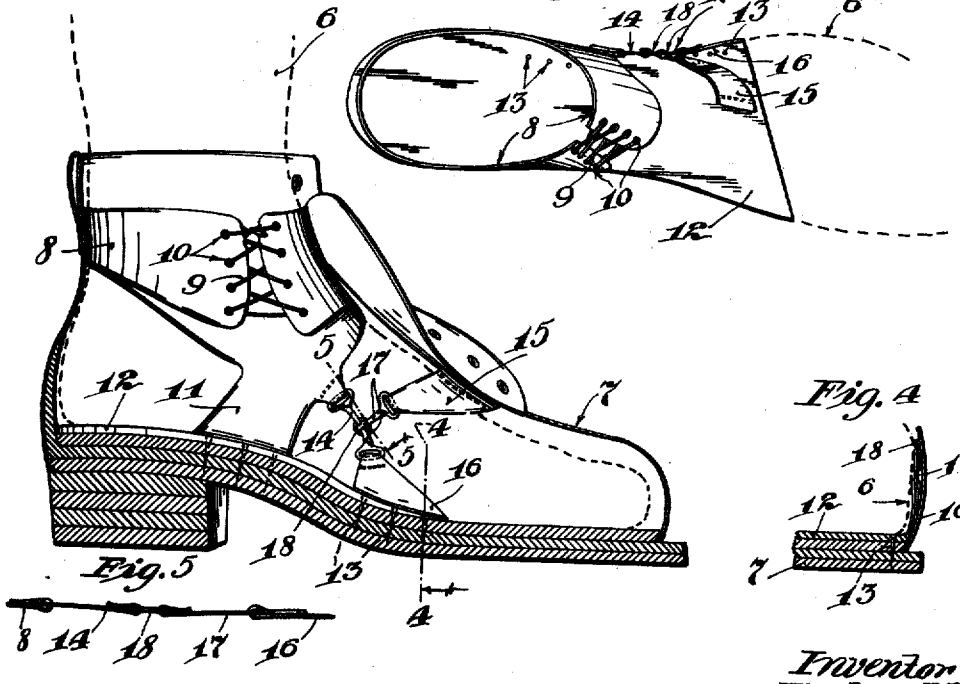


Fig. 3

Fig. 4

Inventor
Emil Dahl
By his Attorneys
Williamson & Merchant

UNITED STATES PATENT OFFICE.

EMIL DAHL, OF MINNEAPOLIS, MINNESOTA.

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Application filed June 23, 1919. Serial No. 306,212.

To all whom it may concern:

Be it known that I, EMIL DAHL, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Braces for Correcting Foot-Angles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object to provide a brace for correcting the foot angle of persons who are either pigeon-toed or whose feet turn out at too great an angle.

To the above end, the invention consists of the novel devices and combinations of devices hereinafter described and defined in the claims.

In the accompanying drawings, which illustrate the invention, like characters indicate like parts throughout the several views.

Referring to the drawings:—

Figure 1 is a view partly in inside elevation and partly in longitudinal section, with some parts diagrammatically illustrated by means of broken lines, showing the brace applied to a left foot having thereon a shoe to which the brace is secured;

Fig. 2 is a view corresponding to Fig. 1, with the exception that the parts are viewed from the opposite side:

Fig. 3 is a plan view of the brace positioned on the shoe sole, diagrammatically illustrated by means of broken lines;

Fig. 4 is a detail view principally in section, taken on the irregular line 4—4 of Fig. 2; and

Fig. 5 is a detail view on an enlarged scale, with some parts sectioned on the line 5—5 of Fig. 2.

The numeral 6 indicates a left foot, having thereon a shoe 7, to which the improved brace is secured and applied to said foot in position to correct the foot angle thereof by turning the same outward. The improved brace, as shown, comprises an ankle strap 8 arranged to extend around the ankle of the foot 6 with its ends terminating short of each other on the inside of the foot and slightly forward, as best shown in Fig. 3. A lacing 9 is inserted through eyelets 10 in the end portions of the ankle strap 8 to adjustably secure the same around the ankle of the foot 6.

Formed with the lower edge of the ankle strap 8, on the opposite side of the foot from the lacing 9, is a downwardly and rearwardly projecting anchor strap 11, the lower end of which is formed with or otherwise secured to the outer longitudinal edge of the sole member 12, and at a point substantially over the front of the heel of the shoe 7. The sole member 12 rests upon the inner sole of the shoe 7 and extends from the counter of said shoe to a point slightly forward of the ball portion thereof, and is secured by nails 13 to the sole of the shoe as best shown by Fig. 1. A snap 14 is attached to the front vertical edge portion of the anchor strap 11 substantially at its junction with the angle strap 8.

Upper and lower rearwardly converging anchor straps 15 and 16, respectively, are secured, the former by stitching to the shoe upper and the latter by forming or otherwise securing the same to the outer edge of the sole member 12 at the ball portion thereof, and substantially directly below the attachment of the anchor strap 15 with said shoe upper. On the rear or free end of each anchor strap 15 and 16 is secured a snap 17, and a ring 18 detachably connects all of the snaps 14 and 17. By reference to Fig. 5, it will be noted that the snaps 14 and 17, and ring 18 are flat so that they will not hurt the person's foot to which the brace is applied.

The relative arrangement of the anchor straps 11, 15 and 16 is such that they extend over the outside portion of a person's foot, and by adjusting the lacing 9, the brace may be caused to pull the toe portion of the shoe outward and thereby cause a person who is pigeon-toed to turn his foot, to which the brace is applied, outward.

From the above description, it is evident that the improved brace may be very quickly applied to a shoe by simply nailing its sole member 12 to the sole of a shoe and stitching the anchor strap 15 to the shoe upper. After a person puts the shoe on his foot, the ends of the anchor strap may be connected thereabout by the lacing 10 before the shoe is laced or otherwise fastened. To correct the foot angle of a person whose feet turn outward at too great an angle, the arrangement of the improved brace will just be the reverse from that shown in the drawings, which is to correct the foot angle of a pigeon-toed person.

What I claim is:—

1. A brace for the purpose set forth, com-

prising a sole member applicable to the inner sole of a shoe, an adjustable ankle strap attached to the sole member, and an anchor strap for connecting the ankle strap to the shoe upper forward of said ankle strap.

2. A brace for the purpose set forth, comprising a sole member applicable to the inner sole of a shoe, and an adjustable ankle strap having two anchor straps, one of which is secured to the sole member, and the other of which is adapted to be secured to the shoe upper forward of said ankle strap.

3. A brace for the purpose set forth, comprising a sole member applicable to the inner sole of a shoe, an adjustable ankle strap having two anchor straps, one of which is secured to the sole member in the vicinity of the ball portion thereof, and the other of which is adapted to be secured thereover to the shoe upper, and a third anchor strap connecting the ankle strap to the sole member in the vicinity of the heel portion thereof.

4. A brace for the purpose set forth, comprising a sole member applicable to the inner sole of a shoe, an ankle strap, a lacing adjustably connecting the ends of the ankle strap, an anchor strap securing the ankle strap to the sole member in the vicinity of the heel portion thereof, and a pair of diverging anchor straps for the ankle strap, one of which is secured to the sole member forward of the first noted anchor strap, and the other of which is adapted to be secured to the shoe upper, all of said anchor straps being located on the same side of the shoe, and said lacing being located on the opposite side of the shoe from the anchor strap.

5. A brace for the purpose set forth, comprising a sole member, applicable to the inner sole of a shoe, an ankle strap, a lacing adjustably connecting the ends of the ankle strap, an anchor strap securing the ankle strap to the sole member in the vicinity of the heel portion thereof, a forwardly projecting hook attached to the ankle strap, a pair of rearwardly converging anchor straps, one of which is secured to the sole member in the vicinity of the ball portion thereof, and the other of which is adapted to be secured thereabove to the shoe upper, snaps on the free ends of said pair of converging anchor straps, and a ring connecting all of said snaps.

In testimony whereof I affix my signature in presence of a witness.

EMIL DAHL.

Witness:
HARRY D. KILGORE.