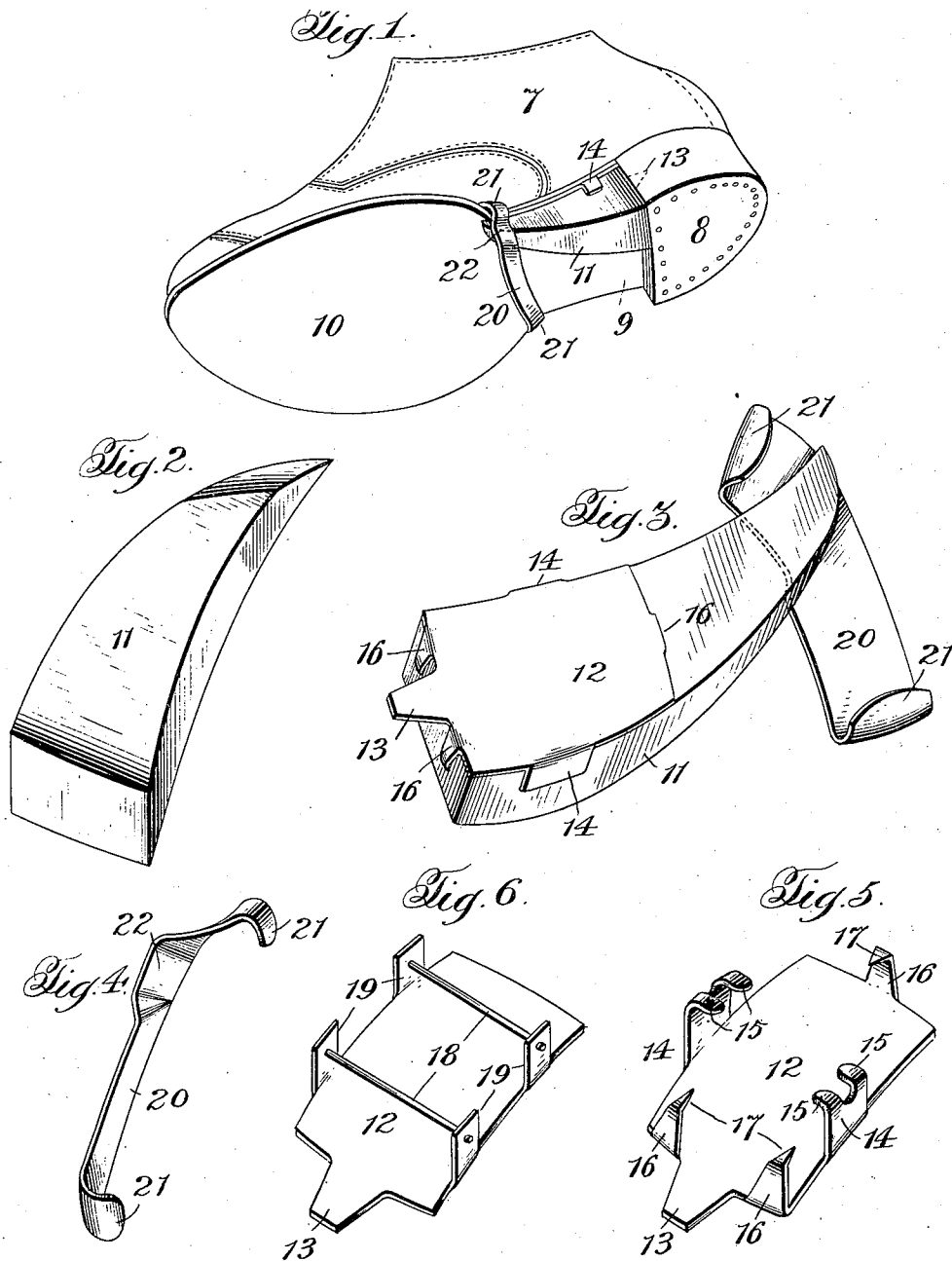


E. J. EMERY.
ARCH SUPPORT.
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1,061,056.

Patented May 6, 1913.



Witnesses

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ELIAS J. EMERY, OF PORTSMOUTH, NEW HAMPSHIRE.

ARCH-SUPPORT.

1,061,056.

Specification of Letters Patent.

Patented May 6, 1913.

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To all whom it may concern:

Be it known that I, ELIAS J. EMERY, a citizen of the United States, residing at Portsmouth, in the county of Rockingham and State of New Hampshire, have invented certain new and useful Improvements in Arch-Supports, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention contemplates an arch-support, preferably of resilient material such as rubber, arranged to be attached outside of a shoe or the like forward of the heel and under the arch or instep; and the invention provides simple and reliable means for securing such a support in place without injury to the article of footwear with which it is associated and in such manner that it may be detached easily when desired.

20 When read in connection with the description herein, the details of construction and arrangement of parts contemplated by the invention will be apparent from the accompanying drawing, forming part hereof, wherein a preferable embodiment of the invention, as applied to a shoe, is disclosed, for purposes of illustration.

While the disclosures herein now are considered to represent the best embodiment of the invention, it is to be understood that it is not the intention to be limited necessarily to this embodiment in interpretation of claims hereinafter, as it is obvious that various changes within the scope of the claims can be made without departing from the nature and spirit of the invention.

Like reference-characters refer to corresponding parts in the view of the drawing, of which—

40 Figure 1 is a view of the support attached to a shoe; Fig. 2 is an enlarged view of the support; Fig. 3 is an enlarged view of the support and its securing devices; Fig. 4 is an enlarged view of the clamp for securing the front part of the support; Fig. 5 is a view of one form of securing-plate; and Fig. 6 is a view of another form of securing-plate.

Having more particular reference to the drawing, 7 designates a shoe or other article of footwear, 8 the heel, 9 the instep portion of the sole, and 10 the tread portion of the sole. The support includes a pad 11, preferably of rubber or other resilient ma-

terial, shaped to fit the contour of the shoe at the instep and to afford a bearing surface extending from the heel to the tread portion of the sole, and arranged to have a larger end abut the front surface of the heel and a smaller or reduced end extend to, or about to, the rear end of the tread portion of the sole, whereby a support is afforded between the heel and the ball of the foot of the wearer.

For the purpose of attaching the pad at its rear end to a shoe, there is secured to the upper surface of the pad a plate or member 12 of rigid sheet material, preferably metal, from which extends rearwardly and beyond the rear end of the pad a tongue 13 arranged to be disposed between the heel and sole or between the layers of material forming the heel of a shoe. Member 12 may be attached to the pad by depending side clips 14 having inwardly-extending prongs 15 projecting into the material of the pad and by depending clips 16 having inwardly-extending prongs 17 also projecting into the pad material, as shown by Fig. 5; or member 12 may be attached to the pad by rivets or rods 18 passing through the pad and having their ends secured in depending side lugs 19, as shown by Fig. 6.

In order to secure the pad to the shoe at its front reduced end, there is provided a spring metal clamp 20, having inturned ends 21 arranged to engage over the sole at its side edges and an offset portion 22 arranged to embrace the reduced end of the pad when the clamp is in place on the shoe. The clamp is so shaped and proportioned that it spans the sole at the place where it begins to widen from the comparatively narrow portion under the instep to the comparatively wide tread portion, whereby the clamp is prevented from working forward and becoming disengaged from the pad. The contact of the clamp with the pad prevents the clamp from working rearwardly to a narrower part of the instep portion of the sole where it might become disengaged from the sole.

The support is attached to a shoe by first inserting the tongue 13 between the heel and sole or between layers of material forming the heel and then pressing the rear end of the pad against the front surface of the heel; and then the clamp 20 is sprung over

the sole in the proper place with its offset portion 22 embracing the front reduced end of the pad. The support is removed by reversal of this process.

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

1. An arch-support comprising a pad arranged to be secured outside of footwear 10 and under the instep portion of the sole, on the upper surface of the pad a plate having thereon clips with portions thereof projecting into the material of the pad, means on the plate whereby the pad is secured in 15 place at its rear end, and means for attaching the pad at its front end.

2. An arch-support comprising a pad arranged to be secured outside of footwear 20 and under the instep portion of the sole, a clamp arranged to span the sole and embrace the front end of the pad, and means for attaching the pad at its rear end.

3. An arch support comprising a pad arranged to be secured outside of footwear 25 and under the instep portion of the sole, a clamp of spring material arranged to embrace the front end of the pad and having inturned ends arranged to engage over the sole, and means for attaching the pad at its 30 rear end.

4. An arch-support comprising a pad arranged to be secured outside of footwear 35 and under the instep portion of the sole, a clamp of spring material arranged to span the sole and having an offset portion ar-

anged to embrace the front end of the pad, and means for attaching the pad at its rear end.

5. An arch-support comprising a pad arranged to be secured outside of footwear 40 and under the instep portion of the sole, a clamp of spring material formed with an offset portion adapted to embrace the front end of the pad and having inturned ends arranged to engage over the sole, and means 45 for attaching the pad at its rear end.

6. An arch-support comprising a pad arranged to be secured outside of footwear and under the instep portion of the sole, 50 a tongue on said pad arranged to cooperate with the heel of footwear to attach the pad at its rear end, and a clamp arranged to span the sole and embrace the front end of the pad.

7. An arch-support comprising a pad arranged to be secured outside of footwear 55 and under the instep portion of the sole, on the upper surface of the pad a plate having thereon clips with portions thereof projecting into the material of the pad, means on 60 the plate whereby the pad is secured in place at its rear end, and a clamp arranged to span the sole and embrace the front end of the pad.

In testimony whereof I affix my signature 65 in presence of two witnesses.

ELIAS J. EMERY.

Witnesses:

ROSE LEVY,
STEWART M. SIRE.