No. 892,652. PATENTED JULY 7, 1908

F. DAHLMANN.

FOOT SUPPORT AND PROTECTOR.

APPLICATION FILED FEB. 14, 1908.

Fig. 1.

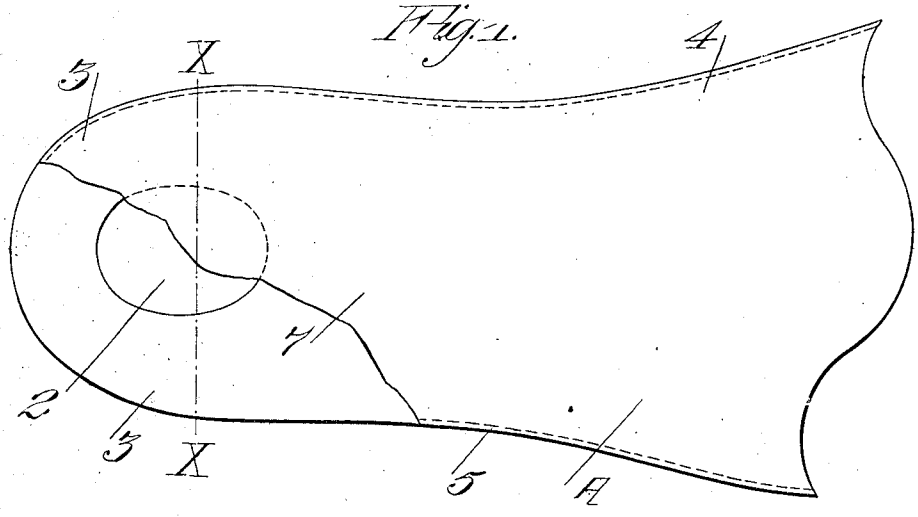


Fig. 2.

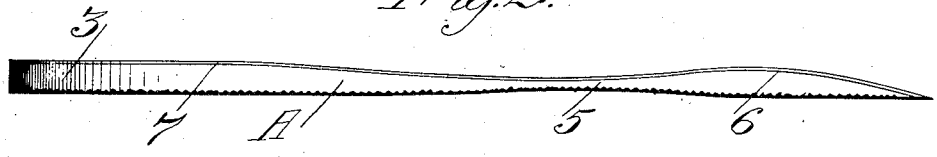


Fig. 3.

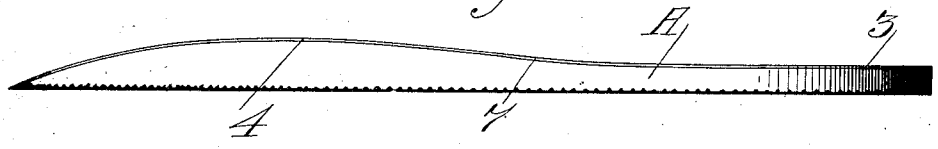
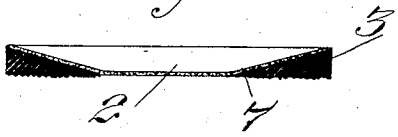


Fig. 4.



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FOOT SUPPORT AND PROTECTOR.

No. 892,652. Specification of Letters Patent. Patented July 7, 1908.

Application filed February 14, 1908. Serial No. 415,903.

To all whom it may concern:

Be it known that I, FRITZ DAHLMANN, citizen of the United States, residing in the city and county of San Francisco and State of California, have invented new and useful Improvements in Foot Supports and Protectors, of which the following is a specification.

My invention relates to an improvement in supporting and protecting devices for the feet of those who are compelled to stand for long periods.

It consists of a pad conforming to the irregularities of the sole, and in details of construction which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a plan view. Fig. 2 is a side elevation of the outside edge. Fig. 3 is a similar view of the inside edge. Fig. 4 is a section on line X—X, Fig. 1.

Where persons have to stand very constantly on their feet, in the operation of certain machines, and for other purposes, such as in bread-making, the weight constantly brought upon the protuberant bones of the heel and the front portion of the foot soon causes the feet to become so sore that it is impossible to stand or walk; and if continued under these conditions, it is liable to produce serious results to said bones.

It is the object of my invention to so form the surface upon which the foot rests, that the hollow of the foot beneath the instep will be properly supported, and so that that portion of the rounded heel bone which would normally rest upon the surface and carry a great portion of the weight of the individual, will be relieved by a concaved pocket, so formed that the sides of the heel will receive the greater portion of the weight. That portion beneath the instep and on the inside is raised or thickened to form a support at this point, and the front portion of the foot is allowed to rest upon a depressed and yielding portion, so that the whole formation of the lower part of the foot is easily supported, and its normal outline is closely followed.

To carry out my invention I have formed a sole which may be placed within any ordinary shoe. In the formation of this sole I employ a rubber or elastic pad A, which is provided with an oval opening 2, of such shape and character as to substantially follow the outline of the bone of the heel. This pad is made thin about the periphery of the opening, and is thickened up around the outside, as shown at 3, to any desired extent, so that the outside portions of the heel will have a support, while the central and harder portion will be allowed to sink into the opening. This pad A is curved to the shape of the interior of the heel portion of the shoe, thence continued forward, and narrowed sufficiently to follow the shank of the shoe. Through this portion and up to just beneath and behind the ball of the foot the inner side of the pad A is thickened to a greater degree than shown in the heel portion, as at 4, while upon the outside and beneath the outer joint bones near the center of the foot, the pad is again made thinner, as at 5, so as to allow it to depress to suit the conformation of this portion of the foot. It is again slightly thickened beyond this depression 5, and the front edge is curved to suit the conformation of the soft and hard portions of the foot just back of and beneath the ball of the foot, as shown at 6.

7 is a pad of thin leather having essentially the same contour as that of the pad A, and rests upon said pad. It may, if desired, be stitched or otherwise secured so as to maintain its proper position, and being thin, it will sink in all places where the pad A is cut away and will follow the higher portions in the same manner; thus providing a perfect support for the foot, but of such contour that all portions will be properly and proportionately supported thereon. The lower surface of the pad A may be corrugated or roughened in any suitable manner to prevent its slipping. It has been found by practice that perfect comfort is obtained by the wearer who may be compelled to stand in a single position for as much as nine hours in succession, and that all soreness vanishes, and the feet become normal. It will be understood that such a pad may be made to extend only to a point in front of the heel portion instead of extending the full length beneath the instep; such a short pad being in many cases sufficient, by reason of its protecting the heel.

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

1. A pad adapted to be worn inside of the shoe and shaped to conform to the shape of the shoe, said pad consisting of a unitary member having its upper surface provided with elevated and depressed portions con-

forming to the concavities and elevations of the bottom of the foot, one of said elevations substantially occupying the hollow of the foot beneath the instep, and a superposed thin pad shaped to conform to the first named pad and forming a continuous foot rest, and capable of moving to follow the outline of the lower pad.

2. In a foot-supporting device of the character described, an elastic pad having an opening formed beneath the heel with a thin peripheral margin, said pad being thickened outwardly from the opening to the periphery, and having a thicker portion beneath the instep on the inside, and a cut-away or thinner portion beneath the outside joint of the foot and the correspondingly shaped thin cover-piece of leather adapted to follow the contour of the elastic pad under the weight applied thereon.

3. In a device of the character described, an elastic pad having a lower roughened surface, an opening made beneath the heel with a thin peripheral margin, the pad being thickened outwardly to the edge around said opening, thence continuing forward and made thinner upon the outer edge beneath the outer joint of the foot, thence thickening to the front edge, said edge being beveled or chamfered and curved to fit the transverse contour of the foot behind the ball, thence continuing backward on the inside, and thickened to form a support for the hollow of the foot beneath the instep, thence merging into the heel portion, and a superposed sole of thinner material adapted to follow the contour of the pad under pressure.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FRITZ DAHLMANN.

Witnesses:
GEO. H. STRONG,
ELISABETH OEHLER.