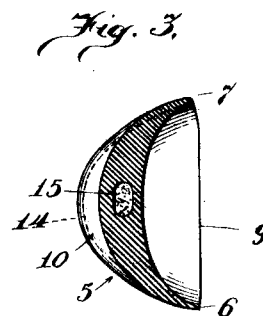
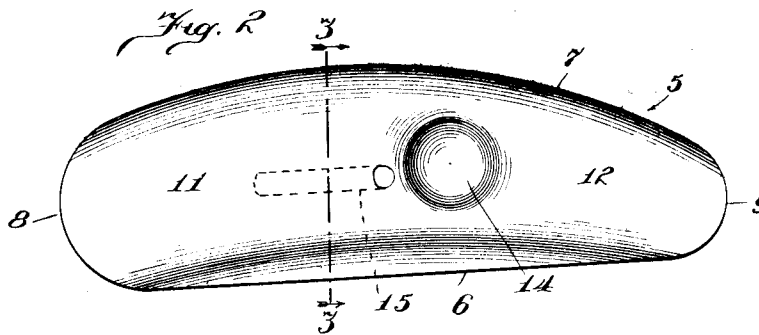
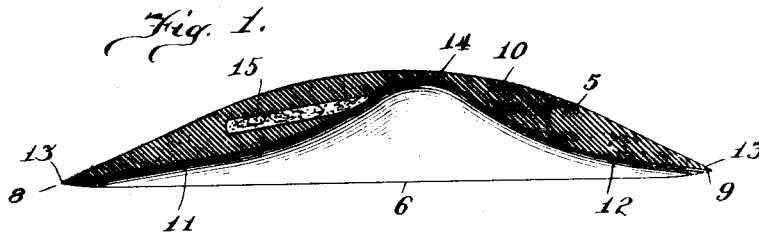


W. M. SCHOLL.
 UNION SHIELD.
 APPLICATION FILED JULY 31, 1911.

1,055,809.

Patented Mar. 11, 1913.



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UNITED STATES PATENT OFFICE.

WILLIAM M. SCHOLL, OF CHICAGO, ILLINOIS.

BUNION-SHIELD.

1,055,809.

Specification of Letters Patent.

Patented Mar. 11, 1913.

Application filed July 31, 1911. Serial No. 641,556.

To all whom it may concern:

Be it known that I, WILLIAM M. SCHOLL, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Bunion-Shields, of which the following is a specification.

My invention relates to improvements in bunion shields and more particularly to rubber shields which are adapted to be worn while wearing shoes.

One of the objects of my invention is to provide a device wherein not only an advantageous synergistic effect is produced by the retention of sweat and heat from the foot in the locality of the bunion, but additional healing effect is attained by the provision of a tubular opening or bore in such position in the body of the shield that pressure upon the device, such for instance as results from walking, will discharge upon the bunion a suitable medicament contained in the bore, such medicament having most favorable conditions of heat and confinement.

In the drawings, wherein I have illustrated an embodiment of my invention, Figure 1 is a longitudinal section of the device; Fig. 2 is a plan view thereof, showing the interior; Fig. 3 is a vertical section thereof, on line 3—3 of Fig. 1.

In the drawings, 5 indicates in general the shield, made of rubber, or like substance, and shaped, as shown in Fig. 2, to provide a substantially straight lower edge 6, a relatively curved upper edge 7 and curved or rounded ends, indicated respectively at 8 and 9, so that the shield may fit into the shoe in a vertical position, standing on edge 6.

As shown in Figs. 1 and 3, my device provides a uniformly curved outer surface 10 for conformity to the inside surface of the shoe, and as shown in Fig. 1, it provides, in longitudinal section, two surfaces 11 and 12, curved in the opposite direction to the curve of the outer surface 10, and meeting such surface 10 at the ends of the shield in a thin edge, as at 13—13, so that the foot may not be chafed by a perceptible ridge at the edges of the shield. At the center, the two surfaces 11 and 12 merge together to form a pocket, 14, into which the bunion may snugly fit.

In use, the curved surfaces 11 and 12 readily conform to the shape of the foot, the soft resilient rubber bodies included between the surfaces 11 and 12 and the outside

surface 10 being pressed inwardly by the shoe of the user. In vertical section, the surfaces 11 and 12 are generally curved, as shown in Fig. 3, to fit around the outside edge of the foot, adjacent the point of articulation of the metatarsal and phalangeal bones of the great toe, such vertical curve and the longitudinal curves above described merging to form the composite curves of the interior surface of the shield, so that the bunion and surrounding fleshy portions of the foot are throughout in intimate contact with the rubber surface of the shield. This results in the creation and retention of sweat and heat upon the bunion, which tends to reduce the swelling at the joint.

In order to increase the effectiveness of the shield above described, I provide in the body of the shield, as for instance in the portion included between the inner surface 11 and the outer surface 10, a tubular opening or bore 15, for a suitable medicament, said bore lying preferably longitudinally and opening into the pocket 14, so that when the shield is emplaced, the bunion is protected and synergistically treated as above described, while the bore 15 has its opening closed by contact with the bunion or adjacent surface of the foot. Now, it will be apparent that, if pressure be applied to the outside surface 10 of the shield, near the bore 15, some of the medicament therein contained will be pressed out into the moist warmed space between the bunion and shield, and in walking, for instance, the successive steps taken by the user will each cause such pressure, so that the bunion will be kept supplied. Further, the medicament, mixing with the confined perspiration, and maintained warm by the protecting body of rubber, has increased effectiveness to reduce the swelling and relieve the user of pain.

Having described my invention, what I claim is:

1. A bunion shield of a single piece of flexible, resilient material having an exterior surface shaped for conformity with the shoe, and an interior surface, having a central pocket shaped for conformity with the fleshy surface of a foot over and adjacent a bunion, said shield being very thin in the portion overlying the bunion pocket and thickened for pressure distribution in front of and in rear of the bunion pocket, and said shield having a medicament-receiving bore running lengthwise of the shield in

one of said thickened portions, wholly to one side of the pocket and opening laterally into the pocket.

2. A bunion shield of material having the
5 essential qualities of rubber, said shield having its exterior surface forming a long longitudinal arch and a shorter transverse arch and having its interior surface formed to fit a great toe joint, and with a bunion-receiving pocket extending nearly to the crest
10 of the exterior arch so that thicker portions of the shield lie, on opposite sides, longitudinally, of the said pocket, said shield having a bore for the reception of a medicament extending longitudinally of one of said
15 thicker portions and opening into a side of the bunion pocket.

3. A bunion shield, of material having the essential qualities of rubber, said shield
20 having an outer surface for conformity to

the inner surface of a shoe, and an inner surface longitudinally providing two curved surfaces 11 and 12, and vertically providing a curve to fit the outside edge of a foot adjacent the affected joint of the great toe, 25 said several inner curves forming a pocket the inner surface of which is adapted to lie in intimate contact over and around a bunion, for purposes described, and said shield providing between its exterior surface 30 and the interior surface, underlying one of the longitudinal curves (11 or 12) a bore for medicament opening to said bunion-receiving pocket.

In testimony whereof I hereunto set my 35 hand in the presence of two witnesses.

WILLIAM M. SCHOLL.

In the presence of—

FORÉE BAIN,

MARY F. ALLEN.