

P. O. POULSON.
INSOLE.
APPLICATION FILED MAR. 25, 1912.

1,051,258.

Patented Jan. 21, 1913.

FIG. 1.

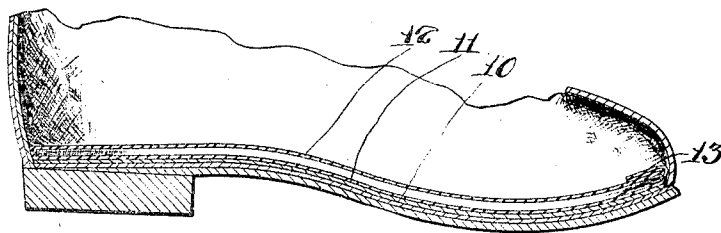


FIG. 2.

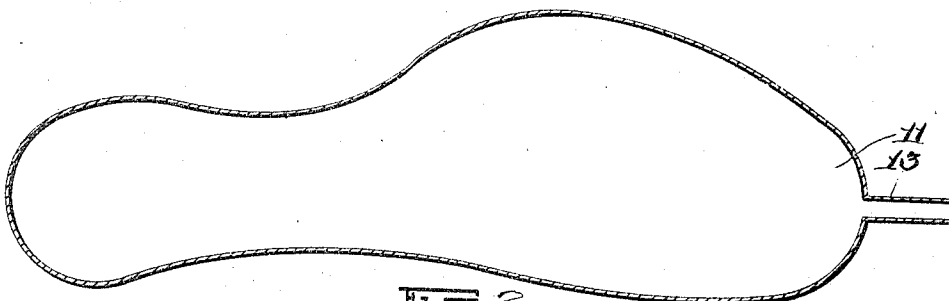
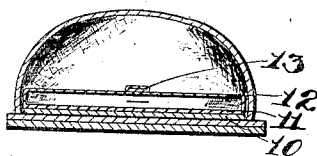


FIG. 3.



WITNESSES
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INSOLE.

1,051,258.

Specification of Letters Patent.

Patented Jan. 21, 1913.

Application filed March 25, 1912. Serial No. 685,957.

To all whom it may concern:

Be it known that I, PALMER O. POULSON, a citizen of the United States, residing at Hagerman, in the county of Chaves and State of New Mexico, have invented certain new and useful Improvements in Insoles, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to foot wear and has special reference to an inflatable insole adapted to be placed in an ordinary shoe to cushion the foot of the wearer.

15 The principal object of the invention is to provide a simple and efficient device which will cushion the foot of the wearer and prevent callosities on the foot sole.

20 With the above and other objects in view this invention consists in general of certain novel constructions, hereinafter fully described and claimed.

25 In the accompanying drawings like characters of reference indicate like parts in the several views, and: Figure 1 is a vertical longitudinal median section through the counter and sole of a shoe. Fig. 2 is a horizontal section through the inflatable insole, the same being removed from the shoe. Fig. 3 is a transverse section taken adjacent the toe of the shoe with this insole in position.

30 The insole comprises a strip of leather or like material 10 whereto is suitably cemented the lower half of an inflated rubber bag 11. Around the edges of this inflatable bag 11 is secured by cementing or vulcanizing an upper bag half as indicated at 12. Each of these halves is provided at its front or toe end with an extension 13, which, when they have their edges cemented together, 40 form a tube for the inflation of the sole. The leather strip and the inflatable bag are made to conform to the shape of the inside of the shoe as can readily be seen by reference to Fig. 2. Furthermore, it should be 45 noted that the tube extension 13 is of substantially the same thickness as the material of the bag body so that no bulge is made at the toe where the tube is positioned.

50 Another point to be observed is that these insoles can be readily removed as they form no permanent part of the shoe.

In use the insole is inflated by blowing into the tube 13 around which a piece of twine is then bent to prevent the egress of air. The insole is then slipped into the shoe 55 with the tube 13 bent backward, the leather side being preferably downward. The rubber, being soft and flexible, the tube will collapse and lie flat beneath or between the wearer's toes so that no chafing from this 60 source is had.

In walking with this insole when the foot first strikes the ground the heel which carries the weight at this time will force the air forward toward the toe, giving a 65 cushioning effect while when the foot leaves the ground the air is forced backward toward the heel, thus allowing gradual striking of the ball of the foot on the ground. In both cases contact of the foot with the 70 solid shoe is gradual and avoids all shock.

By reason of the detachability of these soles a pair may be used with several different pairs of shoes, thus avoiding the necessity of purchasing specially made shoes 75 in order to obtain the effect of an air cushion.

There has thus been provided a simple and efficient device of the kind described and for the purposes specified. 80

Having thus described the invention, what is claimed as new, is:—

An inflatable insole for shoes comprising a strip of leather-like material conforming in outline to the inside of a shoe sole, a strip 85 of flexible elastic material cemented to said leather and conforming in outline thereto, a second strip of similar material, each of said strips being provided with a tongue forming an extension of the toe portion, the 90 edges of said tongue extensions being secured together and the edges of said elastic strips being likewise secured to form an elastic bag provided with an inflation tube.

In testimony whereof I hereunto affix my 95 signature in presence of two witnesses.

PALMER O. POULSON.

Witnesses:

M. N. POULSON,
L. C. SLATER.