

Oct. 7, 1941.

J. DE NORONHA

2,257,902

RUBBER OVERSHOE

Filed Dec. 19, 1938

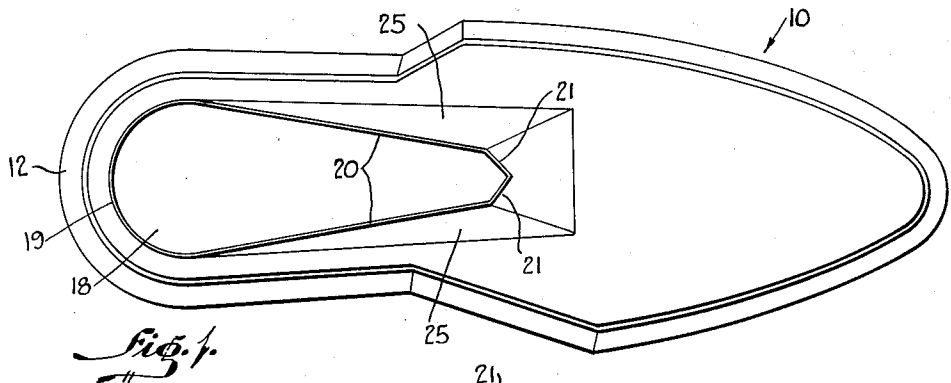


Fig. 1.

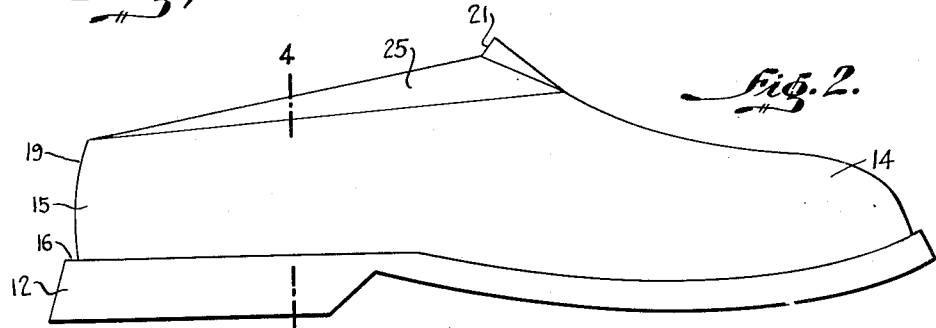


Fig. 2.

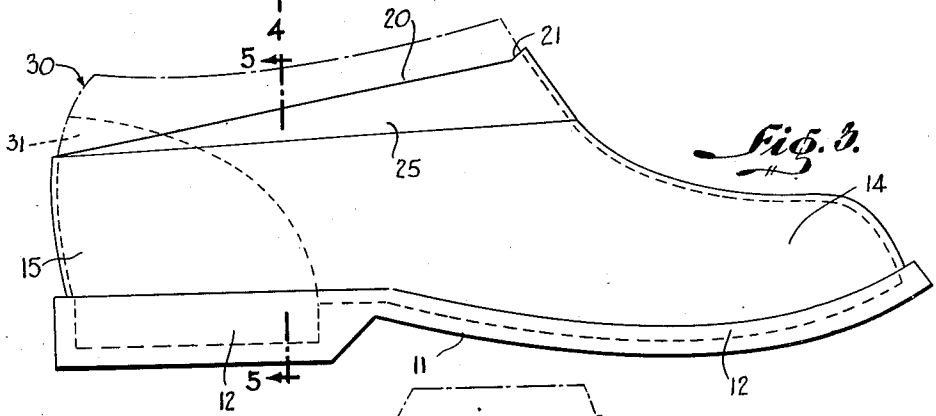


Fig. 3.

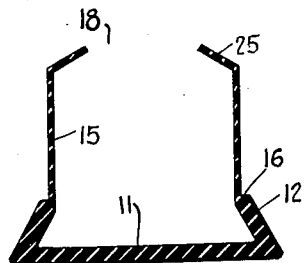


Fig. 4.

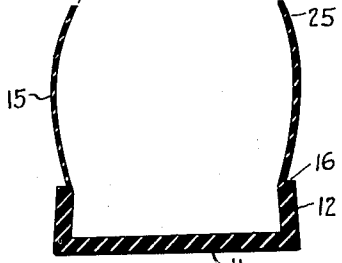


Fig. 5.

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2,257,902

RUBBER OVERSHOE

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Application December 19, 1938, Serial No. 246,642

8 Claims. (Cl. 36—7.3)

This invention relates to rubber overshoes. It is particularly directed to men's overshoes made of elastic rubber without cloth lining.

Heretofore, it has been found necessary to manufacture rubber overshoes in a large number of sizes in various shapes in order to insure a good fit on a corresponding large number of sizes and shapes of shoes. It has been found, furthermore, that rubber overshoes as made heretofore press the front or vamp portions of the shoes where the leather is soft and consequently, pressure is transmitted to the foot causing sweat and undesirable fatigue. It is therefore an object of the invention to provide a rubber overshoe which will fit various sizes and shapes of shoes, and which will not press unduly hard on the vamp portion of the shoe, whereby said overshoes will be comfortable to wear.

It has been found, furthermore, that the rear portion of similar rubber overshoes as heretofore made overlap the upper edge of the shoe and unnecessarily extend into the trousers thereby soiling the socks and unduly pressing upon the sensitive tendons of the feet. It is therefore a further object of this invention to provide a rubber overshoe in which the rear curved part of the counter terminates below the soft leather zone at the upper edge of the counter of the shoe on which the overshoe is worn, whereby the pressure is confined to the hard capped portion of the shoe counter. To this end, the upper edge of the overshoe forming the entrance for the shoe, is in an inclined plane slanting downward toward the rear, instead of upwardly toward the rear, as in such type of overshoes now in use.

A further object of this invention is to provide an overshoe in which the counter is undersized relative to the vamp portion of the overshoe, being narrower than the counter portion of the ordinary overshoe, so as to firmly though elastically grip the counter of shoes for which the overshoe is intended, thereby relieving the pressure from the vamp portion of the shoe.

Still another object of this invention is to provide an overshoe having walls extending upwardly from the bottom of the overshoe and inclined inwardly and upwardly all around, whereby, when the overshoe is worn the heel of the shoe and the edges of the sole of the shoe will press outwardly, to extend said inclined portion of the overshoe, straightening the same, whereby more than one size and shape of shoe may be worn with the overshoe, said inclined portions of the overshoe in the bottom of the overshoe being thicker than the vamp and counter portions of

the overshoe in order to ensure sufficiently firm though elastic resistance against spreading.

Yet another object of this invention is to provide an overshoe of the character described, having a substantially triangular shaped opening at the top with linearly straight edges forming a constricted entrance for the shoe, adapted to have its edges stretched upon the leather of the shoe, said triangular opening preferably having its apex forwardly and the base at the rear.

Yet another object of this invention is to provide an overshoe of the character described, having portions adjacent the opening of the overshoe, and on either side thereof, inclined upwardly and inwardly and increasing in width toward the front, said portions being adapted to open out against the leather upon being forced out by the greater bulk of the shoe upon which the overshoe is worn.

Still another object of this invention is to provide a light, strong and durable overshoe of the character described, which shall be relatively easy to don and doff, and which shall be relatively inexpensive to manufacture, attractive in appearance, and efficient and practical to a high degree in use.

Other objects of this invention will in part be obvious and in part hereinafter pointed out.

The invention accordingly consists in the features of construction, combinations of elements, and arrangement of parts which will be exemplified in the construction hereinafter described, and of which the scope of application will be indicated in the following claims.

In the accompanying drawing, in which is shown one of the various possible illustrative embodiments of this invention,

Fig. 1 is a top plan view of an overshoe embodying the invention;

Fig. 2 is a side view thereof;

Fig. 3 is a side elevational view of the improved overshoe when worn on a shoe;

Fig. 4 is a cross-sectional view taken on line 4—4 of Fig. 2; and

Fig. 5 is a cross-sectional view taken on line 5—5 of Fig. 3.

Referring now in detail to the drawing, 10 designates an overshoe embodying the invention. The overshoe is preferably manufactured by the known process of pressing rubber within closed steel molds and curing by heat under high pressure. By this process the rubber acquires a permanent set elasticity, so that when the overshoe is worn on a shoe much too large, the overshoe

will assume its original shape as soon as it is removed from the shoe, without deformation.

The overshoe 10 comprises a sole portion or bottom wall 11, extending along the whole length of the overshoe from front to rear. Extending upwardly from the wall 11 in integral relation therewith is an upwardly and inwardly inclined lower side wall 12, adapted to be contacted by the sides of the heel and edges of the sole of the shoe. The wall 12 inclines inwardly all around the shoe, so that when the shoe is worn the heel and sole of the shoe will press outwardly on the inclined wall 12 to expand and contract the same, as shown in Figures 4 and 5 of the drawing. The walls 11 and 12 are preferably relatively thick as shown in the drawing.

Extending upwardly from the wall 12 in integral relation therewith is a front vamp portion 14 and a rear counter portion 15. The vamp and counter portions 14 and 15 are thinner than the walls 11 and 12, and extend upwardly from the inner edge of the wall 12 leaving an outer ledge 16, at the upper edge of the wall 12, and forming thus an angular waist along the ledge 16. It will be observed by reference to Fig. 4 that the inner surface of the counter portion 15 of the upper forms an obtuse angle with the adjacent part of side wall 12.

The overshoe is formed with an opening 18 at the top, of substantially triangular shape and having a curved portion 19 at the rear, and forwardly converging portions 20 extending from the rear curved edge, towards the sharply inclined edge portions 21, at the forward ends of the edges 20.

It will be noted that the opening 18 is generally of triangular shape with the base at the rear and the apex at the front.

At each side of the edge portions 20 of the opening 18, are triangular wall portions 25, inclined upwardly and inwardly. The edge at the opening 18 is in an inclined plane slanting downwardly towards the rear, for the purpose hereinafter appearing, so that the rear curved edge portion 19 is lower than the front apex portion of the opening. The board part of the entrance opening 18 at the rear makes it easier for the overshoe to be put on or taken off the shoe.

When the overshoe is in position on the shoe, as shown in Figure 3 of the drawing, the triangular opening 18 is considerably stretched, with the result that its edges are tightly forced against the leather of the shoe to make a watertight closure. Furthermore, the triangular portions 25 being forced to open out by the bulk of the shoe, the lateral stretch thereby created, further contributes toward making the closure adjacent the edges of the opening more water-tight.

It will be noted that the edges of the opening 18 lie in a plane inclined downwardly toward the rear, the rear curved portion 19 corresponding to a point lying below the highest point of the counter stiffener 31 of the ordinary shoe. With this construction the soft leather zone 30 at the upper edge of the counter of the shoe which covers the sensitive tendons of the foot is not touched by the rubber overshoe, the pressure of the overshoe being confined to the hard and rigidly capped portion of the shoe counter. The pressure of the overshoe will thus not be transmitted to the rear of the foot, adjacent the upper edge of the shoe.

The overshoe 10 may be worn with various shapes and sizes of shoes equally well.

It will be noted that the angular portion of

the overshoe in the region of the ledge 16 is constricted and is adapted to expand and contract to accommodate itself to shoes of larger or smaller bulk, adjacent the bottoms of the shoes between limits. With this construction, one overshoe can be properly fitted to shoes of different shapes and sizes, fitting them all equally well.

The inwardly inclined wall 12 is relatively thick all around, so as to offer greater resistance to spreading when a shoe is inserted into the overshoe in order to obtain exact accommodation to the size of the shoe at that zone.

The width of the counter portion 15 of the overshoe is underdimensioned relative to the forward vamp portion 14, being proportionately narrower in relation to the vamp than the counter of the ordinary rubber overshoe. Thus the counter 15 of this overshoe is smaller relative to the vamp 14 thereof, than is the counter of the ordinary shoe to the vamp thereof, so that when the overshoe is worn, the counter 15 of the overshoe will more firmly grip the counter of the shoe than will its vamp 14 grip the vamp of the shoe. With this construction, the injuring pressure on the vamp of the shoe is relieved and furthermore, the possibility of the overshoe being pulled off the shoe by sticky mud or snow or slush is entirely obviated. Furthermore, since the counter portion of the shoe is stiffer than the vamp portion of the shoe, it is the proper place for the overshoe to grip the shoe.

Inasmuch as the counter portion 15 and the vamp portion 14, and also the top portion of the overshoe are made of substantially thin rubber, and since the rubber is highly elastic, and inasmuch as the pressure that the overshoe exerts is opposed by the hard or stiff portion of the shoe counter and by the hard edge of the shoe sole and heel, substantially inappreciable pressure is transmitted to the foot itself, so that the overshoes are extremely comfortable to wear.

It will thus be seen that there is provided a device in which the several objects of this invention are achieved, and which is well adapted to meet the conditions of practical use.

As various possible embodiments might be made of the above invention, and as various changes might be made in the embodiment above set forth, it is to be understood that all matter herein set forth or shown in the accompanying drawing is to be interpreted as illustrative and not in a limiting sense.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A rubber overshoe comprising a sole, a lower side wall portion extending upwardly and inclined inwardly therefrom at the heel and forward tread portions thereof, an upper counter portion and a vamp portion, each thinner than said lower side wall portion, extending upwardly from the latter in integral relation therewith, the inner surface of said counter portion forming an obtuse angle with the inner surface of the adjacent part of said lower side wall portion at both sides of the overshoe, the juncture of said angularly related surfaces being located so as to engage the side edges of the heel and sole of the shoe on which the overshoe is worn, said counter portion rising vertically from the upper, inwardly disposed edge of said lower side wall portion.

2. A rubber overshoe comprising a sole, a lower side wall portion extending upwardly and inclined inwardly therefrom at the heel and forward tread portions thereof, an upper counter

portion and a vamp portion, each thinner than said lower side wall portion, extending upwardly from the latter in integral relation therewith, the inner surface of said counter portion forming an obtuse angle with the inner surface of the adjacent part of said lower side wall portion at both sides of the overshoe, the juncture of said angularly related surfaces being located so as to engage the side edges of the heel and sole of the shoe on which the overshoe is worn, said counter portion rising vertically from the upper, inwardly disposed edge of said lower side wall portion, the top rear edge portion of said counter portion being of a height to terminate below the top rear edge of the counter stiffener of the ordinary shoe when the overshoe is worn thereon.

3. A rubber overshoe comprising a sole, a lower side wall portion extending upwardly and inclined inwardly therefrom at the heel and forward tread portions thereof, an upper counter portion and a vamp portion, extending upwardly from the latter in integral relation therewith, the inner surface of said counter portion forming an obtuse angle with the inner surface of the adjacent part of said lower side wall portion at both sides of the overshoe, the juncture of said angularly related surfaces being located so as to engage the side edges of the heel and sole of the shoe on which the overshoe is worn, said counter portion rising vertically from the upper, inwardly disposed edge of said lower side wall portion.

4. A rubber overshoe comprising a sole, a lower side wall portion extending upwardly and inclined inwardly therefrom at the heel and forward tread portions thereof, an upper counter portion and a vamp portion, each thinner than said lower side wall portion, extending upwardly from the latter in integral relation therewith, the inner surface of said counter portion forming an obtuse angle with the inner surface of the adjacent part of said lower side wall portion at both sides of the overshoe, the juncture of said angularly related surfaces being located so as to engage the side edges of the heel and sole of the shoe on which the overshoe is worn, said counter portion rising vertically from the upper, inwardly disposed edge of said lower side wall portion, said counter portion having upwardly and inwardly inclined top parts terminating in edges defining the top opening for the insertion of the shoe, said edges inclining downwardly from front to rear to a point at the rear of the overshoe to be located below the top of the counter stiffener of the ordinary shoe on which the overshoe is worn.

5. A rubber overshoe comprising a thick sole, an upwardly and inwardly inclined thick lower side wall extending a short distance from said sole at the heel and forward tread portions thereof, upper counter and vamp portions of less thickness than said sole and lower side walls extending upwardly from the inner edge of the inwardly inclined wall, the inner surface of said counter portion forming an obtuse angle with the inner surface of the adjacent part of said lower side wall portion at both sides of the overshoe, the juncture of said angularly related surfaces being located so as to engage the side edges of the heel and sole of the shoe on which the overshoe is worn, said counter portion rising vertically from the upper inwardly disposed edge of said lower side wall portion, said overshoe having an opening at the top decreasing progres-

sively in width from the rear edge thereof toward the front, and the top edge of said opening being disposed substantially in a plane inclined downwardly toward the rear and terminating in a rear edge to be disposed below the top of the counter stiffener of the ordinary shoe when the overshoe is worn thereon.

6. A rubber overshoe comprising a thick sole, an upwardly and inwardly inclined thick lower side wall extending a short distance from said sole at the heel and forward tread portions thereof, upper counter and vamp portions of less thickness than said sole and lower side walls extending upwardly from the inner edge of the inwardly inclined wall, the inner surface of said counter portion forming an obtuse angle with the inner surface of the adjacent part of said lower side wall portion at both sides of the overshoe, the juncture of said angularly related surfaces being located so as to engage the side edges of the heel and sole of the shoe on which the overshoe is worn, said counter portion rising vertically from the upper, inwardly disposed edge of said lower side wall portion, said overshoe having an opening at the top decreasing progressively in width from the rear edge thereof toward the front, and the top edge of said opening being disposed substantially in a plane inclined downwardly toward the rear terminating in a rear edge to be disposed below the top of the counter stiffener of the ordinary shoe when the overshoe is worn thereon, said overshoe having portions adjacent said opening on opposite sides thereof inclined inwardly and upwardly and increasing in width toward the front.

7. A rubber overshoe comprising a sole, a lower side wall portion extending upwardly and inclined inwardly therefrom at the heel and forward tread portions thereof, an upper counter portion and a vamp portion, each thinner than said lower side wall portion, extending upwardly from the latter in integral relation therewith, the inner surface of said counter portion forming an obtuse angle with the inner surface of the adjacent part of said lower side wall portion at both sides of the overshoe, the juncture of said angularly related surfaces being located so as to engage the side edges of the heel and sole of the shoe on which the overshoe is worn, said counter portion rising vertically from the upper, inwardly disposed edge of said lower side wall portion, said counter portion having upwardly and inwardly inclined top flat planar parts terminating in edges defining the top opening for the insertion of the shoe, said edges inclining downwardly from front to rear to a point at the rear of the overshoe to be located below the top of the counter stiffener of the ordinary shoe on which the overshoe is worn.

8. A rubber overshoe comprising a sole and vamp and counter portions, said overshoe having an opening at the top decreasing progressively in width from the rear edge toward the front, and the top edge of said opening being disposed substantially in a plane inclined downwardly toward the rear and terminating in a rear edge to be located below the top of the counter stiffener of the ordinary shoe when the overshoe is worn thereon, said overshoe having portions adjacent said opening on opposite sides thereof inclined inwardly and upwardly and increasing in width toward the front.

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