

F. WHARTON.
SHOE HEEL.
APPLICATION FILED MAY 20, 1918.

1,300,071.

Patented Apr. 8, 1919.

Fig. 1.

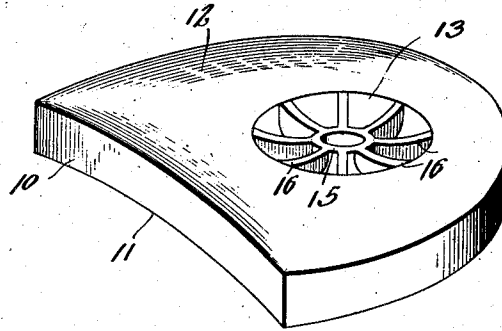


Fig. 2.

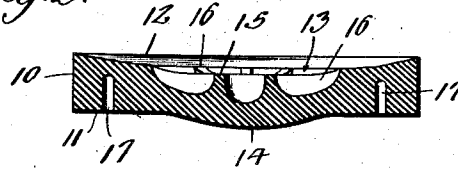


Fig. 3.

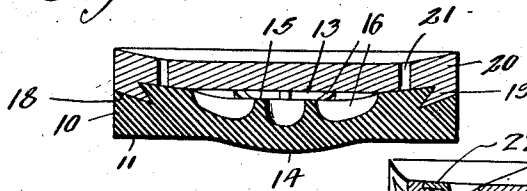


Fig. 5.

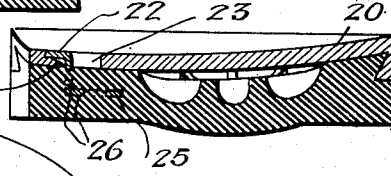


Fig. 4.

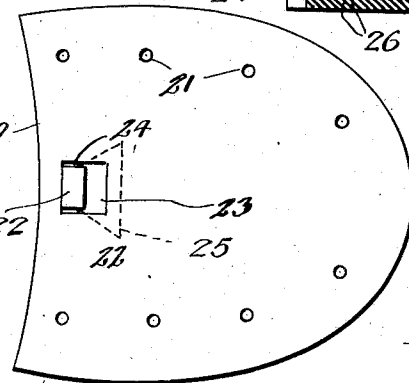
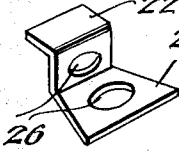


Fig. 6.



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SHOE-HEEL.

1,300,071.

Specification of Letters Patent.

Patented Apr. 8, 1919.

Application filed May 20, 1918. Serial No. 235,662.

To all whom it may concern:

Be it known that I, FRANK WHARTON, a citizen of United States, residing at Elyria, in the county of Lorain and State of Ohio, have invented new and useful Improvements in Shoe-Heels, of which the following is a specification.

This invention relates to shoe heels and aims to provide a heel constructed of rubber or other compressible material which may be either permanently or detachably secured to a shoe.

The primary object of the invention is to provide a heel of this character with an auxiliary cushioning means in the form of a raised portion extending beyond the tread surface of the heel, the heel being hollowed out or provided with a cavity upon the upper surface at the rear of the raised portion to permit the latter to yield under pressure, a plurality of radially disposed ribs extending from the side wall of the cavity and normally spaced from the heel portion of the shoe to provide a stop to yieldingly limit the inward movement of the auxiliary cushion.

Other objects and advantages of the invention will appear as the following description is read in connection with the accompanying drawings, in which:—

Figure 1 is a perspective view of a shoe heel constructed in accordance with the present invention;

Fig. 2 is a transverse sectional view of the same;

Fig. 3 is a view similar to Fig. 2 illustrating means for detachably securing the heel to the shoe;

Fig. 4 is a plan view of the attaching plate shown in Fig. 3.

Fig. 5 is a longitudinal central section taken from Fig. 4, and

Fig. 6 is a detailed perspective view of the hook member.

Referring to the drawings in detail, wherein like characters of reference denote corresponding parts, the improved heel is indicated at 10.

This heel includes the tread surface 11 and the upper surface 12 which is adapted for contact with the heel portion of the shoe. The upper surface 12 is preferably concaved as shown and is further provided with a cavity or depression 13, preferably of circular form. The lower wall of this cavity extends beyond the lower or tread sur-

face of the heel as shown at 14 to provide an auxiliary cushioning means for the heel. Disposed concentrically within the cavity 13 is a ring 15, preferably formed of rubber and made integral with the lower wall of the cavity, the upper surface or edge of this ring terminating short of the upper surface 12 of the heel. Connecting the ring and the inner wall of the cavity are a plurality of radially disposed ribs 16, the upper edge of these ribs being slightly curved so as to be flush with both the upper edge of the ring 15 and the upper surface 12 of the heel. These ribs form a strengthening means for the lower wall of the cavity and act in conjunction with the ring 15 to limit the inward movement of the wall under pressure by contact with the heel portion of the shoe. The heel is preferably provided with a plurality of depressions 17 disposed around or adjacent its edge for the reception of nails or suitable fastening devices by means of which it may be secured to the shoe.

In Figs. 3 and 4 there is illustrated means whereby the heel may be detachably secured to the shoe. In this form of the invention the heel 10 is similar in construction to the form previously described, except that it is formed around its edge with a substantially V-shaped groove 18, which is adapted to receive a similarly shaped tongue or flange 19 formed around the edge of a securing plate 20. This plate is preferably formed of metal and is provided with a plurality of apertures 21 for the passage of nails or other fastening devices for the purpose of securing the plate in the heel portion of the shoe. In order to secure the heel against accidental displacement, the latter is provided with a hook member 22 which is adapted to engage in a slot 23 formed in the plate 20. One edge of the slot 23 is provided with beveled surface 24 to provide a closer grip beneath the hook. The hook member is formed of a strip of metal having each of its ends bent substantially at right angles and in opposite directions, one of these ends forming the hook 22, while the other end has its edges flared outwardly to provide an anchor 25. Openings 26 are formed in the hook member, so that when the latter is embedded in the heel as shown in Fig. 5, the material will enter the opening 26 and together with the anchor 25 securely hold the said member in position.

The invention is susceptible of various

changes in its form, proportions and minor details of construction and the right is reserved to make such changes as fall within the scope of the appended claims.

5 Having described the invention, what is claimed is:—

1. A shoe heel formed of compressible material and having a cavity or depression in the upper surface thereof, a raised portion forming the outer face of the lower wall of the cavity and extending beyond the lower tread surface of the heel and a hollow compressible element located within the cavity or depression, the upper end of said element terminating short of the upper edge of the cavity.

2. A shoe heel formed of compressible material and having a cavity or depression in the upper surface thereof, a raised portion forming the outer face of the lower wall of the cavity and extending beyond the lower tread surface of the heel, a concentrically disposed ring located within said depression or cavity and terminating short of the upper edge of said cavity and radially arranged ribs connecting the ring with the side wall of the cavity.

3. A shoe heel formed of compressible material and having a cavity or depression in the upper surface thereof, a raised portion forming the lower wall of the cavity and extending beyond the lower tread surface of the heel and a hollow compressible stop located within the cavity or depression, the upper end of the stop terminating short of the upper edge of the heel, and means for connecting the cavity to a shoe.

4. A shoe heel formed of compressible material and having a cavity or depression in the upper surface thereof, a raised portion forming the outer face of the lower wall of the cavity and extending beyond the lower tread surface of the heel, a concentrically disposed ring located within said depression

or cavity and radially arranged ribs connecting the ring with the side wall of the cavity and terminating short of the upper edge of said cavity and means for connecting the heel to a shoe.

5. A shoe heel formed of compressible material and having a cavity or depression in the upper face thereof, a raised portion forming the outer face of the lower wall of the cavity and extending below the lower tread surface of the heel, a plate secured to the heel portion of the shoe, an S-shaped member having one end embedded in the heel and its opposite end extending to provide a hook for engagement with an opening in the plate and a flared portion formed in the embedded end of the hook member.

6. A shoe heel formed of compressible material and having a cavity or depression in the upper surface thereof, a raised portion forming the outer face of the lower wall of the cavity and extending below the lower or tread surface of the heel, a plate secured to the heel portion of the shoe, a flange of substantial triangular cross section extending partially around the marginal edges of the plate for engagement with a similarly shaped groove in said heel and a stop located within the cavity and normally spaced from the plate for contact with the latter to yieldingly limit the inward movement of the lower wall.

7. A shoe heel formed of compressible material and provided with a cavity or depression in its upper surface, a compressible raised portion forming the outer face of the lower wall of the cavity and extending beyond the lower tread surface of the heel and arranged to be flexed to form a substantially flat tread surface, and a stop within said cavity or depression.

In testimony whereof I affix my signature.

FRANK WHARTON.