Dec. 9, 1924. 1,518,875

F. REDMAN

SHOE HEEL

Filed Aug. 8, 1923

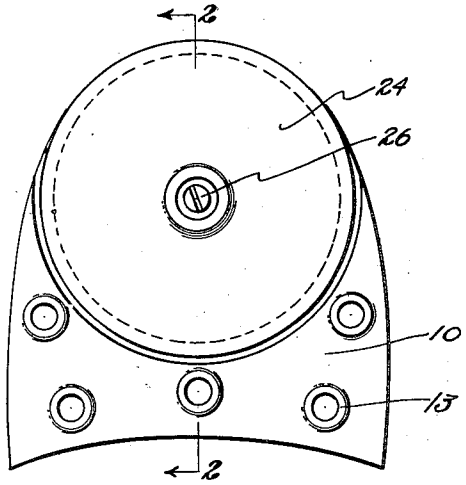


FIG. 1

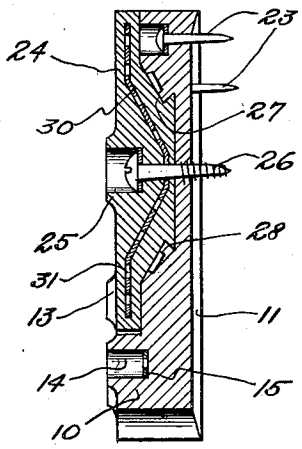


FIG. 2

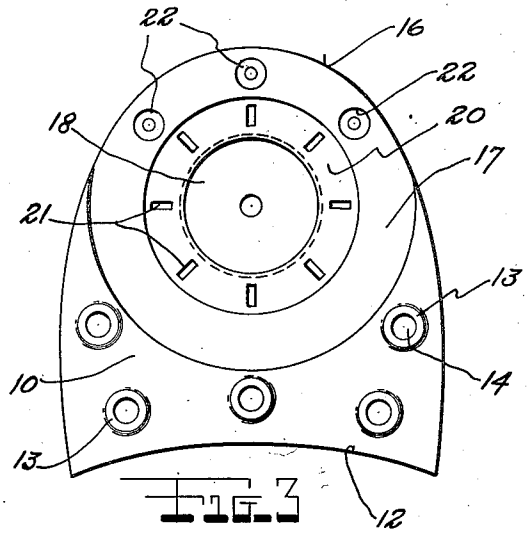


FIG. 3

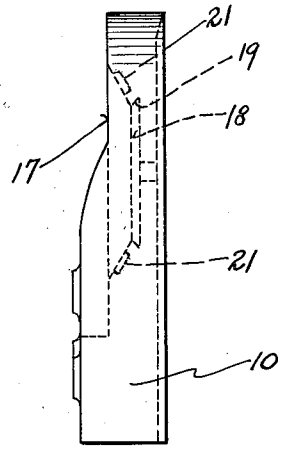


FIG. 4

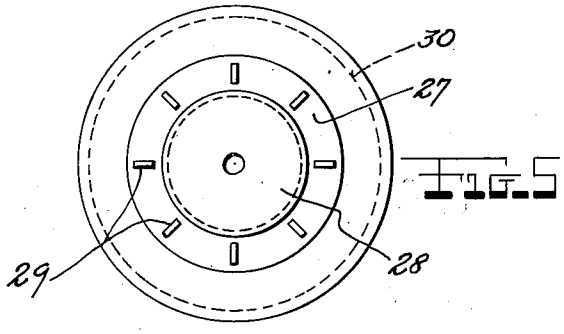


FIG. 5

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UNITED STATES PATENT OFFICE.

FRANK REDMAN, OF ATLANTIC CITY, NEW JERSEY.

SHOE HEEL.

Application filed August 8, 1923. Serial No. 656,385.

To all whom it may concern:

Be it known that I, FRANK REDMAN, a citizen of the United States, residing at Atlantic City, in the county of Atlantic and State of New Jersey, have invented certain new and useful Improvements in Shoe Heels, of which the following is a specification.

The main object of this invention is to provide a cushion shoe heel having a rotatable disk-like tread, the purpose of the rotatable tread being to renew the worn portions by simply rotating the disk to another position. A shoe heel is more frequently worn down more at the tip of the heel, and by substituting a disk for the usual solid heel, longer usage of the same may be had.

Another object is to provide ridges on one surface of the tread disk, which register in corresponding recesses and prevent the disk from undesired rotation during use.

These and other objects will become apparent in the description below, in which characters of reference refer to like-named parts in the drawing.

Referring briefly to the drawing Figure 1 is a top plan view of the cushion shoe heel.

Figure 2 is a sectional elevational view taken on line 2—2 of Figure 1.

Figure 3 is a top plan view of the shoe heel with the tread disk removed.

Figure 4 is a side elevational view of the same.

Figure 5 is a bottom plan view of the tread disk.

Referring in detail to the drawing, the numeral 10 indicates the main body of the cushion heel, having a raised tapering edge 11 which partly encircles the cushion heel, and when in place lies in snug contact with the heel of the shoe. The forward end 12 of the body is of uniform thickness across its width and has a plurality of bosses 13 at spaced apart intervals in which holes 14 are formed, said holes passing partly thru the body. Washers 15 are seated in the bottom of said holes and are provided with openings thru which nails pass. The latter securely attach the forward portion of the body to the shoe heel. The rear of the heel has a semi-circular edge 16. A relatively large annular recess 17, lying tangent with the semi-circular edge, is formed in the rear of the body, the rear part being entirely open, the front of the recess being partly enclosed by the thick portion of the body 10. An additional and smaller recess 18 is provided within the larger recess 17, the encircling wall of recess 18 being convergently tapered as indicated by the numeral 19. An inclined seating surface 20 connects the wall 19 of the recess 18 with the lower surface of the recess 17. The seat is provided with a plurality of radially spaced apart notches 21, the purpose of which will be more fully hereinafter described. Additional holes 22 are provided at the rear of the heel and also receive nails 23, the latter passing into the heel of the shoe. An annular disk 24 having a boss 25 projecting from its lower surface, is mounted in the recess 17, the means for retaining said disk in place being a screw 26. The surface of the disk opposite to the boss 25 has a conical and annular lug 27 surmounted by a flange 28, the edge of the latter being tapered to fit into the portion 19 of the body 10. The face of the lug 27 is provided with a plurality of radially spaced-apart ridges 29 which are adapted to register in the notches 21 previously mentioned. An annular plate 30 is molded into the tread disk 24 and is deformed or deflected into a cone at its center, said plate being provided with perforations 31. The plate forms a stiffener for the tread disk and the holes permit joining of the rubber on both sides of said plate.

The cushion heel is attached to the heel of the shoe in the following manner. The body 10 is fitted to the heel and after being whittled to proper size is secured in place by passing nails thru the holes 14 and 22. The tread disk 24 is next mounted in place in the recess 17 and a screw 26 is passed thru a central hole in the boss 25, said screw passing thru the disk and stiffener plate 30 and the reduced portion of the body 10. It is to be understood that both the cushion heel and disk are composed of some flexible and resilient material, such as rubber, in order to permit the flange 28 to be compressed so that it may readily enter the reduced throat portion 19, to be ultimately seated in the recess 18. As the heel is worn, the bosses 13 and 25 are worn down to the level of the tread disk 24 and the main body 10. Additional wear causes the rear exposed corner of the tread disk 24 to be worn away. In order to renew this portion of the heel, the disk may be rotated to a new position so that a practically unworn edge of the disk is at the rear end of the body. The disk, as

stated, has a series of ridges 29 which register in corresponding grooves 21, the latter being formed on the seat 20 of the body 10. To release the ridges from their grooves, rotational pressure is brought to bear on the disk until the ridges meet the next notches. These ridges prevent the tread disk from being inadvertently rotated during use.

It is understood that certain changes in form and construction, such as varying the angle of the seat 20, may be made without departing from the spirit and scope of the invention.

I claim:—

A shoe heel comprising a flexible main body having an annular recess, the sides of the recess being open at the rear end, a second recess below the first-named recess, a conical seating surface connecting said last-named recess with the first-named recess, the conical surface being provided with rectangular notches which extend radially about the axis of the annular recess, a separate tread disk, a perforated cup molded therein, a conical lug on said disk adapted to cooperate with and seat upon the conical surface of the last-named recess, a flange surmounting the conical lug and adapted to lie in said last-named recess, longitudinal ridges on the conical lug adapted to register in the radial notches in the body for preventing rotation of the disk, and means for securing said body and disk to the shoe.

In testimony whereof I affix my signature.

FRANK REDMAN.