April 14, 1942. J. A. MASELTER 2,279,891

HEEL

Filed Jan. 18, 1940

Fig. 1

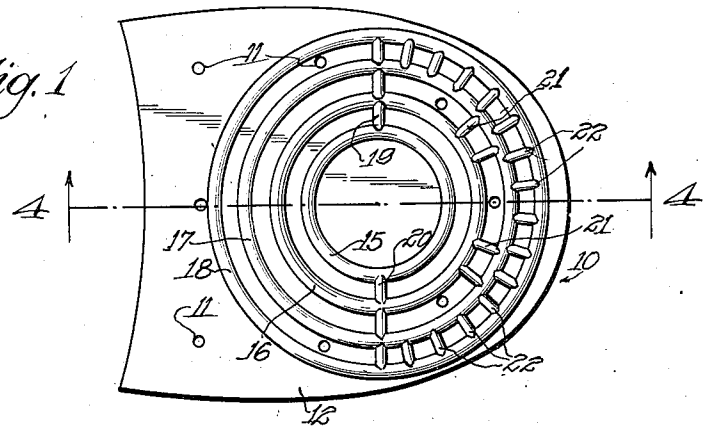


Fig. 2

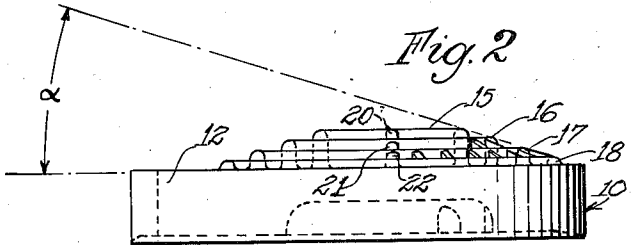


Fig. 3

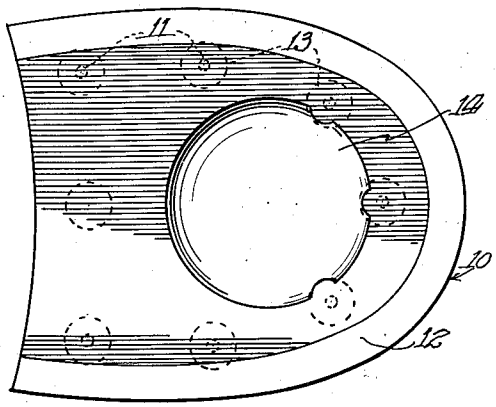
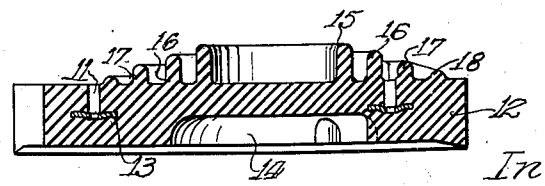


Fig. 4



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HEEL

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3 Claims. (Cl. 36—59)

The invention relates to cushion heels.

It is an object of the invention to provide a heel of the character described, which has greater wear resisting properties than any known heel.

A further object constitutes the provision of a heel with a wearing portion conducive to preventing running down of the heel at the edge so as to prolong the life of the heel.

Another object constitutes the provision of a heel having a wearing surface which accommodates the stepping off and subsequent walking, whereby the heel proper is relieved from wear until the wearing surface is worn down.

A still further object constitutes the provision of a heel which possesses a high degree of resiliency so as to absorb shocks and jars incident to walking.

It is also an object to provide a heel which effectively prevents skidding by affording a large contact area with the ground and concurred suction effects.

A still further object constitutes the provision of a heel having a wearing surface which permits the stepping off and subsequent walking to be carried out on the principle of a rolling motion.

A still further object constitutes the provision of features of construction and arrangement tending to enhance the efficiency and utility of the improved heel.

With these and other important objects in view, which will become more apparent from a perusal of the invention, the latter comprises the means described in the following specification, particularly pointed out in the claims forming a part thereof, and illustrated in the accompanying drawing, in which:

Fig. 1 is a bottom plan view of a heel constructed in accordance with my invention.

Fig. 2 is a side view.

Fig. 3 is a top plan view of the heel, and

Fig. 4 is a section on the line 4—4 of Fig. 1.

Referring to the several views in the drawing, the heel generally designated by 10 comprises a resilient heel body 12 formed of rubber of such consistency as to be wear-resisting.

A series of nail receiving holes 11 is provided in inwardly spaced relation to its periphery, the holes extending about to the center of the thickness of the heel and there enlarged in horizontal direction to receive washers 13. Upon the upper side of the heel body, and in inwardly spaced relation to its periphery, there is provided a circular walled recess 14.

The tread surface of the heel body is provided with a series of circular ribs in concentric relation, the inner rib extending farthest below the tread surface and the outer ribs being of decreasing depth, the crests of the ribs being in a plane forming an angle with the tread surface which may vary between 18° and 20°.

Attention is called to the fact that a person, when stepping off, holds the heel under an angle of 18° to 20° to a horizontal plane and, for this reason, the taper of the rib crest has been chosen accordingly.

The innermost rib 15 extends about one-quarter inch below the tread surface of the heel and the next adjacent circular ribs 16, 17 and 18 are equidistant and concentric to rib 15 but, as stated before, decrease in depth so that a wearing surface is produced, which extends in two planes, one defined by the crests of the ribs 15, 16, 17 and 18, and serving during stepping off, and the other plane defined by the crest of the inner rib 15.

It is evident that the ribs form a wearing structure superposed on the heel and only after they are worn down will the heel body proper be subjected to wear. Thus, the running down of the edge of a heel is effectively prevented and, in addition, the spaced ribs provide resiliency and shock absorbing properties incident to pneumatic heels.

The ribs 15 and 16 are connected by transverse webs 19 and 20. The circular ribs 16 and 17 are connected by five radial web-like projections 21, whereas the ribs 17 and 18 are connected by a comparatively large number of web projections 22 extending radially from the common center of the circular ribs.

The connections afforded between the circular ribs enhance the ground engaging area of the heel and serve to prevent slipping as well as define suction cups to cause better adherence of the heel to the ground.

While the drawing shows a preferred embodiment of the invention, changes and alterations may be readily made, without departing from the spirit of the invention.

I, therefore, do not limit myself to the details of construction and arrangement, as shown, but wish to include all variations and modifications constituting departures, within the scope of the invention, as defined in the appended claims.

I claim:

1. A heel including a body portion, a plurality of circular ribs extending below the tread surface, the crests of said ribs being in a plane at

an acute angle to said tread surface, and spaced radial web-like projections connecting adjacent ribs.

2. A heel including a body portion, a plurality of circular ribs extending below the tread surface, the crests of said ribs being in a plane at an acute angle to said tread surface, and spaced radial web-like projections connecting adjacent ribs to provide suction cups.

3. A bottom member for shoes, including a body portion, a plurality of curved ribs in concentric arrangement extending below the wearing surface of said bottom member, the crests of said ribs being in a plane at an acute angle to said wearing surface, and radially extending means connecting adjacent ribs.

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