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R. P. HARSHBERGER

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RUBBER HEEL

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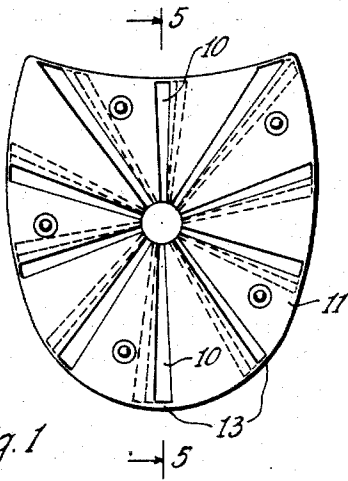


Fig. 1

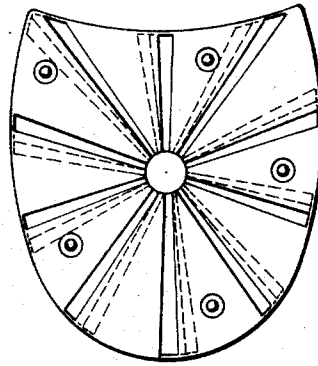


Fig. 2

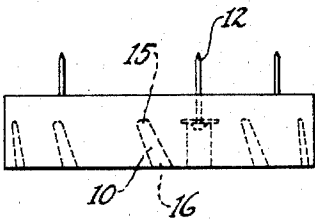


Fig. 3

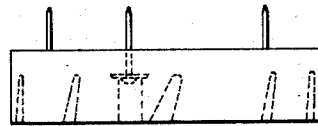


Fig. 4

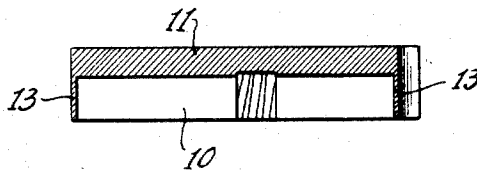


Fig. 5

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## UNITED STATES PATENT OFFICE.

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## RUBBER HEEL.

Application filed March 5, 1926. Serial No. 92,399.

This invention relates to rubber heels to be applied to shoes or boots, and one of the objects of the invention is to provide heels which will have a tendency to cause the wearer to walk with their feet more nearly parallel. If there is a tendency to turn the toes out too far these heels will gradually eliminate this tendency, or, on the other hand, they may be arranged so as to eliminate the tendency to turn the toes inwardly too much.

Of the accompanying drawings Fig. 1 is a bottom view of a heel to be worn on the left foot when it is desired to turn the toes inwardly more; Fig. 2 is a corresponding bottom view of a heel to be worn on the right shoe; Figs. 3 and 4 are rear elevations of these heels; and Fig. 5 is a section along the line 5—5 of Fig. 1.

The invention comprises rubber heels so formed that when the wearer presses down on the heel there will be a tendency for the heel to rotate slightly so as to turn the heel, with reference to the toes, inwardly or outwardly. Assuming it to be a left foot and that the shoe is worn by a person whose toes turn outwardly too much, the tendency will be to rotate the heel so as to turn the heel out slightly as the weight is put on the heel, and thus to, relatively, turn the toe inwardly. Any suitable arrangement of the heel may be made to accomplish this purpose, but I prefer to provide the slots 10 in the heels 11, and to have the slots inclined or slanting, as indicated. Assuming a left heel, when it is desired to turn the heel outwardly, the slots in the rear of the heel slant outwardly as they pass inwardly so that, when pressure is placed thereon, the tendency will be to move the rear part of the heel outwardly. At the same time the slots in the forward part of the heel slant upwardly and outwardly so that the tendency is to turn the forward part of the heel inwardly. These two tendencies will coact to turn the foot itself inwardly so as to cause the foot to be more nearly parallel with the line of direction of the walker. Correspondingly the right heel has the rear slots also slanting outwardly or away from the other foot. It will be understood, however, if it is desired to turn the toes outwardly more all of the slots in the heels will be reversed so far as the inclination is concerned.

The heels may be fastened to the shoes in

any suitable manner, such as by means of nails 12 which are inserted in the usual manner; and, to improve the appearance of the shoe, I provide a thin wall 13 at the end of each slot so that the slots will not show from the edges of the heels. I also taper the slots somewhat as indicated so that the outer portions 16 are somewhat wider than the inner portions 15. When so arranged any dirt or substances which may be crowded into the slots will soon work out, and this will prevent the slots from becoming filled solidly so that the heels will be ineffective.

It will be understood from this that the general purpose of the invention is to provide means for turning the feet of the wearer of the heels so that they will be more nearly parallel. This tends to strengthen the arch of the foot and is a more comfortable and effective way of walking or running. If, however, it may be desired for any reason to turn the feet so that they will be at a greater angle than normal it is necessary only to reverse the direction of slant of the slot on the respective heels. It is to be understood that the heels will not produce at each step the entire effect desired. There will be a rather material tendency with each step for the foot to be turned in the direction desired and the continuous use of the heels gradually tends to cause the wearer to turn the feet permanently in a more nearly parallel direction, as with each step there is a slight tendency of this nature, which gradually accumulates; and when the heels are worn for a sufficient time the effect is to form the habit of turning the toes in the manner desired. It will be understood that the effectiveness of the invention will depend somewhat upon the depth and general formation of the slots in the heels, and they may be made slightly or materially effective as seems best to meet the requirements.

I claim as my invention:

1. A heel adapted to be fixed to a shoe, said heel being composed of yielding material, and having radial slots therein of very material depth, said slots having nearly parallel walls, both of which are inclined with reference to a line perpendicular to the bottom of the heel.

2. A heel adapted to be fixed to a shoe, said heel being composed of yielding material, and having radial slots therein of very

material depth, said slots having walls inclined at an angle to a line perpendicular to the bottom of the heel, said walls being nearly parallel, but the slots being narrower at the inner portion of the slots than at the outer portions.

3. A heel adapted to be fixed to a shoe, said heel being composed of yielding material, and having radial slots therein of very material depth, said slots being spaced a material distance apart and projecting side-wise and forwardly and backwardly from the central portion of the heel, both of the sides of the slots being inclined to a perpendicular to the bottom of the heel.

4. A heel adapted to be fixed to a shoe, said heel being composed of yielding material, and having slots extending inwardly from its tread and rearwardly from the central portion of the heel, the slots being of greater depth than width and with both walls inclined to the tread plane and in the same general direction.

5. A heel adapted to be fixed to a shoe, said heel being composed of yielding material and having slots extending inwardly from the tread, said slots being spaced a material distance apart and projecting side-wise and backwardly from the central portion of the heel, both of the sides of the slots being inclined in the same direction to a line perpendicular to the bottom of the heel, and the slots terminating before the outer side surface of the heel is reached.

6. A heel adapted to be fixed to a shoe, said heel being composed of yielding material, and having slots of very material depth extending outwardly from the central portion thereof, each of said slots having its walls nearly parallel, and with the walls inclined with reference to a line perpendicular to the bottom of the heel.

In testimony whereof, I hereunto set my hand.

RUSSELL P. HARSHBERGER.