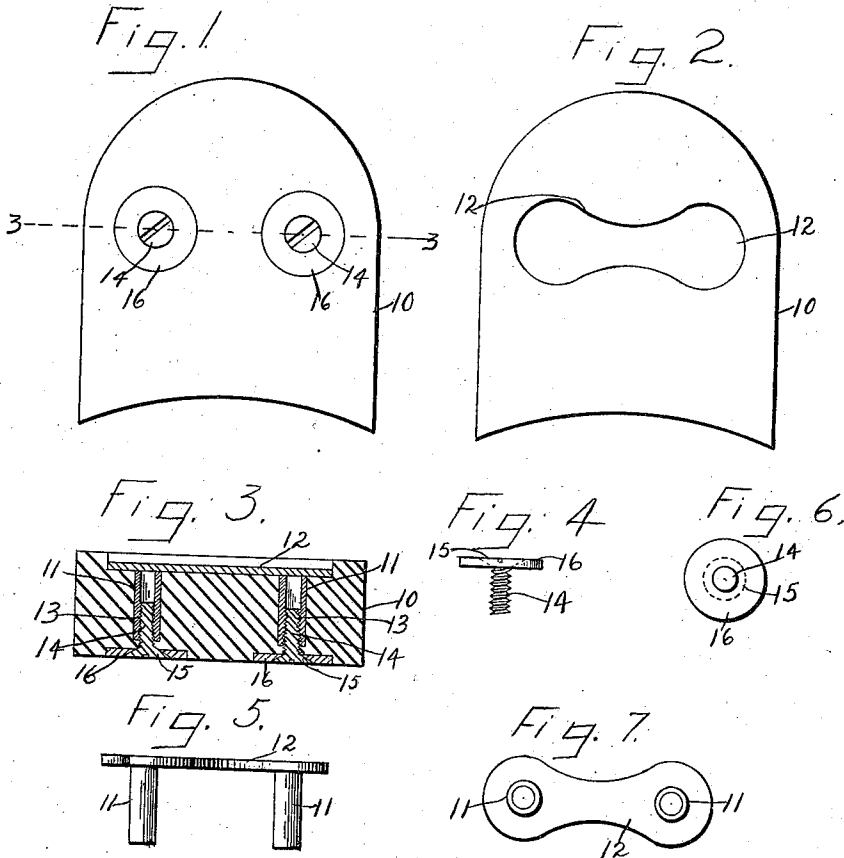


G. G. MIRLACH,
RUBBER HEEL PROTECTOR.
APPLICATION FILED MAY 1, 1909.

963,308.

Patented July 5, 1910.



Witnesses

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UNITED STATES PATENT OFFICE.

GEORGE G. MIRLACH, OF BEAVER DAM, WISCONSIN.

RUBBER-HEEL PROTECTOR.

963,308.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, GEORGE G. MIRLACH, a citizen of the United States, residing at Beaver Dam, in the county of Dodge, State of Wisconsin, have invented certain new and useful Improvements in Rubber-Heel Protectors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention relates to heel protectors for foot wear and more particularly to the class of protective wearing plates for heels of boots or shoes and which is adapted for use either with leather or rubber heels.

The primary object of the invention is the provision of a heel protector for boots or shoes in which the wearing elements are readily and easily detachable from the heel of a shoe to permit the interchanging of the members to enable even wearing of the same and that will prevent the tread surface of the heel from wearing away more quickly on one side than the other thereof.

Another object of the invention is the provision of a device of this character in which the wearing disks are readily and easily detached from a heel should they become considerably worn so that the same may be replaced by new ones in their stead, and also that will enable the heel to possess more lasting wearing qualities and to overcome the possibility of uneven wear thereof and that is by having one side wear away more quickly than another side of the same.

A further object of the invention is the provision of a heel protector which is simple in construction, readily and easily mounted in a heel, thoroughly efficient in operation and inexpensive in the manufacture.

With these and other objects in view the invention consists in the construction, combination and arrangement of parts as will be hereinafter more specifically described, illustrated in the accompanying drawings which disclose the preferred form of embodiment of the invention, and as brought out in the claim hereunto appended.

In the drawings:—Figure 1 is a bottom plan view of a rubber heel embodying the invention. Fig. 2 is a top plan view thereof. Fig. 3 is a sectional view on the line 3—3 of Fig. 1. Fig. 4 is a side elevation of one wearing disk and adjustable fastener. Fig. 5 is a side elevation of the member to which

the fasteners are adjustably connected. Fig. 6 is a plan view of the parts shown in Fig. 4. Fig. 7 is a plan view of the part shown in Fig. 5.

Similar reference characters indicate corresponding parts throughout the several views in the drawings.

In the drawings the numeral 10 designates generally a rubber heel which is adapted to be mounted upon foot wear such as a shoe or boot in the usual manner and it may be of any other suitable material, size, shape and thickness. Contained in the heel 10, are suitable openings to receive hollow tubular portions 11, which are integral with and united together by a cross piece or plate 12, which latter is adapted to lie against the inner face of the heel at the base of a suitable countersink correspondingly shaped thereto in the heel when the same is mounted on the foot-wear. The cross connecting plate 12 is of considerably less thickness than the depth of the recess in one face of the heel so that the said plate may be displaced between the bottom of the recess and the adjacent portion of the heel upon compression of the elastic heel. The said hollow tubular portions 11 are internally screw threaded as at 13, to adjustably receive the threaded stems 14, of headed screws 15, which latter when engaging the tubular portions 11, enter the heel 10, from the opposite tread surface or face thereof.

Embedded in the tread surface or face of the heel 10 and to lie flush therewith are metallic wearing members, such as steel disks 16, which latter are provided with beveled central openings to be engaged by the heads of the screws 15, which lock or hold the wearing members in proper position upon the heel at the outer wearing surface thereof. The heads of the screws 15, are adapted to engage the openings in the disks 16, so as to have their outer surface lie in the same plane or flush with the outer wearing surfaces of the said disks 16, so that the latter and the screw heads will not protrude beyond the wearing or tread surface of the heel.

It is clearly obvious that by the mounting of the wear disks upon the heel the latter will not be destroyed of its resilient qualities to effect a soft tread to the foot wear. But the wear members will prevent uneven or excessive wear to the heel while the foot wear is being worn or in constant use

by the wearer. Therefore the life of the heel is materially increased without affecting its particular function as a soft tread for foot wear.

- 5 The screws 15, will permit the interchanging of the wear disks so that should one portion thereof become worn or if one disk should wear quicker than the other the same can be shifted from one side of the tread
10 portion of the heel to the other, and furthermore new wear plates can be substituted for those that have become worn or useless.

- It is of course to be understood that any number desired of friction wear disks may
15 be employed in the heel and they may be placed in the heel in any desired location of the same.

What is claimed is:—

- 20 The combination with an elastic heel having an elongated recess in one face and spaced countersinks in the opposite face with bores intersecting the said recess, of a plate correspondingly shaped to the re-

cess and disposed within the same against its bottom, internal screw threaded tubular 25 portions projecting from the plate into said bores, wearing disks fitted within the countersinks and having beveled apertures, headed screw members passed through the apertures in the disks and adjustably en- 30 gaging the screw threads of the tubular portions, the heads of the said screw members being seated in the beveled apertures in the disks so that the said heads will lie flush with the outer faces of the disks, the said 35 plate being of considerably less thickness than the depth of the recess in the heel to permit limited movement of the plate when the heel is being compressed.

In testimony whereof, I affix my signature, in presence of two witnesses. 40

GEORGE G. MIRLACH.

Witnesses:

CHAS. C. MILLER,
C. S. CONGDON.