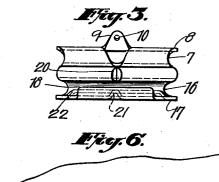
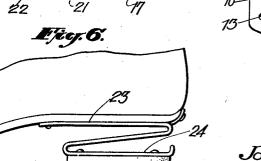


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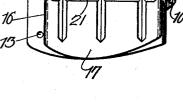
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John R. Nock. Pichard BY. vm.

ATTORNEY.

### Patented Apr. 19, 1927.

## 1,625,048

# UNITED STATES PATENT OFFICE.

## JOHN R. NOCK, OF BROOKLYN, NEW YORK.

#### SPRING HEEL.

#### Application filed March 13, 1926. Serial No. 94,609.

particular to a type embodying a spring member which will give a cushioning effect to the wearer during walking.

A particular object of the invention is to provide a strong, durable spring heel which will relieve the jars commonly received by the spine during walking and which will thereby afford greater comfort to the feet 10 and will conserve the energy of the wearer.

A further object of the invention is to provide a strong metallic spring heel which will form a yieldable support for the heel of the shoe and will also act as a ground 15 gripping agent whereby slipping is prevented.

A still further object of the invention is to provide means in connection with a bent spring heel whereby mud and dirt cannot 20 accumulate between the leaves of the spring

so that the compressible action of the heel is prevented.

A further object of the invention is to

provide a spring heel which can be stamped out of metal and bent to position whereby 25 it may be readily placed on the heel of a shoe without employing the large number of tack fasteners in present day use.

To enable others skilled in the art to 30 fully comprehend the underlying features of my invention that they may embody the same in the various modifications in structure and relation contemplated, a drawing depicting a preferred form has been annexed

as a part of this disclosure and in such 35 drawing similar reference characters denote corresponding parts throughout all of the views, of which

Figure 1 is a view in side elevation of a shoe equipped with my improved spring 40 heel

Figure 2 is a view in perspective of the the construction heel showing spring thereof.

Figure 3 is a rear view in elevation of the 45 spring heel.

Figure 4 is a top plan view of the heel showing the longitudinally disposed central rib therein,

Figure 5 is a bottom plan view of the heel 50showing the ground gripping feature and, Figure 6 is a partial view in side elevation of a shoe having secured thereto a modified form of the heel member.

dicates a shoe of the usual type, to the heel gripping element which will prevent slip-

This invention relates to shoe heels and in portion 6 of which is secured my improved spring heel 7. This spring heel consists of an upper shee engaging portion 8, at the rear end of which is punched out or 60 otherwise provided a shoe engaging lip 9, having an opening 10 therein through which is passed a fastening member 11, which secures the rear end of the shoe with the adjacent portion of the spring heel. The 65 forward end of the upper portion 8 is ex-tended as at 12 and is provided with the openings 13 whereby the heel may be attached to the sole 14 of the shoe through the medium of the suitable fastening mem- 70 bers 15.

The spring heel is preferably made of spring steel tempered to the shape illus-trated, which is a substantially "Z" shape and comprising the central obliquely dis- 75 posed portion 16, which connects the upper portion 8 with the ground engaging member 17, the latter of which at its rear end is provided with the upturned edge 18, which prevents the heel from catching or digging 80 into the ground. It will be observed that this spring heel can be made of one piece of strip metal bent to the form shown and suitably punched to provide the lip member 9 and a plurality of raised rib members, one 85 of which is provided in the upper portion 8 of the spring heel and depends therefrom, this rib being indicated as at 19. The intermediate portion 16 of the heel is provided with a like rib 20 and the ground engaging 90 member 17 is provided with a centrally disposed raised rib 21, having transverse extensions 22, all of which go to make up a ground gripping plate which engages the ground and prevents slipping of the heel. It will 95 be noted that the depending rib 19, when the heel is depressed, will move towards the intermediate portion 16 and will force any mud or dirt over the sides thereof which has accumulated between the upper portion 8 100 and said intermediate portion. The same thing will occur between the intermediate portion and the ground engaging portion 17, in the former of which is disposed the depending rib 20 and in the latter of which 105 is formed the upstanding rib 21 and its pro-jected ribs 22. It will be evident, therefore, that the accumulation of mud and dirt between the opposing portions of the spring heel will be prevented and also that the rib 110 Referring to the drawing in detail, 5 in- 21 and its extension 22 will provide a ground

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ping of the heel, as is common with a smooth wise altering the arrangement of the corbottom heel.

In Figure 6 I have shown a spring heel member 23 made in the same manner as the 5 spring heel shown in Figure 1, which may have incorporated therein the same type of ribs which will expel the dirt or other accumulation occurring between the opposing portions of said heel. The lower portion 24 10 of the heel is adapted to carry a suitable rub-

- ber heel or heel plate 25, made of any suitable material, so that the noise produced in the contact of the heel with the sidewalk or road during walking is eliminated. It will be evident, therefore, that I have
- $15^{+}$ provided an improved spring heel which will absorb the shock normally transmitted to the wearer of a solid heel and one which will prevent slipping.
- 20While I have illustrated and described my invention with some degree of particularity, I realize that in practise various alterations therein may be made. I, therefore, reserve the right and privilege of changing the 25 form of the details of construction or other-

related parts without departing from the spirit of the invention or the scope of the appended claims.

Having thus described my invention what 30 I claim as new and desire to secure by United States Letters Patent is,

1. A shoe heel consisting of a strip of metal bent to provide opposing portions one of which is adapted to be attached to a shoe 35 and one of said portions constituting a ground engaging member, and outstruck rib members formed longitudinally of said opposing heel portions.

2. A shoe heel consisting of a strip of 40 metal bent to provide opposing portions, one of which is adapted to be attached to a shoe, and one of said portions constituting a ground engaging member and outstruck, coinciding rib members formed in said op- 45 posing heel portion for preventing accumulation of dirt between said opposing portions.

In testimony whereof I affix my signature.

#### JOHN R. NOCK. [L. S.]