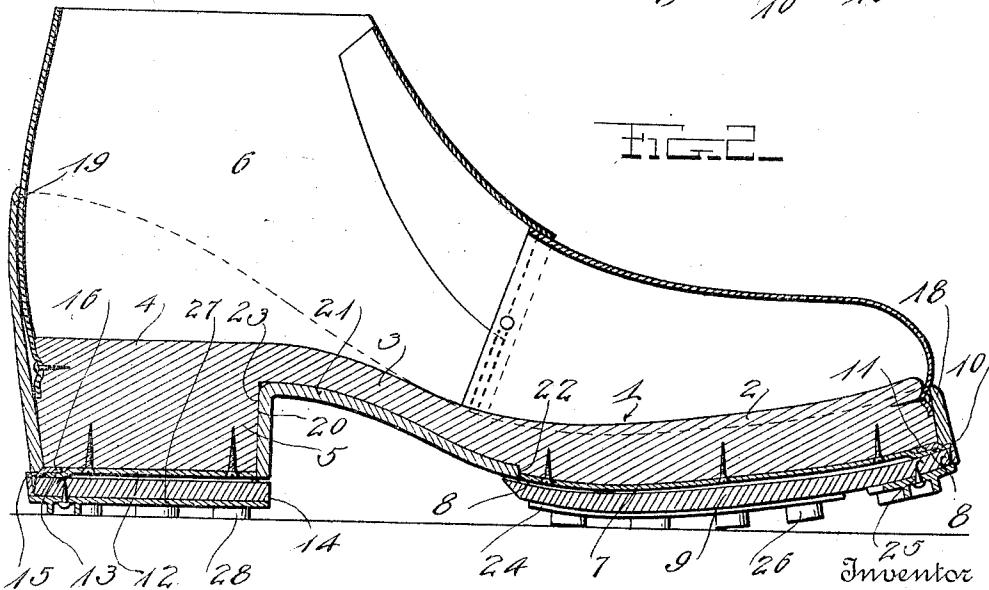


M. RASMUSSEN.
SHOE PROTECTOR.
APPLICATION FILED APR. 18, 1912.

1,051,448.

Patented Jan. 28, 1913.

2 SHEETS-SHEET 1.



Witnesses
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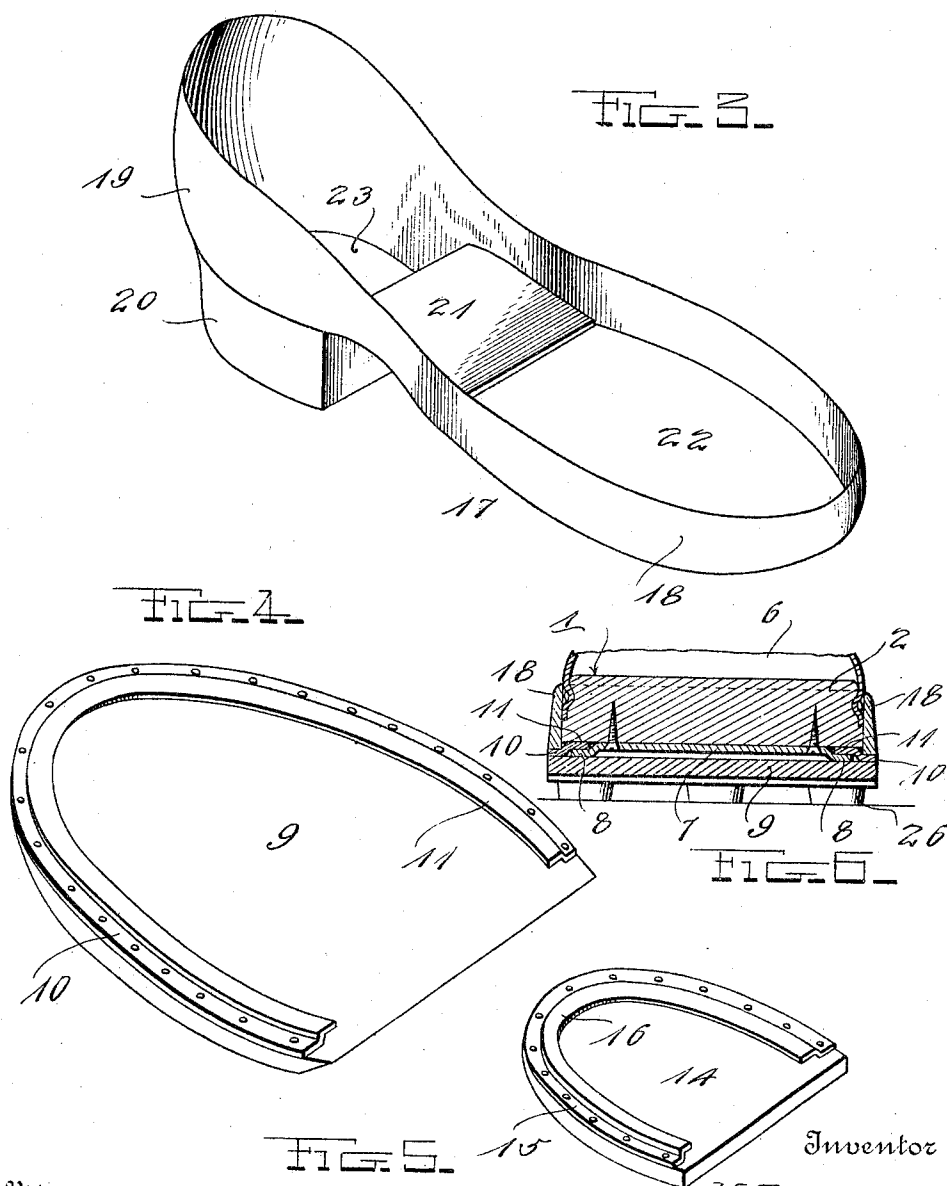
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UNITED STATES PATENT OFFICE.

MARTIN RASMUSSEN, OF RACINE, WISCONSIN.

SHOE-PROTECTOR.

1,051,448.

Specification of Letters Patent.

Patented Jan. 28, 1913.

Application filed April 18, 1912. Serial No. 691,579.

To all whom it may concern:

Be it known that I, MARTIN RASMUSSEN, a subject of the King of Denmark, residing at Racine, in the county of Racine and State of Wisconsin, have invented certain new and useful Improvements in Shoe-Protectors; and I do 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.

This invention relates to an improvement in shoe protectors and is more especially designed to protect wooden soled shoes which in use are subjected to rough wear.

An object of the invention is to provide a simply constructed and efficient attachment which will protect the sole, heel, and shank of the shoe, as well as a portion of the upper thereof.

Another object is to provide a metal protecting rim for inclosing the fastening elements which secure the upper to the sole and prevent them from wearing or becoming loosened, and also to render them invisible.

Another object is to provide a metal protecting rim held removably in position by removable sole and heel plates detachably engaged with the stationary sole and heel of the shoe.

With this and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts as will be hereinafter more fully described and claimed.

In the accompanying drawings: Figure 1 represents a perspective view of a shoe equipped with this improvement; Fig. 2 is a longitudinal section thereof; Fig. 3 is a perspective view of the protector detached; Fig. 4 is a perspective view of the removable sole; Fig. 5 is a similar view of the removable heel lift; Fig. 6 is a transverse vertical section through the front portion of the shoe with parts broken out.

In the embodiment illustrated a heavy shoe such as is used by miners is shown provided with a stationary sole 1, preferably constructed of wood and shaped to form the forward portion or half sole 2, arch or shank portion 3, and a heel portion 4. The heel

portion 4 has formed on its under side a depending stationary heel member 5. The sole may be of any desired shape and it has connected thereto by any suitable means an upper 6.

Secured to the forward portion 2 of the sole 1 is a metal half sole 7 which is of the same size and conforms to the shape of the forward portion 2 of the sole and the edge thereof is offset from the stationary sole to provide a peripheral lip 8 for detachable engagement with a removable outer sole 9, preferably composed of heavy leather and engaged with said metal half sole 7 by means to be described.

The leather half sole 9 is provided on its inner face around the edge thereof with a metal strip 10 secured at its outer edge to said sole 9 by rivets or other suitable fastening elements and having its inner edge offset from the sole 9 to form a connecting lip or flange 11 for slidable engagement with the lip 8 on the metal half sole 7. It is obvious from the drawings that this outer leather half sole 9 may be readily slid into engagement with the metal half sole 7 by engaging the cooperating lips of the soles and sliding said outer sole longitudinally toward the rear or heel of the shoe. It will thus be observed that the outer leather sole may be quickly inserted and removed when desired, which is especially desirable in case a new outer sole should be required and also to permit the removal of the protecting rim hereinafter described.

A metal heel plate 12 is secured to the lower face of the stationary wooden heel member 5 by any suitable means and has its peripheral edge offset from said heel in a manner similar to the metal half sole 7 to provide an attaching lip 13 for engagement with the cooperating member which will now be described. A removable heel lift 14 is detachably connected with the metal heel plate 12 by means of a metal strip 15 secured to the inner face of the lift 14 near its edge, said strip having its inner edge offset from said lift 14 to form a connecting lip or flange 16 for slidable engagement with the lip 13 and the metal heel plate 12, said outer heel lift being slidably connected

with the metal heel plate in a manner similar to the half sole above described.

A metal protector 17 preferably composed of aluminum and shaped to conform to the shape of the shoe to which it is to be applied comprises an upstanding marginal guard or rim 18 which may extend to any suitable or desired height, preferably terminating at its upper edge just above the connection of the shoe upper with its wooden sole or it may extend farther upward if desired.

It is, of course, understood that the size and outline of this protector 17 will correspond with the dimensions and outlines of the boot or shoe to which it is to be applied and the rim 18 will be bent to conform to the contour of that portion of the vamp or upper with which it is in contact. This rim 18 merges at its rear or heel end into a counter 19 and a hollow heel portion 20. A solid shank portion or plate 21 connects the rim 18 at the instep or shank portion of the shoe and is designed to form a metal instep to protect the instep or shank portion of the wooden sole when the shoe is used in connection with a shovel or spade.

As shown this protector 17 is composed of a single piece of metal but it will be obvious that it may be made of connected parts if desired, the integral form, however, being preferable.

The openings 22 and 23 at the bottom of this frame or protector 17 conform exactly in size and shape to the metal half sole 7 and heel plate 12 to provide for a ready insertion and removal of this protector. When in operative position the offset lips of these plates 7 and 12 project slightly below the lower edge of the protector into position to permit the sliding engagement therewith of the leather half sole 9 and heel lift 14 by means of which the protector 17 is held reliably in position on the shoe without any other fastening means being necessary and when the outer sole and heel plates become worn they may be quickly removed and new ones substituted.

As shown the outer leather half sole 9 is provided with removable wear plates 24 each of which is provided with a plurality of perforations or rivet holes 25 for the passage of the fastening screws or rivets. On the lower or outer face of these plates around the screw holes therein are formed depending annular anti-skidding elements 26 which will prevent the shoe from slipping when used on ice or in muddy places. The free edges of these members 26 may be sharpened to any desired extent, the sharper they are the more effective. These wear plates 24 may be of any suitable size or shape, three being here shown applied to the half sole 9, two elongated plates being se-

cured near the outer edge of the sides of the sole and a toe plate to the toe thereof.

A heel plate 27 similarly constructed is secured to the outer face of the leather heel lift 14 and is here shown in the form of a plate which covers the entire lift but it is obvious that it may be made in skeleton form if desired. Depending anti-skidding elements 28 are formed around the screw openings in said heel plate in the same manner as is described above in relation to the sole member.

The protector 17 is especially desirable as it does not require any means for securing it to the upper of the shoe whereby the life of the upper is prolonged.

One protector may be used in connection with many shoes, provided, of course, that the shape and size of the shoes be the same.

To disassemble the parts it is necessary only to slide the heel lift 14 rearwardly and the leather half sole 9 forwardly thereby disengaging them from the metal heel and sole plates whereupon the aluminum protector 17 may be readily slipped off the bottom of the shoe.

I claim as my invention:

1. In a shoe, a stationary sole and heel, a metal half sole secured to said stationary sole, a protecting metal rim encircling said shoe, means for detachably connecting the heel of said metal rim with the stationary heel of the shoe, a detachable half sole, and cooperating means on said metal half sole and said detachable half sole for removably securing said soles together and the protective rim in operative position.

2. In a shoe, a stationary sole and heel, a metal half sole secured to said stationary sole and having its edge offset therefrom, a protecting rim encircling said shoe, means for detachably connecting the heel portion of said rim to the heel portion of said shoe, and a detachable half sole having an inverted offset flange on its inner face for slidable engagement with the offset edge of said metal half sole.

3. A metal shoe protector comprising a rim adapted to encircle a shoe and having a transversely arranged metal plate connecting the shank portion thereof, the rear portion of said rim merging into a metal counter and hollow heel, said heel having an opening in its lower face, and means for detachably securing said protecting rim to the shoe.

4. A metal shoe protector comprising an upstanding rim for encircling a shoe, a metal shank plate connecting the lower edge of said rim at the shank portion of the protector, and means arranged at the bottom of said protector for detachably securing it to a shoe.

5. In a shoe, a stationary sole and heel, a

metal encircling rim removably mounted thereon, a detachable half sole mounted on said stationary sole, and a wear plate secured to said detachable sole and having depending annular anti-skidding elements on its outer face.

In testimony whereof I have hereunto set

my hand in presence of two subscribing witnesses.

MARTIN RASMUSSEN.

Witnesses:

EMIL MILLER,
T. P. HARDY.