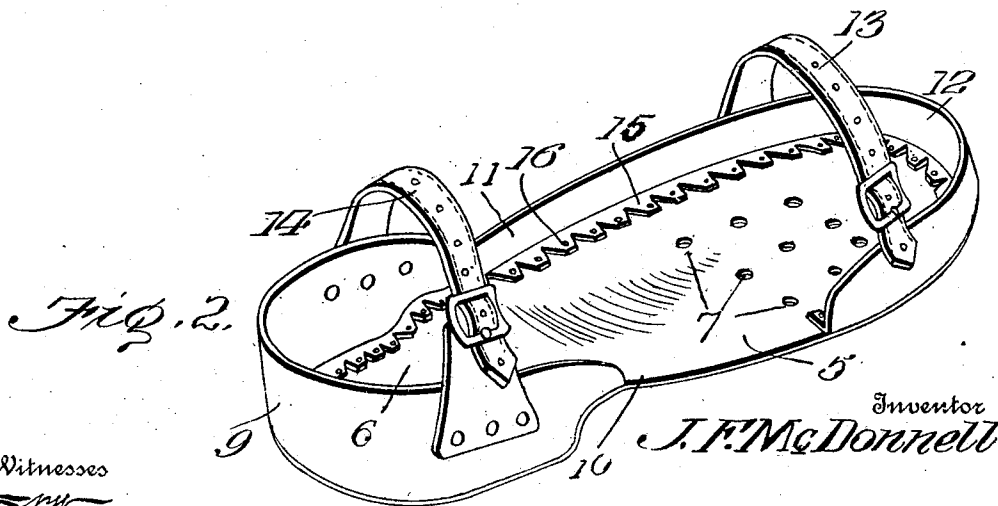
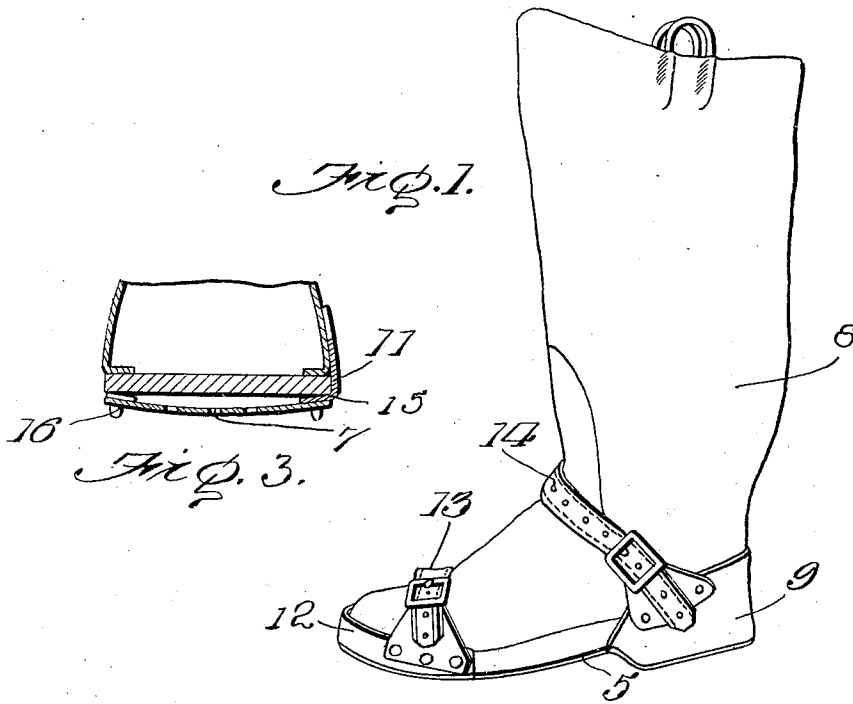


J. F. McDONNELL.
STEEL SHOE OR SANDAL.
APPLICATION FILED JULY 28, 1909.

946,846.

Patented Jan. 18, 1910.



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JOSEPH F. McDONNELL, OF CEDAR RAPIDS, IOWA.

STEEL SHOE OR SANDAL.

946,846.

Specification of Letters Patent.

Patented Jan. 18, 1910.

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To all whom it may concern:

Be it known that I, JOSEPH F. McDONNELL, citizen of the United States, residing at Cedar Rapids, in the county of Linn and State of Iowa, have invented certain new and useful Improvements in Steel Shoes or Sandals, of which the following is a specification.

This invention relates to metallic shoes or sandals and has for its object to provide a comparatively simple and thoroughly efficient device of this character adapted to be worn over an ordinary rubber boot or shoe for the purpose of protecting the sole of the boot from the deleterious action of cement when the wearer is working in a sewer or employed in erection of different kinds of cement structures.

A further object is to provide a metallic shoe or sandal having its inner edge provided with a flange constituting a guard for the boot when digging or shoveling, there being a series of perforations in the sole of the sandal to permit the passage of water between said sandal and boot, thus to prevent the accumulation of mud and small pebbles on the inner face of the sandal.

A still further object of the invention is generally to improve this class of devices so as to increase their utility, durability and efficiency, as well as to reduce the cost of manufacture.

Further objects and advantages will appear in the following description, it being understood that various changes in form, proportions, and minor details of construction may be resorted to within the scope of the appended claim.

For a full understanding of the invention reference is to be had to the following description and accompanying drawings, in which:—

Figure 1 is a perspective view of a metallic shoe or sandal constructed in accordance with my invention showing the same applied to a boot. Fig. 2 is a perspective view of the sandal detached. Fig. 3 is a transverse sectional view of Fig. 2 showing the sandal applied to a boot.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawing by the same reference characters.

The improved metallic shoe or sandal forming the subject-matter of the present in-

vention comprises a sole section 5, formed of sheet metal and having its heel portion 6 imperforate and its toe portion formed with a series of spaced perforations 7 to permit the passage of water between the inner face of the sandal and the sole of the boot 8, thereby to prevent the accumulation of mud and pebbles between the parts, which latter has a tendency to cut or otherwise injure the rubber. The heel portion 6 is provided with a counter 9 adapted to bear against the counter of the boot 8 and assist in retaining the sandal in position on the boot and also prevent undue wear on the heel of the latter. The counter 9 terminates at the instep portion 10 of the sole section on one side thereof, while on the other side of the sole section the counter is extended longitudinally to form a vertical flange or guard 11 which serves to protect the boot or shoe when digging or shoveling. The flange 11 is curved to conform to the contour of the inner edge of the shoe and is preferably extended around the toe portion thereof to form a toe flange 12. The toe flange 12 is of less height than the counter 9 and preferably terminates at a point opposite the flange 11 and in spaced relation to the adjacent end of the counter 9, thus to afford a passage for the water, sand and other debris passing through the perforations 7. Riveted or otherwise rigidly secured to the flange 12 are suitable attaching straps 13 adapted to engage the toe portion of the boot 8, there being similar attaching straps 14 secured to the counter 9 and adapted to extend across the instep of the boot as shown. It will here be noted that the flange 11 not only forms a guard for the inner face of the boot or shoe, but also forms a partition or barrier for the water entering through the perforations, so that the water coming in contact with the guard flange 11 will be deflected laterally on the opposite side of the shoe and flow outwardly between the inner edge of the counter 9 and toe flange 12. It will also be noted that the sole 5 is slightly concavo convex in cross section so as to promote the free circulation of water between the upper face of the sandal and the sole of the boot or shoe for the purpose before mentioned.

The counter 9, guard flange 11, and toe flange 12 are formed separately and subsequently attached to the sole section, the lower edge of the material constituting the counter, guard flange and toe flange being cut or sev-

ered to produce a series of attaching lips 15 adapted to bear against the inner face of the sole section 5 and to which they are rigidly secured by rivets or similar fastening devices 16. It will be noted that the rivets 15 extend below the lower face of the sole section 5 to form in effect calks, thus to prevent slipping of the shoe and also to slightly elevate the lower face of the sole 5 above the ground to facilitate the passage of water through the perforations for the purpose of keeping the inner face of the insole free from dirt, pebbles and other foreign matter.

Having thus described the invention what is claimed as new is:—

A metallic sandal comprising a perforated sole section, toe and heel flanges having lat-

erally extending attaching lips adapted to bear against the upper face of the sole section and connected by an integral guard flange disposed on the inner edge of said sole section, the outer edge of the sole section between the heel and toe flanges being smooth and unobstructed, rivets extending through the attaching lips and sole section for retaining the heel and toe flanges in position thereon and attaching straps secured to said flanges.

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

JOSEPH F. McDONNELL. [L. S.]

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