March 15, 1938. J. M. MURRAY 2,111,536

TOE GUARD

Filed Aug. 17, 1936

Fig. 1.

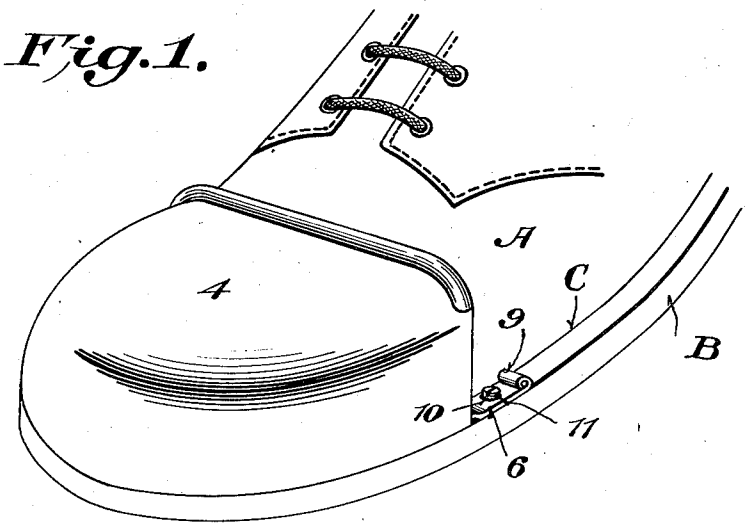


Fig. 2.

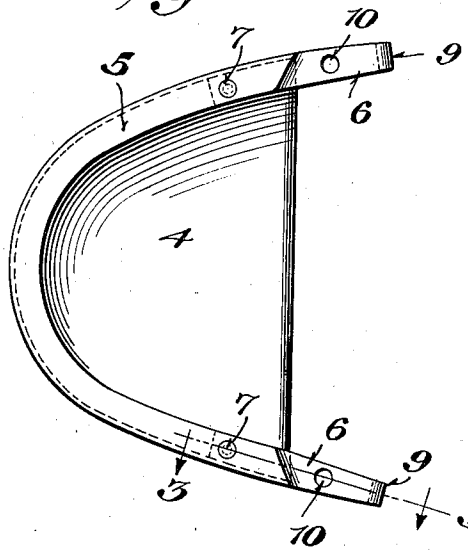
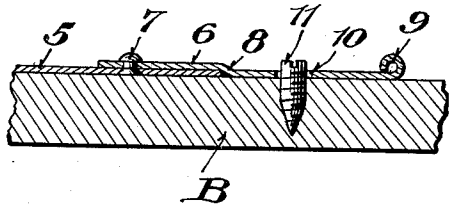


Fig. 3.



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UNITED STATES PATENT OFFICE

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TOE-GUARD

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Application August 17, 1936, Serial No. 96,500

1 Claim. (Cl. 36—72)

This invention relates to toe-guards for footwear, and particularly to guards for protecting the fore parts of heavy boots and shoes worn by workmen whose feet are liable to contact against machinery, castings, rock, etc.

It is an object of the invention to provide means whereby a guard for this purpose is held reliably in place on a boot or shoe, and whereby the guard easily may be placed on and removed from an article of footwear.

When considered with the description herein, the characteristics of the invention are apparent in the accompanying drawing.

Like reference-characters refer to corresponding parts in the views of the drawing, of which—

Fig. 1 is a view of the guard on a shoe;

Fig. 2 is a bottom view of the guard;

Fig. 3 is a section on the line 3—3, Fig. 2.

The guard proper is a cap 4 of sheet metal or other suitable rigid material formed and shaped to constitute a cover that conforms substantially to, and extends over, the vamp or fore part of the upper A of footwear.

Along its base or lower edge the cap has an inwardly-extending flange 5 that is seatable on top of the marginal portion of the sole B and to extend under the bulge C of the vamp or fore part of the upper to nearly the place where the upper is connected to the sole.

For holding the cap in that position, flat springs 6, one on each side, are secured to the top of flange 5, as by rivets 7. These springs extend rearwardly beyond the cap proper, and they are offset, as shown at 8, to lie flush against the top of the sole to the rear of the flange, the springs being tensioned to lie normally in their projecting portions in the same plane as the flange. The free ends of the springs are turned upwardly and rolled over as beads 9. Each of the springs has a hole or seat 10 to receive the upper end of a pin 11 in the sole. This pin may be a headless screw, as shown, or of any other suitable form fast in the sole.

When the guard is to be placed on footwear, it is shoved rearwardly with its flange 5 on top of the sole, and the springs ride over the pins 11 until the holes or seats reach the pins, when the springs snap down over the pins and against the sole. The pins then projecting into the seats or holes reliably maintain the guard in place. During the rearward placement movement of the cap, the rolled over or rounded ends of the springs permit them to begin to ride over the pins.

The guard may be removed by lifting the springs from the pins. This releasing movement of the springs may be caused by the wearer grasping the terminal beads and lifting the springs. When the springs cannot be lifted easily by the fingers, as when they are covered with mud, they may be pried upwardly by inserting the end of a screw-driver or other suitable article under the rounded terminals.

Moreover, if a guard becomes wedged between stones or in a slot or the like, and it is possible to flex the sole downwardly by pressing the heel down, the springs thereby may be released from the pins and the boot or shoe withdrawn from the guard.

Further, when the pins are of the screw type, if difficulty is met in releasing the springs from them, the pins may be unscrewed from the sole.

It is to be understood, however, that in ordinary circumstances the springs easily may be released by lifting them with the fingers, and that the methods mentioned for releasing the cap in extraordinary conditions are referred to to show the general suitability of the retaining means of the invention.

What I claim as new, and desire to secure by Letters Patent, is—

A guard comprising a cap for covering the fore part of an article of footwear and having at its base an inwardly-disposed flange seatable on top of the marginal portion of the footwear sole, and a flat spring at each side of said cap fixed in its front portion against the top of said flange inside of the cap and extending rearwardly thereof, the springs being offset downwardly at the end of the flange a distance equal to the thickness of the flange whereby they are adapted to lie flush against the top of the sole, and each of said springs having a seat to receive an upwardly-extending projection on the sole and being susceptible of being lifted for disengagement therefrom.

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