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J. MICHELSEN

CALK ATTACHMENT FOR BOOTS

Filed March 8, 1926

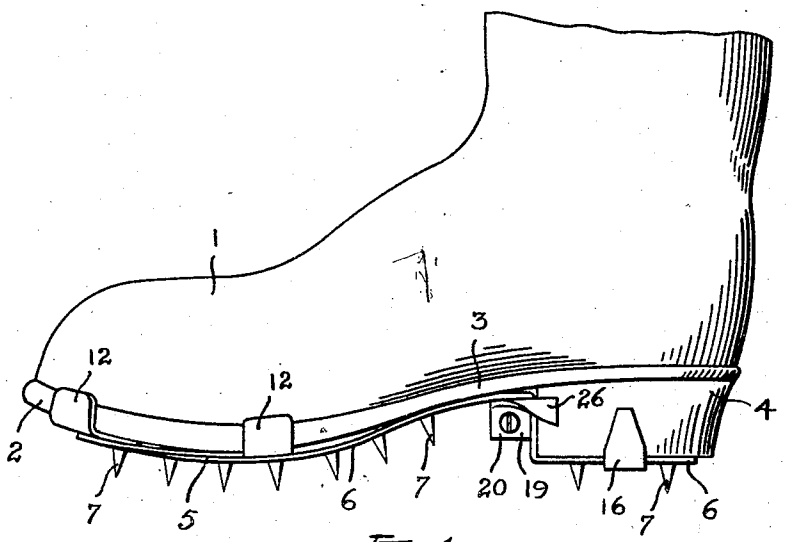


Fig. 1

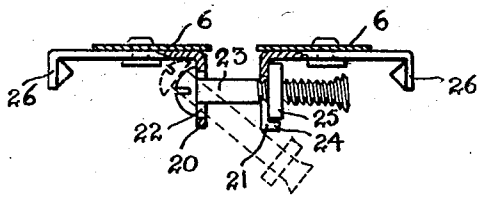


Fig. 3

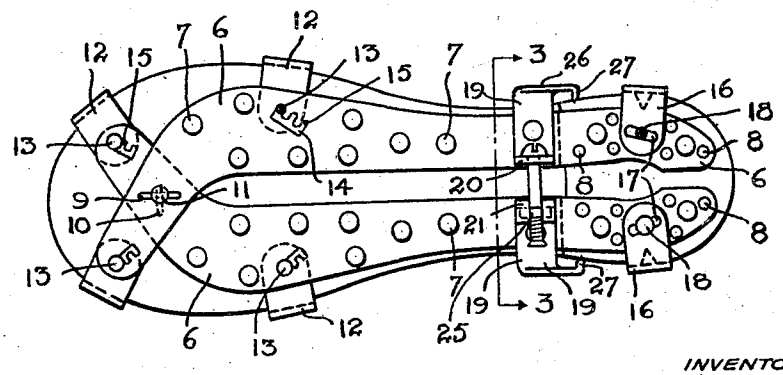


Fig. 2

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UNITED STATES PATENT OFFICE.

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CALK ATTACHMENT FOR BOOTS.

Application filed March 8, 1926. Serial No. 93,294.

My invention relates to improvements in calk attachments for boots, the objects of which are to provide means whereby the attachment may be adjusted to fit a variety of shapes and sizes of boots, and may be securely yet detachably secured thereto. Further objects are to provide means whereby the clamping bolt is held against detachment from the device, so that no parts may be lost, rendering the attachment incomplete when required for fitting to other boots.

The invention consists essentially of a pair of scissor like members fitted with calks and adjustable clips which are adapted to be fastened to the sole and heel of a rubber or other boot by drawing one end of the members towards each other by means of a bolt or other suitable fastening, as will be more fully described in the following specification in which:—

Fig. 1 is a side view of the invention.

Fig. 2 is a plan view showing the attachment secured to the sole and heel of a rubber boot, with the heads of some of the rivets removed to show the clip adjusting means.

Fig. 3 is an enlarged detail view of the clamping means taken on the line 3—3 of Figure 2.

In the drawings like characters of reference indicate corresponding parts in each figure.

The numeral 1 indicates generally a boot, having a sole 2, an arch 3, and a heel 4. The numeral 5 indicates generally the attachment which is formed with a pair of curved members 6 having calks 7 projecting downwardly therefrom and preferably a plurality of apertures 8 adjacent their rear ends of which they may be secured by screws to the heel 4 when intended for permanent attachment. The members 6 are slotted adjacent their forward ends, the slot in one member being formed longitudinally of the device as at 9 and that in the other member being formed transversely as at 10, shown in dotted line, through which slots a rivet 11 is loosely carried, so that the ends of the attachment can move about a variable fulcrum when being adjusted to a boot.

The numeral 12 indicates a plurality of clips which are adapted to embrace the welt of the sole 2 and are each provided at their inner ends with a rivet 13 which projects through a slot 14 having two or more right angular extensions 15, all of which are diagonally disposed with respect to the boot 1 so that the extensions 15 vary in distance from the edge of the sole permitting the rivet 13 to be held in whichever slot is required to bring the clip into proper gripping contact with the welt of the sole.

The numeral 16 indicates a pair of clips which are adapted to grip the heel 4, each of these clips is preferably provided with a diagonally disposed slot 17 whose longitudinal axis is directed to the rear centre of the heel and which is fulcrumed upon a rivet 18 carried in the rear end of the member 6. The numeral 19 indicates a pair of clamps secured to the member 6, preferably formed of sheet metal downwardly turned at their inner or opposing ends as at 20 and 21 respectively, the end 20 being provided with an oval aperture 22 through which a bolt 23 is adapted to project. The end 21 is slotted to permit the passage and removal of the bolt 23 and is turned outwards as at 24 to form a lip for the purpose of engaging one side of a nut 25 upon the bolt 23. The bolt 23 is riveted up at its outer end to prevent the removal of the nut 25. The clamps 19 are bent over at their outer ends as at 26 and are provided with a pair of prongs 27 which are adapted to be drawn into the sides of the heel 4 of the boot as the bolt 23 is driven up into the nut 25.

Having thus described the several parts of my invention I will now briefly explain its adjustment.

The attachment is laid upon the sole of the boot to be fitted and the clips 12 moved so that their rivets 13 come to rest in whichever slot extension 15 is required to give the proper spacing between the clips, so that when the attachment is drawn up to fixed position the sole shall be properly gripped thereby. The clips 16 are allowed to engage the heel 4 when lying in a position approximately at right angles to the length of the boot, so that as the bolt 23 is tightened the clips ride upon their rivet 18, the slots 17 moving therealong until a position of rest is attained, when it will be found that the clips have assumed an angle converging towards the centre of the heel and the pulling strain of the clips at opposite ends of the boot is opposed. As the bolt 23 is tightened, the prongs 27 are drawn into the sides of the heel so as to prevent any adverse strain imposed upon the attachment from drawing its centre portion downwards from the arch 3 of the boot.

When removing the attachment the bolt 23 is slackened within the nut 25 which is allowed to be withdrawn from the slotted end 21 of the clamp and the bolt remain in suspension, as shown in dotted line in Figure 3, within the oval aperture 22 of the end 20 and the members 6 spread apart to release the several clips from the boot.

What I claim as my invention is:

A calk attachment for boots comprising a pair of relatively movable members provided with clips for attaching same to the sole and heel of a boot, a pair of transverse plates fastened to the lower surfaces of said members and arranged in alignment, said plates being positioned to lie in proximity to the breast of the boot heel and being bent rearwardly and inwardly at the outer ends to provide prongs adapted to be imbedded in the sides of the heel when the plates and relatively movable members are drawn together, the inner ends of said plates being bent to provide opposing parallel lugs and a tightening devices passing through openings formed in said lugs and operable to draw the lugs and attached members together so as to imbed the prongs of the plates within the heel of the boot as aforesaid.

Dated at Vancouver, B. C., this 24th day of February, 1926.

JOHN MICHELSEN.