June 8, 1954 P. SALZMAN 2,680,258

SOLE STRAIGHTENER FOR SHOES

Filed July 3, 1953

Fig. 1.

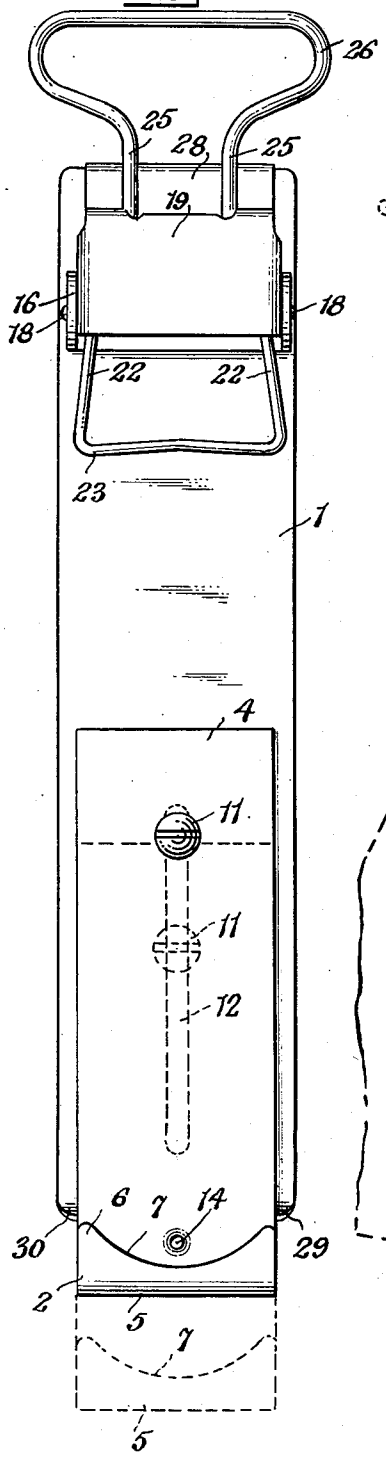

Fig. 2.

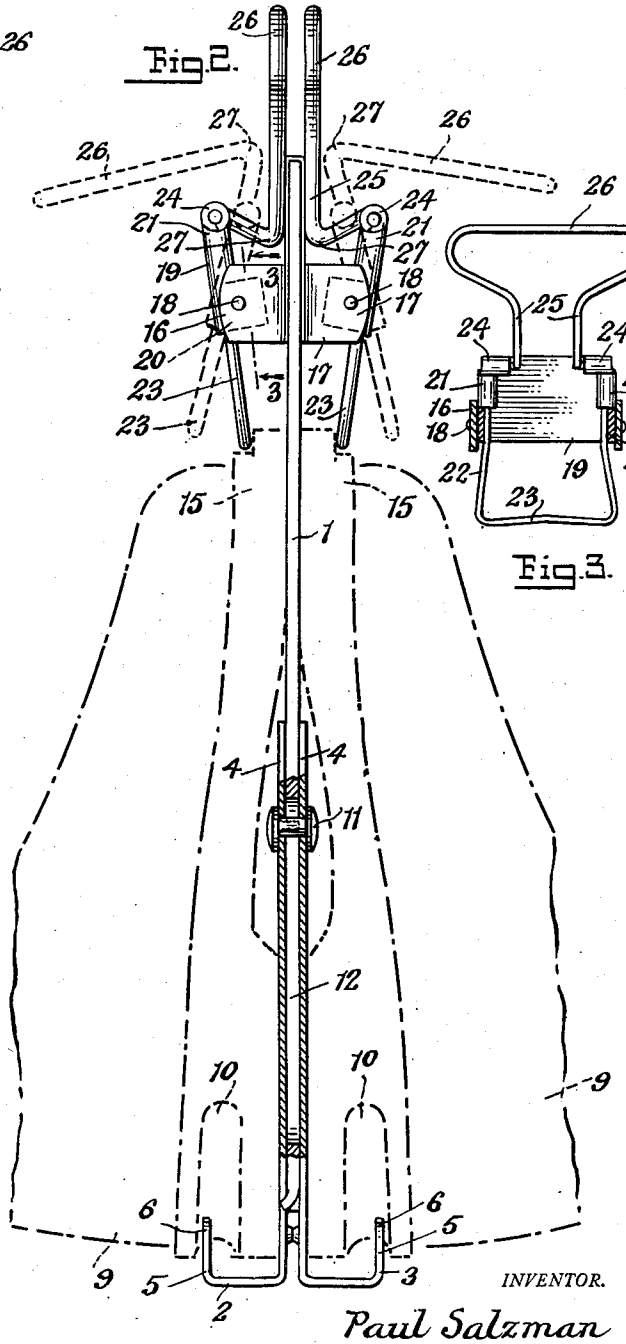

Fig. 3.

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SOLE STRAIGHTENER FOR SHOES

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5 Claims. (Cl. 12—129.1)

1

This invention relates to shoe holders or so-called "trees" by means of which a pair of shoes or boots are supported in such a manner as to hold the soles straight or flat, and particularly after the shoes have been subjected to moisture.

Certain types of shoes or boots, and particularly those used for skiing or for engagement in other winter sports, become wet after continued use and to maintain the shoes in proper form it is desirable that the shoes be held or supported in a manner to keep the sole portions of the shoe flattened. It is therefore the primary object of the present invention to provide a simplified and improved means by which a pair of shoes will be held in a manner to insure the soles of the shoes remaining flat.

It is another object of the invention to provide a device of this character which will be readily adjustable to enable it to accommodate shoes of various sizes; which can be made of non-corrosive metal to avoid rusting; which can be made light in weight and thus readily carried in luggage or as a part of skiing or sport equipment and which will be strong and sturdy and capable of withstanding hard use.

With these objects, and other objects to be hereinafter set forth in view, I have devised the arrangement of parts to be described and more particularly pointed out in the claims appended hereto.

In the accompanying drawing, wherein an illustrative embodiment of the invention is disclosed,

Fig. 1 is a front elevation of the improved shoe holder constructed in accordance with the invention;

Fig. 2 is a side elevation of the same, with parts shown in section to disclose construction; and

Fig. 3 is a sectional view on a reduced scale, the view being taken on the line 3—3 of Fig. 2, looking in the direction of the arrows.

Referring to the drawing, 1 indicates the body portion of the invention which, in the embodiment shown, is in the form of a flat, stiff, elongated strip of non-corrosive metal such as aluminum or aluminum alloy. At one end of the strip 1, and which will herein be referred to as the lower end of the strip, is provided a pair of heel grips, indicated respectively at 2 and 3. Each of these heel grips includes a flat plate portion 4 disposed flatwisely against a face of the strip 1, and a hook portion 5, terminating in the upturned flange 6 provided with a notched edge as indicated at 7. This notch 7 is shaped to fit

2

around the rear edge of the heel of a shoe 9 and to enter the depression 10 in the heel as commonly provided in so-called "ski boots," and as clearly shown in Fig. 2.

The two plate portions 4 of the heel grips are connected together by an adjustable clamping screw 11 which is slidable in an elongated, centrally positioned, slot 12 provided in the strip 1. Beyond the lower end of the strip 1, the two heel grips 2 and 3 are joined together as by a depressed rivet 14, welding or by other means. Thus, by the connection established by means of the screw 11 and by the rivet 14, the two heel grips are connected together as a unit and when slidably moved with respect to the strip 1, they are accordingly moved together. The above-described arrangement is such that by loosening of the screw 11 the two heel grips may be moved longitudinally of the strip 1, the screw 11 moving along in the slot 12. When the heel grips are properly positioned for a pair of shoes of the required size, the screw 11 is tightened and the heel grips 2 and 3 are thus located in a fixed position from which they will not have to be again shifted until shoes of a different size are to be accommodated by the device.

Means is provided at the opposite or upper end of the strip 1 for engagement with the front or toe ends of the soles 15 of the shoes. Secured to the opposite faces of the strip 1 are U-shaped supporting brackets indicated respectively at 16 and 17. Pivotally mounted by the pivots 18, in each of these brackets, is a plate 19 having lugs 20 through which the pivot pins 18 pass. On its rear face adjacent to its side edges, the plate is provided with sleeves or sockets 21 in which is anchored the legs 22 of a substantially U-shaped toe clamp or finger 23. Adjacent to its upper edge and at its rear face, the plate 19 is formed with a pair of sleeves or socket members 24 into which the ends of legs 25 of a loop-shaped handle member 26 are pivotally mounted. As will be noted from Fig. 2, these legs 25 are provided with elbows or are sharply bent as indicated at 27. A protective wear plate or sheathing 28 of steel or other hard metal is fitted over the upper end of the strip 1 to prevent abrasion of the surface of the strip 1, which might be of relatively soft metal as heretofore pointed out.

From the foregoing, the operation of the improved shoe holder will be readily understood. The heel grips are adjusted to the proper position by sliding them along the strip 1 as required, the grips being guided in this sliding movement by ears 29 and 30 provided on the strip 1, and by

the engagement of the screw 11 with the slot 12. When the proper position of the heel grips is secured, the screw 11 is tightened. The front end of the sole of the shoe is inserted under the clamp or finger 23. This can be readily done by pivotally moving each of the plates 19 to the positions shown in dotted lines in Fig. 2, while the handles 26 are extended outwardly as also shown in dotted lines in that figure.

After the forward ends of the soles of the two shoes have been inserted under the clamps or fingers 23, these clamping elements are moved into clamping positions by pivotally moving the plates 19 to the positions shown in full lines in Fig. 2. The plates 19 and the clamping fingers 23 rigidly carried thereby, are then locked in the clamping positions by swinging the handles 26 to the positions shown in full lines. It will be noted that when the handles are disposed in these positions, the handles are brought flatly against the strip 1 and the bends or elbows 27 in the legs of the handles are so disposed that pivotal movement tending to swing the clamping fingers 23 away from the strip 1 is prevented by the handles and the fingers 23 are thus maintained in their locked positions to hold the shoe flatly against the strip 1 and thus hold the soles of the shoes in the required flat position to enable them to dry while retaining their required shape. When the parts are in the clamping position as above described, and as shown in full lines in Fig. 2, the loop portions of the handles project above the upper end of the strip 1 and thus permit the device, with its shoes attached, to be easily carried by the handles or else suspended in any suitable manner.

The shoes are released from the device by swinging the handles 26 to the dotted-line positions of Fig. 2, whereupon the plates 19 and attached fingers 23 can be readily pivoted outwardly to release the forward ends of the shoes and the shoes then readily detached from the device.

Having described one embodiment of the invention, it is obvious that the same is not to be restricted thereto, but is broad enough to cover all structures coming within the scope of the annexed claims.

What I claim is:

1. A shoe holder comprising a flat strip, a heel grip arranged on each face of the strip and slidably adjustable thereon longitudinally of the strip, a toe clamp arranged on each face of the strip, each clamp consisting of a pivoted member adapted to take over the front end of the sole of a shoe rested flatly against a face of the strip, and a pivoted handle member for each toe clamp, said handle member serving to lock the toe clamp in its clamping position.

2. A shoe holder comprising a metal strip, adjustable means at one end of the strip for engaging the heels of a pair of shoes arranged on opposite sides of the strip, toe clamps adjacent the opposite end of the strip for engaging the front ends of the soles of the said pair of shoes, each of said toe clamps consisting of a pivoted member having a handle pivotally attached to it, said handle being movable to a position to lock the pivoted member against pivotal movement when said member is located in its shoe-retaining position.

3. A shoe holder as provided for in claim 2, wherein each of the handles is in the form of a loop extending beyond one end of the strip, and the toe clamps each include a loop which takes over the forward end portion of the sole of the shoe.

4. A shoe holder comprising, a flat, elongated metal strip slotted longitudinally adjacent to one of its ends, a hook-shaped, heel-engaging grip disposed on each face of the strip, a set screw extending through the slot in the strip and connecting the heel grips together, each of the grips including an upturned, hooked end formed with a notched edge for engagement with the heel of a shoe rested flatly against a face of the strip, toe clamps arranged adjacent to the opposite end of the strip, each of said toe clamps including a bracket, a plate pivoted in the bracket, a toe-engaging loop attached rigidly to the plate and extending beyond the plate to engage over the toe end of a shoe sole, a handle pivotally attached to the plate, said handle being offset from the plate to thereby provide a locking means for holding the plate in its clamping position while the handle is disposed in a certain position relatively to the strip.

5. A shoe holder comprising a flat metal strip having heel grips at one end and toe clamps at its opposite ends, each of the toe clamps including a bracket, a plate pivoted therein, a loop-shaped shoe-sole engaging finger carried by the plate, and offset loop-shaped handle pivoted on the plate, said handle being shaped to constitute a lock to prevent pivotal movement of the plate when the finger thereon is in engagement with the shoe sole and the handle is positioned adjacent to the strip.

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