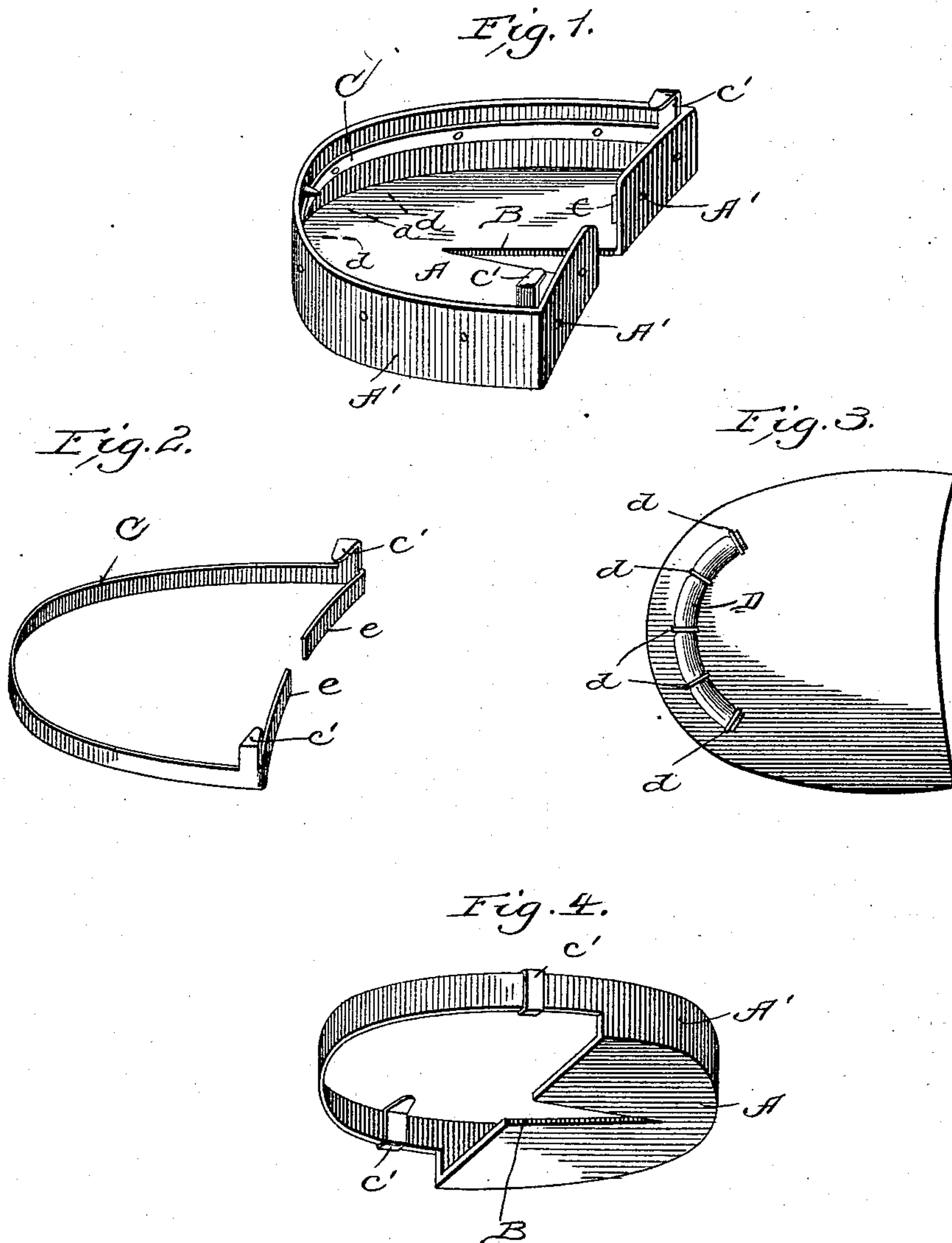


(No Model.)

T. J. WILLIAMS.  
DETACHABLE RUBBER HEEL.

No. 539,843.

Patented May 28, 1895.



witnesses:  
Harry D. Parker.  
Herbert Bradley.

Inventor:  
Thomas J. Williams  
by J. F. Beale:  
Atty.



# UNITED STATES PATENT OFFICE.

THOMAS JACKSON WILLIAMS, OF KOUNTZE, TEXAS.

## DETACHABLE RUBBER HEEL.

SPECIFICATION forming part of Letters Patent No. 539,843, dated May 28, 1895.

Application filed March 12, 1895. Serial No. 541,439. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS JACKSON WILLIAMS, a citizen of the United States, residing at Kountze, in the county of Hardin and State of Texas, have invented certain new and useful Improvements in Detachable Rubber Heels; 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.

My invention relates to rubber heels adapted for attachment to the heel of a boot or shoe.

The object of my invention is to provide a rubber heel tap adapted for detachable connection to the heel of a boot or shoe, and which shall serve to cushion the fall of the heel.

It is also my object to provide a corrugated surface upon the face of the heel which shall adapt the same for service as an ice creeper.

In the accompanying drawings, forming a part of this specification, Figure 1 is a perspective view of my rubber heel. Fig. 2 is a perspective view of means for detachably connecting the heel-tap. Fig. 3 is a bottom plan view of the face of the heel. Fig. 4 is a perspective view of a modification.

Referring more particularly to the drawings A denotes the heel tap or sole made of soft rubber and having a raised flange A' extending around the sides, back, and breast where it is divided by an opening B formed in the face of the heel tap. Said opening is V shaped as shown in the drawings, and is cut inward from the breast of the heel and extends back about half way to the rear thereof. The raised flange is about the height of an ordinary heel made of rubber cloth or leather, and secured in any suitable manner to the heel or formed integral therewith. C denotes a steel spring secured to said flange by rivets or otherwise and is co-extensive therewith, its bent ends c c extending to the opening B. As shown in Fig. 2 said ends are bent inwardly and backwardly at an acute angle to their sides and are curved to conform to the curve in the breast of the heel whereby they are given a quick bearing surface. c' c' denote lugs formed integral with said spring extending upwardly and then inwardly at right angles as shown in Figs. 1 and 2.

The face of the heel tap as shown in Fig. 3 is provided with a piece of rubber tubing D secured to the sub heel by wire staples d driven through the same and clinched on the upper side forming a series of air chambers between each pair of staples, and providing a corrugated bearing surface at the rear of the heel.

The heel tap is adapted by reason of the V shaped opening B, to fit different sizes of heels and it is applied to the heel by spreading the sides of the spring C which opens out the flange A' to admit the heel. The bent ends c c of said spring bear backwardly against the breast of the heel while its sides clamp the sides of the heel. The lugs c' c' fit in the space over the shank formed at the intersection of the shank and vamp immediately above the corners of the heel. Said lugs press inwardly and serve to prevent the downward escape of the heel tap. Flat pronged thumb tacks may be provided at the back of the flange A' to give additional support if desired. The spring C is preferably located about midway of the flange A' so that it will bear in the dished sides of the heel.

The rubber tube secured to the under side or face of the heel besides affording air cushions equips the heel tap for an ice creeper as it affords a corrugated surface at the bearing portion of the heel. The tube when worn can be readily detached by removing the wire staples and a new one substituted.

In the modification shown in Fig. 4, the heel tap is designed to cover the rear part of the heel and in this form the flange A' is preferably formed integral with the heel tap and is provided with an elastic band which embraces the breast of the heel and adapted to clamp said flange tightly to the lifts of the heel on all sides. At proper points on said band is provided lugs c' c' which operate to support the heel tap and hold it in position in like manner to the lugs shown in Fig. 1.

Having thus described my invention, what I claim as new therein, and desire to secure by Letters Patent, is--

1. A detachable rubber heel tap adapted to fit heels of varying size having a divided breast, a raised flange terminating upon each side of said division, and a steel spring secured to said flange and adapted to grasp the sides and breast of the heel.

2. A detachable heel tap having a raised flange provided with a spring adapted to clamp the side, back, and breast of a heel, and lugs adapted to press inwardly over the shank  
5 above the heel.

3. A detachable rubber heel tap having a raised flange, a divided breast and an elastic band adapted to clamp the breast of a heel and provided with lugs adapted to press in-  
10 wardly over the shank above the corners of said heel.

4. The combination with a heel made of soft

or yielding fabric, of a detachable heel tap formed of a rubber tube and a series of staples embracing said tube and driven through  
15 said heel, whereby said tube is compressed at intervals and presents a corrugated bearing surface, substantially as shown and described.

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

THOMAS JACKSON WILLIAMS.

Witnesses:

BIRCH PEDIGO,

J. R. DAVENPORT.