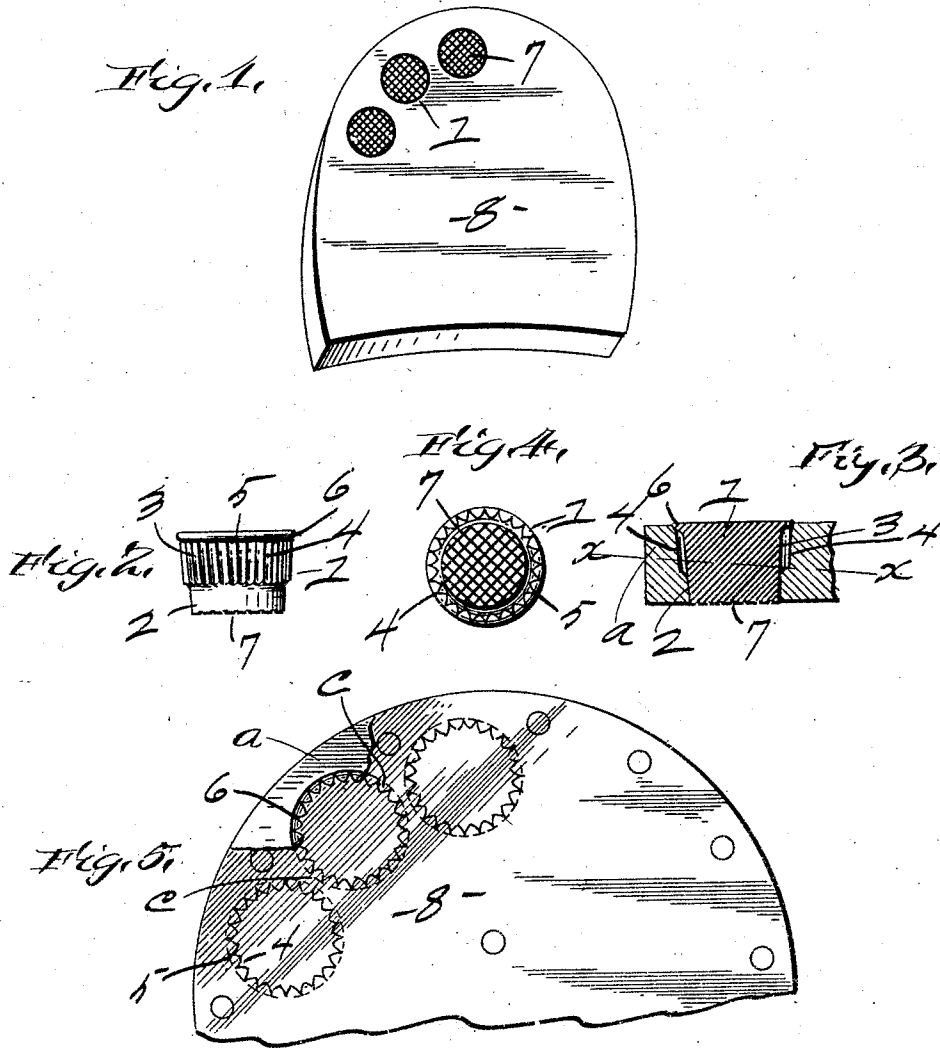


1,010.345.

Patented Nov. 28, 1911.



Witnesses,
 E. L. Eder
 Omar F. Fry.

Inventor:
 James E. Brady
 by *Carl H. Keller*
 atty

UNITED STATES PATENT OFFICE.

JAMES E. BRADY, OF TOLEDO, OHIO, ASSIGNOR TO E. L. BECKHAM, OF TOLEDO, OHIO.

HEEL-PROTECTOR.

1,010,345.

Specification of Letters Patent. Patented Nov. 28, 1911.

Application filed December 31, 1909. Serial No. 535,759.

To all whom it may concern:

Be it known that I, JAMES E. BRADY, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Heel-Protectors; and I do hereby 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.

This invention has reference to improvements in heel plugs for shoes to protect and prolong the life of the heel at the point of greatest wear.

The object of the invention is to provide a simple and inexpensive protection for a shoe heel which shall be practically insured against accidental removal due to forcible contact with the ground or pavement.

In carrying out my invention I employ the novel arrangement and details herein-after shown, described and specifically claimed.

In the accompanying drawings illustrative of my invention, Figure 1 is a perspective view of a heel lift showing three of my improved heel plugs in position; Fig. 2 is a side elevation of a plug; Fig. 3 is a vertical section through the lift and the plug in position therein; Fig. 4 is a bottom plan view of the plug; and Fig. 5 is a face view of a shoe heel showing the lower lift and the plugs worn away and showing a portion of the lift adjacent to one of the plugs broken away. All of the figures except Fig. 1 are enlarged views.

Referring to the details my improved plug 1 is constructed of any suitable hard metal, preferably steel, and the same is in the form of a tapered plug having the lower portion 2 of the sides smooth and having the upper portion 3 formed with longitudinally extending ribs 4 having sharp ridges 5, the diameter of the ribbed portion of the plug being greater than the lower portion by reason of the ribs. About the top margin of

the plug there is provided a limiting shoulder 6 the ribs 4 being discontinued immediately below the top. The outer wearing face 7 of the plug is suitably roughened and 8 indicates a leather lift having holes punched therein to receive the plugs.

In applying my plug to a heel the lift 8 is punched with holes, preferably three in number, each hole being just large enough to readily receive the lower portion 2 of the plug, the plug being readily inserted up to the point where the ribs commence. Then by means of a suitable tool or pressure applying device the plug is forced into the hole causing the ribs to become firmly embedded in the leather, the shoulder 6 engaging the top margin of the hole in the lift.

In Fig. 5 is illustrated a heel having the lift provided with my improved plugs, the same being tacked upon the heel proper. The figure illustrates the lift and the plugs worn down to the line $x-x$, Fig. 3, and shows a portion a broken away by accident, as may readily occur in wearing the heel. Should the heel break away in the manner shown, the positive engagement provided by the interlocked ribs and the leather walls, as at c insures the plug from being accidentally knocked off until completely worn out. The plugs when in position are invisible from the rear of the heel and on the face of the heel are attractive in appearance.

What I claim is—

A heel protector having the form of a plug, the lower portion of which has smooth sides and the upper portion of which is provided with longitudinal ribs projecting beyond the smooth lower portion, and a limiting shoulder about the upper margin of the plug, substantially as described.

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

JAMES E. BRADY.

Witnesses:

EDWIN L. EDLER,
CARL H. KELLER.