

UNITED STATES PATENT OFFICE.

WILLIAM H. TOWERS, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN VULCANIZED-RUBBER RINGS FOR BOOT AND SHOE HEELS.

Specification forming part of Letters Patent No. 122,869, dated January 16, 1872.

Be it known that I, WILLIAM H. TOWERS, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Vulcanized-Rubber Taps for Boots and Shoes to prevent slipping on ice and pavements; and I hereby declare the following to be a full and exact description of the same.

This invention consists of a flat ring or washer of soft vulcanized rubber of suitable diameter to cover or nearly cover the bottom of the heel of a boot or shoe. Heretofore there have been both plates and composition of rubber, either plain, corrugated, or filled with sand, emery, and the like, to be attached to the heels and soles of boots and shoes. When properly made they have some utility, but are expensive. The object of my invention is to provide a simple cheap article which the wearer may attach to any ordinary boot or shoe as required, and when not worn and wanted, may be torn off.

The following description will enable any one to make and use my invention. I take the vulcanizable compound of caoutchouc or rubber or other vulcanizable gum, and form sheets the same as for the manufacture of elastic rolls for wringers and the like. This sheet is then rolled around a mandrel or core to the depth of from half an inch to three-quarters of an inch, more or less. The mandrel should be from three-eighths to half an inch in diameter. The roll is then vulcanized in the ordinary

way so as to form an elastic roll. From this roll I cut washers or rings about an eighth of an inch in thickness, or the rings may be cut from the roll and then vulcanized. This ring or washer, made of the material and in the form described, constitutes my invention.

When used it is to be attached to the heel of the boot or shoe by means of tacks, screws, pegs, or cement. When tacks are used I prefer the common copper tacks as they are not affected by the sulphur in the rubber. As only the heel of the boot or shoe is covered by the washer, the leather on the ball of the shoe holds on to such surfaces as rubber would slip on. The hole in the center of the rubber-ring also takes hold of any irregularities of the ice, and assists in preventing slipping in any direction. The cost of the article is so small that when once used, if not again required, it may be torn off and thrown away.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

A flat ring of vulcanized rubber or its equivalent, suitable for attaching to the heels of boots and shoes, the same being a new article of manufacture.

WM. H. TOWERS.

Witnesses:

FRANK EVANS,
JOS. H. WHITMAN.

(84)