

No. 652,887.

Patented July 3, 1900.

G. F. BUTTERFIELD.  
HEEL FOR BOOTS OR SHOES.

(Application filed July 1, 1897.)

(No Model.)

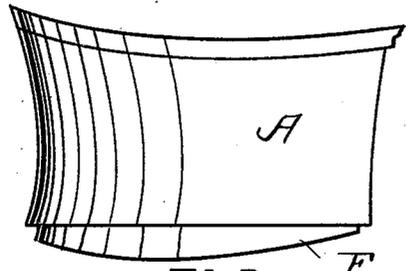


Fig. 1. F

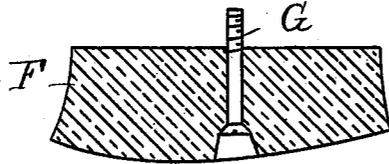
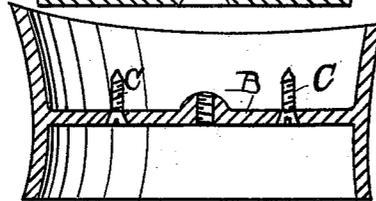
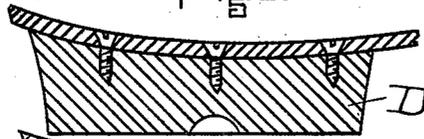
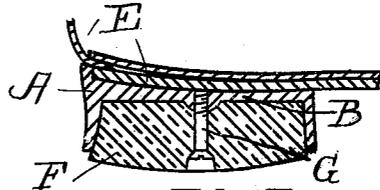


Fig. 2.



Figs. 5.

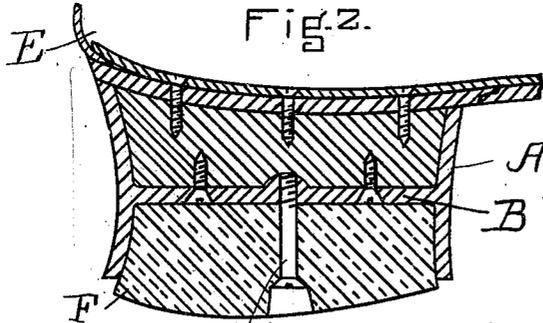


Fig. 6.

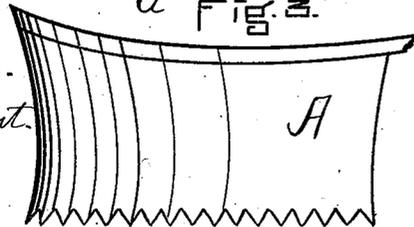


Fig. 7.

WITNESSES.

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ATT'Y.

# UNITED STATES PATENT OFFICE.

GEORGE F. BUTTERFIELD, OF STONEHAM, MASSACHUSETTS.

## HEEL FOR BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 652,887, dated July 3, 1900.

Application filed July 1, 1897. Serial No. 643,079. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE F. BUTTERFIELD, of Stoneham, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Heels for Boots or Shoes, of which the following, taken in connection with the accompanying drawings, is a specification.

The object of this invention is to provide heels of improved construction for boots or shoes of various styles and to adapt the same to varying conditions of use.

My improved heels have an outer shell of thin metal or other suitable material secured firmly to the bottom of the boot or shoe by rivets, screws, staples, or nails, these fastenings preferably entering a boss or projection first fixed in place at the heel portion of the shoe. The metallic shell has in its best form a horizontal partition uniting its side walls about midway of its height and fitting snugly against the bottom of the boss or heel-form fixed to the shoe, and through this partition screws or other fastenings pass upwardly to secure the shell to the boss. A yielding tread or cushion, preferably of vulcanized rubber, is held in the lower chamber of the shell by any suitable means, such as vulcanizing it in position; but I prefer to secure it detachably by one or more screws entering the horizontal partition, so that it may be removed, when desired, so as to bring the edges of the shell to the ground, whereby slipping on ice in winter is prevented. The lower edge of the shell may be toothed or roughened to make it more effective for this purpose. The rubber cushion when in use projects considerably below the shell, and while transversely horizontal its bottom is preferably quite convex from front to rear.

The upper chamber of the shell may be omitted, together with the wooden or other boss or heel-form on the shoe, and the horizontal portion secured direct to the heel portion of the shoe by staples, nails, or rivets extending upwardly through the sole and insole and clenched inside the shoe. For men's shoes, where the heel is relatively low, this form is especially desirable.

In the drawings, Figure 1 is a side view of one of my improved heels. Fig. 2 is a vertical longitudinal section through the parts, shown detached. Fig. 3 is a like section through the completed heel. Fig. 4 is an elevation of the shell without the cushion. Fig. 5 is a modification.

A represents the outer shell, and B the partition or horizontal portion, through which pass the fastenings which secure the shell to the shoe. In Figs. 2 and 3 these fastenings are shown as screws C, extending upwardly into the boss or heel-form D, which is fixed to the heel portion of the sole or shoe E.

In Fig. 5 the upper walls of the shell are omitted or reduced and the part B becomes a concave top of the shell, fitting beneath the heel portion of the shoe, and the fastenings are clenching-staples which hold the shell firmly, its upper edges inclosing the rear end of the sole.

F is a yielding cushion, preferably of vulcanized rubber, fitted into the lower chamber of the hollow shell A. G is a screw counter-sunk in the cushion F and extending up and threaded to engage in a thickened portion of the part B of the shell. Any desired number of such screws may be used, and when the cushion is not to be removable it may be permanently cemented or vulcanized in place. The bottom is shown convex in its longitudinal section, with the greater swell at the rear.

I claim as my invention—

A boot or shoe having secured to its heel portion a heel-shaped metallic shell, open at bottom and roughened along its lower margin, in combination with a yielding cushion fitting within and protruding below said shell and provided with detachable fastenings permitting its removal, substantially as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 29th day of June, A. D. 1897.

GEORGE F. BUTTERFIELD.

Witnesses:

A. H. SPENCER,  
MATTHEW M. BLUNT.