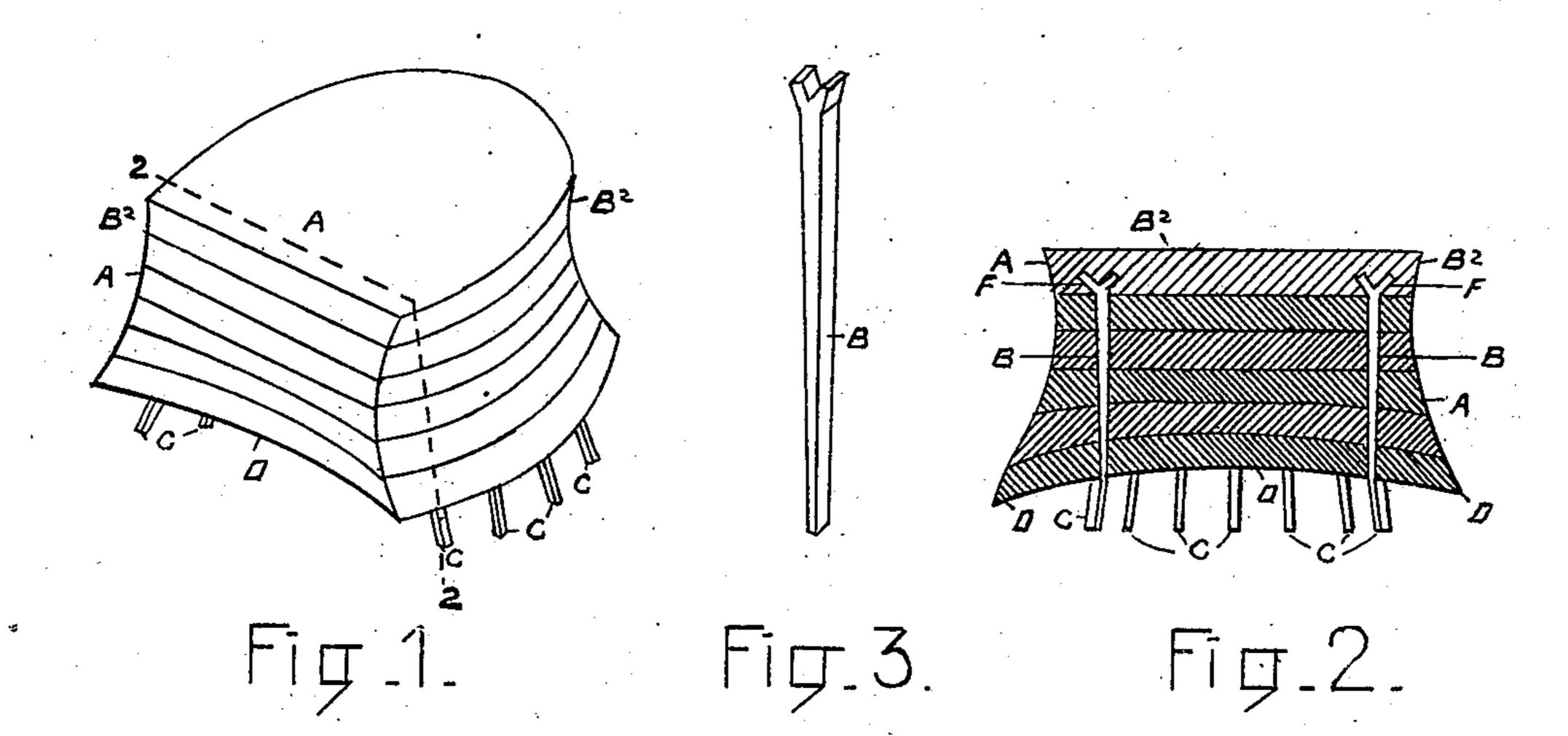
(No Model.)

## H. A. WEBSTER.

### HEEL FOR BOOTS OR SHOES.

No. 397,041.

Patented Jan. 29, 1889.



WITNESSES. Seo. Scul-Horaco K. Osborn.

NVENTOR. Harold a. Webster Ghes altorneys Brown Bros.

# United States Patent Office.

### HAROLD A. WEBSTER, OF HAVERHILL, MASSACHUSETTS.

#### HEEL FOR BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 397,041, dated January 29, 1889.

Application filed February 18, 1888. Serial No. 264,537. (No model.)

To all whom it may concern:

Be it known that I, HAROLD A. WEBSTER, of the city of Haverhill, in the county of Essex and State of Massachusetts, have invented a new and useful Improved Boot and Shoe Heel, of which the following is a full, clear, and ex-

act description.

This invention consists of a heel for boots and shoes, which is made of separate lifts or 10 layers of leather or other suitable material, and is provided with nails or such like fastenings that continuously extend into and through the thickness of the several lifts, and at one end are bent and clinched in opposite 15 lateral directions of their shanks on and preferably embedded within the top lift, and at their opposite ends are projected from the sole-face of the heel—that is, the face to lie in contact with the boot and shoe sole when 20 the heel is attached, and severally in position to be driven into the boot or shoe sole, and having a length when so driven to pass through the entire thickness of the sole and to be clinched thereon.

In the drawings forming part of this specification, Figure 1 is a perspective view of the heel of this invention. Fig. 2 is a central vertical section, line 2 2, Fig. 1. Fig. 3. is a perspective view of a nail, the subject of a separate application for Letters Patent of the United States, Serial No. 264,539, and which, preferably, is used for the production of the

heel of this invention.

In the drawings, A is the boot or shoe heel.

This heel A is made of separate lifts or layers of leather or of other suitable material, and in the usual and well-known ways of making heels.

B B are the nails. These nails have shanks and points C, of any of the usual or other suitable forms, and the heads F have opposed wings on opposite sides of the shank forming an internal acute angle, preferably sharp, with each other, and each capable of bending when the head is entered into leather or other suitable material by forcing either the nails head first into or the leather over the heads of the nails, or at the same time by both forcing the nails head first into and the leather over the heads of the nails—as, for illustration, as fully described in the application before referred to, and also in the ap-

plications for Letters Patent of the United States, Serial Nos. 256,061 and 264,538, for improved method of attaching heels to boots 55 and shoes and machine for employing said method, and to all of which reference is hereby had for a more perfect understanding thereof.

The nails B extend continuously through 60 the thickness of the several lifts of the heel A, and the wings of each nail-head are entered into the thickness of the top lift B<sup>2</sup>, and bent and clinched in opposite lateral directions of the shanks of the nail and also 65 embedded in the top lift, preferably so as to be removed from its treading-face and to lie between its opposite faces. The points C of the nails severally project from the sole-face of the heel—that is, the face of the heel to 70 lie against the boot or shoe sole when the heel is attached to it—and severally they are located and of a length, driven into the sole, to pass through its thickness and be clinched thereon. Preferably the projecting points of 75 the nails are bent outwardly—that is, toward the outer edge of the heel, so that by forcing the heel to the sole, as described, and also in the applications aforesaid, the points of the nails will be bent outwardly—that is, toward 80 the edge of the heel and sole.

The heel described is complete for attachment to a boot or shoe sole, and as the nailheads clinch the top lift on the remaining lifts and the nail-points clinch the heel on 85 the sole the several lifts are secured between the clinch of the opposite ends of the nails, the whole insuring a most positive and reliable attachment and bind, especially of the top lift to the heel and of the whole heel to the 90 boot or shoe sole. Again, the clinching of each head in opposite lateral directions, as described, secures a binding and holding of the top lift to the heel and an interlock of the nails and top lift that with a given num- 95 ber of nails is practically equal to the clinch which would be secured with double the number of nails if each clinched only in one direction.

I am aware that, broadly, a heel provided 100 with nails projecting from it is not new, and such is shown in Letters Patent of the United States Nos. 35,377, 90,049, 237,626, 242,434, and 376,987, and this I do not claim; but

What I do claim, and desire to secure by Letters Patent of the United States, is—

A nail-charged heel for boots and shoes and in which the lifts are secured together by nails having V-shaped heads and points severally projected beyond the lifts on opposite sides of the heel, and the top lift secured or spanked on, the nail-heads severally embedded and clinched therein by a spread of their

opposite wings or members, substantially as 10 described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

HAROLD A. WEBSTER.

Witnesses:

ALBERT W. BROWN, GEO. C. BENT.