

No. 752,736.

PATENTED FEB. 23, 1904.

M. M. WEST.
HEEL PROTECTOR.

APPLICATION FILED JULY 20, 1903.

NO MODEL.

Fig-7-

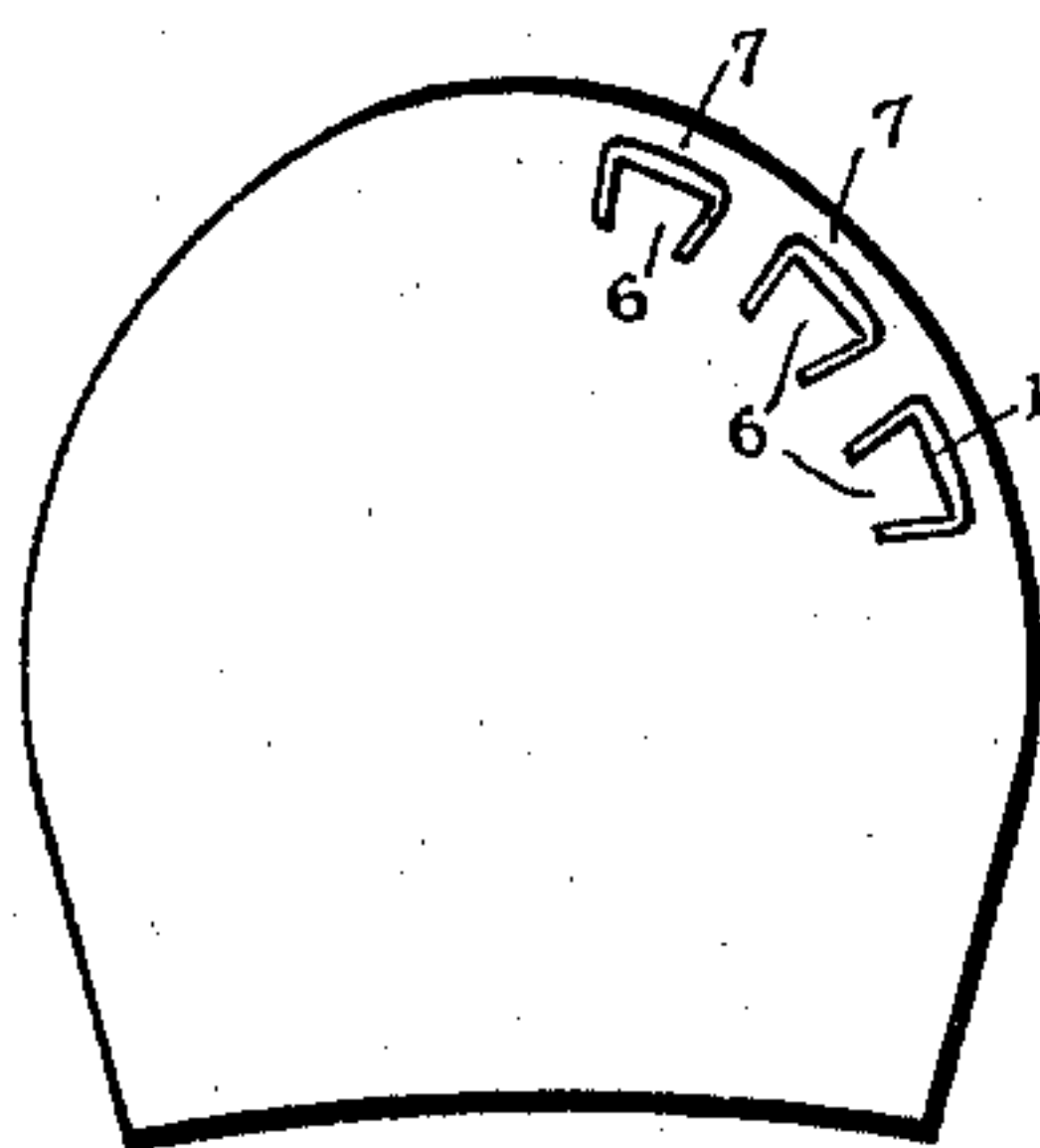
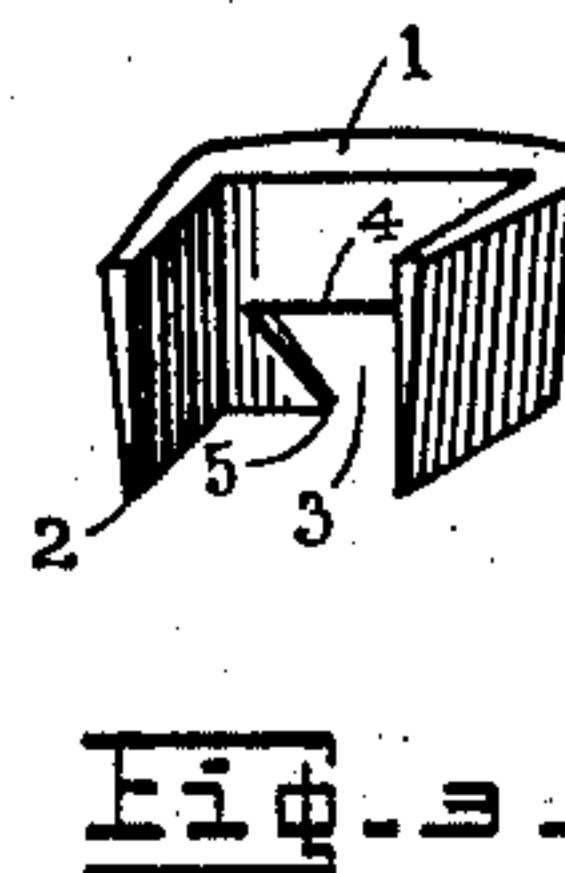
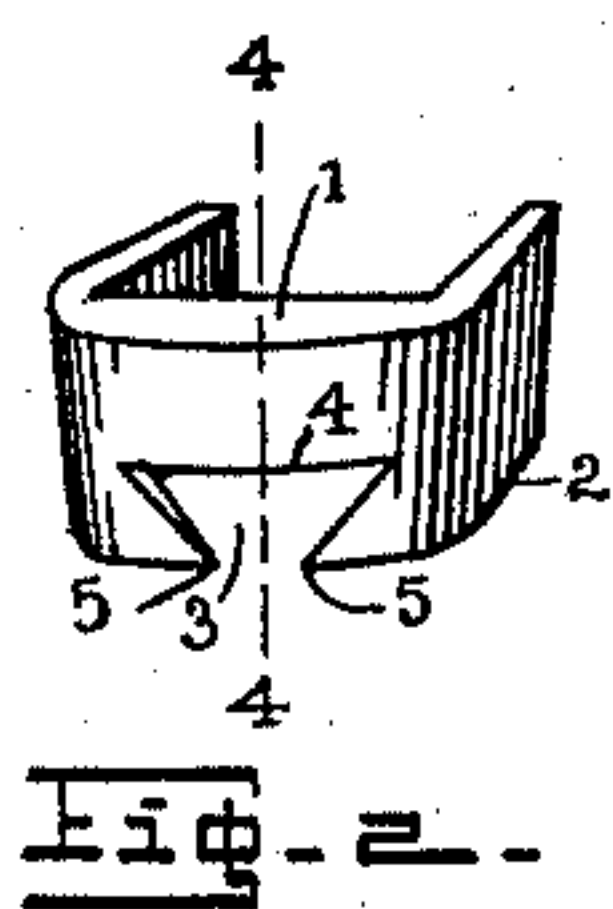
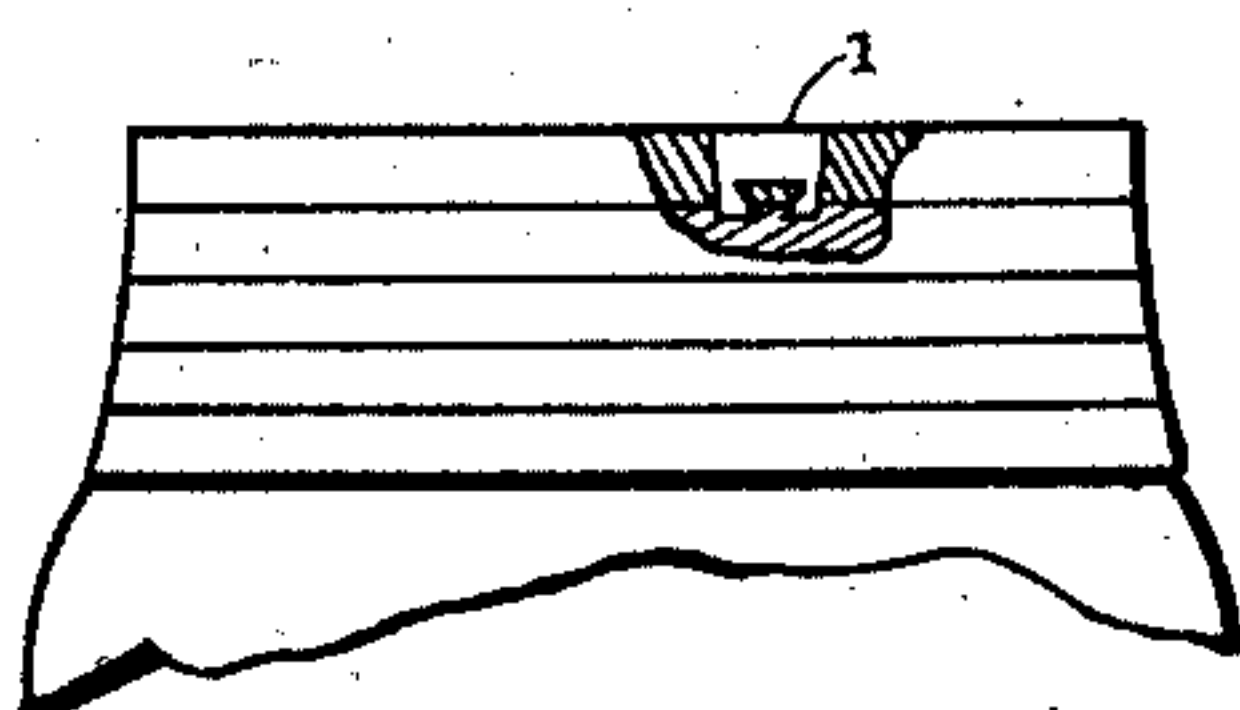


Fig-1-

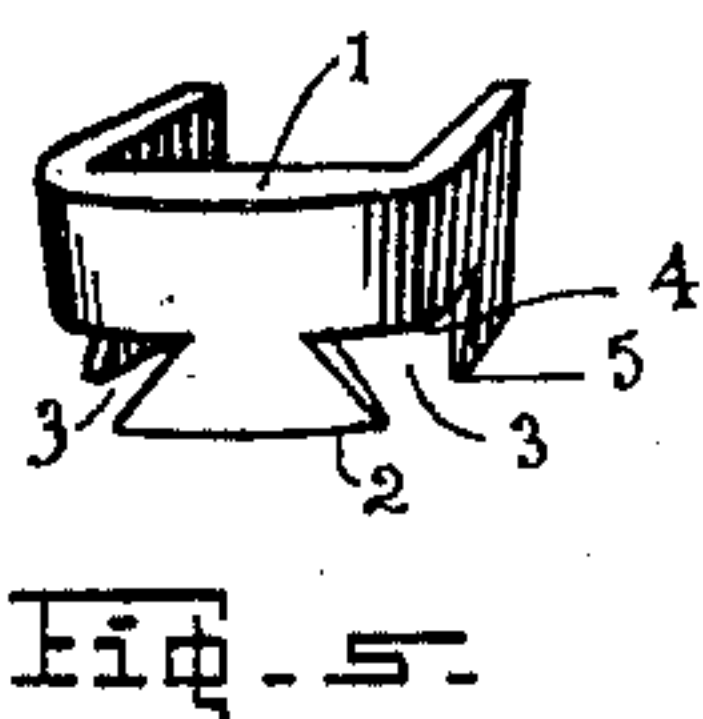


Fig-6-

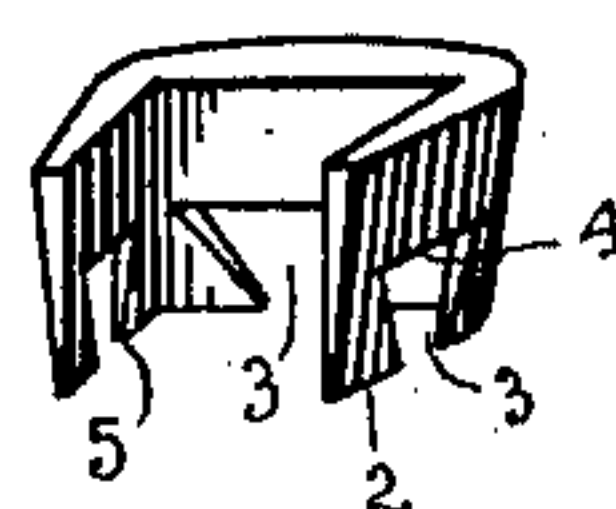
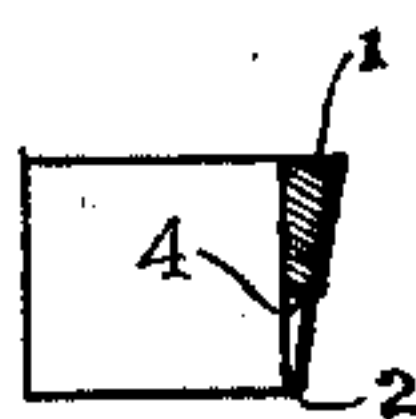


Fig-4-



WITNESSES:

Brennan West.
C. R. Brown

Mansfield M. West, INVENTOR.

BY *A. E. Fouts*
ATTORNEY.

UNITED STATES PATENT OFFICE.

MANSFIELD M. WEST, OF CLEVELAND, OHIO, ASSIGNOR TO NATIONAL SHOE-PLATE MANUFACTURING COMPANY, OF CLEVELAND, OHIO, A PARTNERSHIP.

HEEL-PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 752,736, dated February 23, 1904.

Application filed July 20, 1903. Serial No. 166,257. (No model.)

To all whom it may concern:

Be it known that I, MANSFIELD M. WEST, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and useful Improvement in Heel-Protectors, of which the following is a specification.

This invention relates to improvements in heel-protectors, and has for its object the production of a protector that can be easily driven into a heel and which when thus driven will not damage the heel, but will so compress the material of the latter about itself that it will be held permanently in position.

In the accompanying drawings, forming a part of this application, Figure 1 is a view of the bottom of a heel provided with my protectors on its wearing edges. Fig. 2 is a perspective view of the protector, showing the front side provided with the dovetailed notch. Fig. 3 is a similar view showing the wedge shape of the blank from which the protector is formed. Fig. 4 is a sectional view taken on line 4 4 of Fig. 2. Figs. 5 and 6 show modified forms of the protector, and Fig. 7 is a rear elevation of a heel having a portion of its material torn away to show the protector therein.

Referring to the drawings, in which similar reference characters designate corresponding parts throughout the several views, 1 represents the broad wearing-surface or upper edge of the protector. Gradually tapering from this surface the protector becomes quite thin at the lower edge 2, thus making it easy to drive it into the leather.

Heretofore in the manufacture of devices of this general character it has been necessary to corrugate the sides of the same to prevent them from loosening and working out. These corrugations about the sides of the protector make it not only hard to drive, but they damage the leather more or less while the protector is being driven. In the form of protector shown the corrugations are unnecessary, as there is a dovetailed notch 3 formed in the side of the protector, which, as will be seen from the following description, answers the

same purpose. The upper edge 4 of this notch is blunt and is as broad as the protector is thick at this point. When the protector has been driven into the leather the depth of the notch, it will be seen that there is a part of the leather between and above the points 5 which has not been cut and which comes in contact with the edge 4. On each side of this part of leather there is an unfilled triangular portion of the cut. As is obvious, when the protector is driven deeper than the notch the blunt edge 4 will force the leather which is in its path into these unfilled portions of the cut and will pack it about and above the points 5 so firmly that the protector will be securely held in position. Preferably the protector is so proportioned that the distance between the surface 1 and the edge 4 is somewhat less than the thickness of the first heel-tap, as shown in Fig. 7. When so formed there is a continuity of leather between the part 6 within the protector and the part 7 at the edge of the heel. If the heel-tap were completely severed by the edge 4, the part 6 would turn outwardly and would quickly wear away, which would loosen the protector, so that it would be liable to come out entirely.

The number and location of the notches 3 may be varied as desired. Thus in Figs. 2 and 3 a single notch is shown that is centrally located at the front of the protector. In Fig. 5 I have shown a pair of notches located at the angles. while in Fig. 6 there are three notches, one being centrally located in each of the sides and also one in the front.

While I have shown the protector as bent into angular form, I desire it to be understood that the form may be varied widely without departing from the scope of my invention as defined in the claims. The angular form is deemed preferable, however, as it affords an extended wearing-surface near the edge of the heel. The shape of the notches 3 may also be varied as desired, it being only necessary to have the points 5 nearer each other than the sides of the notches, so as to leave unfilled spaces above the points as the protector is driven.

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

5 1. A shoe-protector having a broad wearing-surface and a cutting edge at its lower part, said wearing-surface and said edge being substantially parallel, and the said cutting edge being provided with a notch that is wider
10 above than it is at the said edge, for the purpose specified.

2. A shoe-protector having a broad wearing-surface and a cutting edge, said edge being substantially parallel with the said wearing-surface and being provided with a notch
15 that is wider above than it is at the said edge, the upper wall of the notch being blunt whereby the edge cuts the shoe material as the protector is driven and the blunt upper wall of the notch crowds the material into the cut that
20 is formed by the lower edge.

3. A shoe-protector having a broad wearing-surface and gradually tapering in cross-section toward an edge at its lower part, said edge being substantially parallel to the said
25 wearing-surface, and having a notch that is

wider above than it is at the said edge, the upper wall of the notch being blunt whereby the edge cuts the shoe material as the protector is driven and the blunt upper wall of the notch crowds the material into the cut that
30 is formed by the lower edge.

4. In a heel having an outer heel-tap, a bent shoe-protector having a wearing-surface and a cutting edge, the said edge being provided with a notch, and the distance between the
35 wearing-surface and the edge being greater than the thickness of the heel-tap, but the distance between the bottom of the notch and the wearing-surface being less than said thickness, whereby when the protector is driven,
40 the heel-tap will be severed on each side of the notch, but will not be severed at the notch, for the purpose specified.

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

MANSFIELD M. WEST.

Witnesses:

L. LOUIS MALM,
C. R. BROWN,