No. 750,979. PATENTED FEB. 2, 1904.

J. D. KAESTNER.

SOLE OR HEEL PROTECTOR.

APPLICATION FILED JULY 25, 1902.

NO MODEL.

Fig. 1.

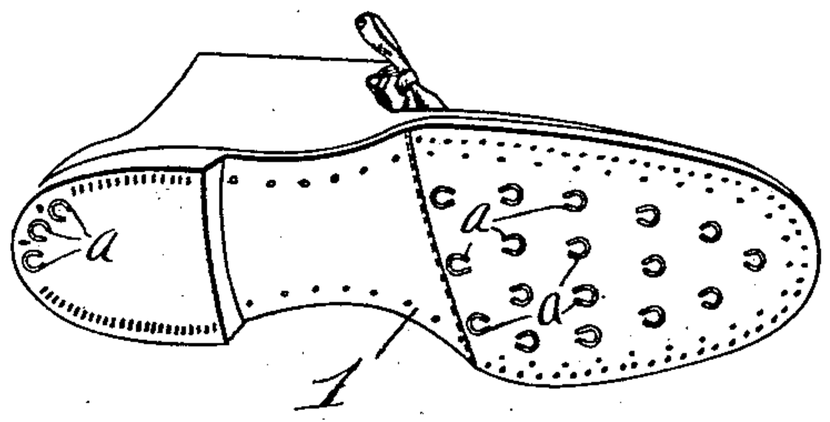


Fig. 2.

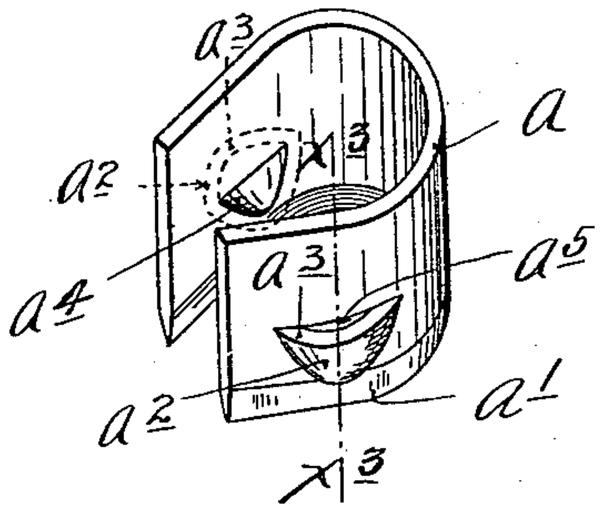
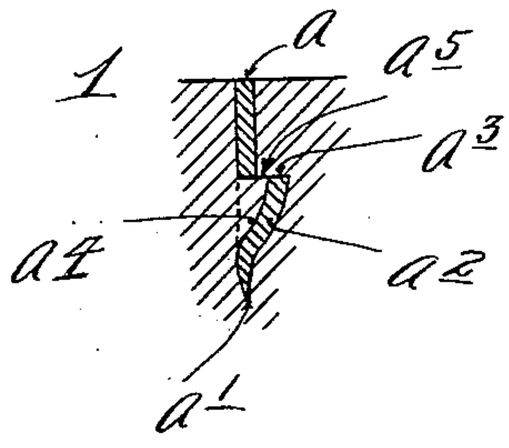


Fig. 3.



Witnesses.
H. D. Kilgore.
A. H. Opsahl.

Inventor.
John D. Kaestner.
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No. 750,979. Patented February 2, 1904.

UNITED STATES PATENT OFFICE.

JOHN D. KAESTNER, OF MINNEAPOLIS, MINNESOTA.

SOLE OR HEEL PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 750,979, dated February 2, 1904.

Application filed July 25, 1902. Serial No. 116,911. (No model.)

To all whom it may concern:

Be it known that I, JOHN D. KAESTNER, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Sole or 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.

My present invention has for its object to improve the construction of metallic heel and sole protectors; and to this end it consists of the novel devices and combinations of devices hereinafter described, and defined in the claim.

The invention is illustrated in the accompanying drawings, wherein like characters indicate like parts throughout the several views.

Figure 1 is a perspective view of a shoe having my improved protecting devices applied both to the heel and sole thereof. Fig. 2 is a perspective view showing one of the protecting devices on an enlarged scale; and Fig. 3 is a vertical section showing one of the devices embedded in the heel of a shoe, said device being sectioned on the line x^3 x^3 of Fig. 2.

The numeral 1 indicates a shoe as an entirety.

The character a indicates the body of the metallic protector, the same being preferably formed from quite a thin sheet of tempered steel, which is preferably bent to the circular form shown in the drawings, but may be bent in any other desired form or may be left straight, although this latter construction would not be the most desirable. The inner edge of the body a is preferably slightly sharpened, as indicated at a', although where the material is quite thin this sharpening of the edge will not always be found necessary. In its sides the body a is formed with laterally-pressed lugs a^2, which lugs at their sides and bottom portions taper off and blend into the sides of the said body. At their upper edges, as viewed in Figs. 2 and 3, the said lugs a^2 are provided with abrupt shoulders a^3. The inner sides of the lugs a^2, in view of the fact that they are pressed laterally, are concave and afford pockets a^4, which, as shown, cut through the sides of the body a slightly, as shown at a^5. When these metallic protectors are driven into the heel or sole of the shoe, as indicated in Fig. 3, the leather will press in under the shoulder a^3 and into the pocket a^4, and will thus securely hold the body-piece a both at its outer and inner sides. As is evident, a lug projecting at one side only of the body-strip a would not accomplish this result. Otherwise stated, with the construction suggested whenever the body-piece a happens to be worn down to the shoulder a^3 the remaining portion of the protector will fall from its seat, since there would be nothing corresponding to the pocket a^4 to hold the same. It is further evident that with the concavo-convex retaining-lugs a^2 the body-pieces a will be securely held in the leather until worn down nearly or quite to their sharpened or inner edges. It will thus be seen that I attach great importance to the fact that the retaining-lugs bulge out over one side and are concave at their opposite sides, so that the surrounding leather will securely hold the body of the protector from both sides or faces. In virtue of the tapering forms of the retaining-lugs a^2 the body-pieces a would be readily driven into the leather of the heel or sole of the shoe.

What I claim, and desire to secure by Letters Patent of the United States, is as follows:

A metallic protector for heels and soles of shoes, comprising a thin body having one or more concavo-convex retaining-lugs a^2 with sharp shoulders a^3 pressed laterally from the said body, the said body having the same amount of metal in all horizontal cross-sections, substantially as described.

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

JOHN D. KAESTNER.

Witnesses:
JAS. F. WILLIAMSON,
ELIZABETH H. KELIHER.