

No. 661,833.

Patented Nov. 13, 1900.

A. G. WILLIAMS.
HEEL PROTECTOR.

(Application filed Apr. 10, 1900.)

(No Model.)

Fig. 1.

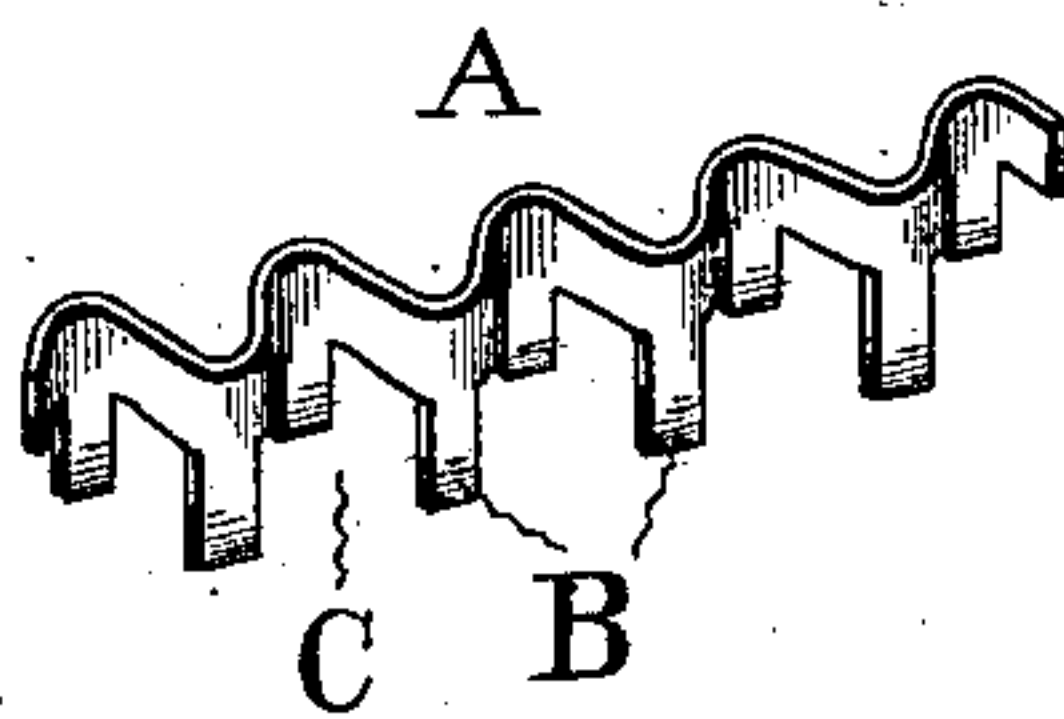
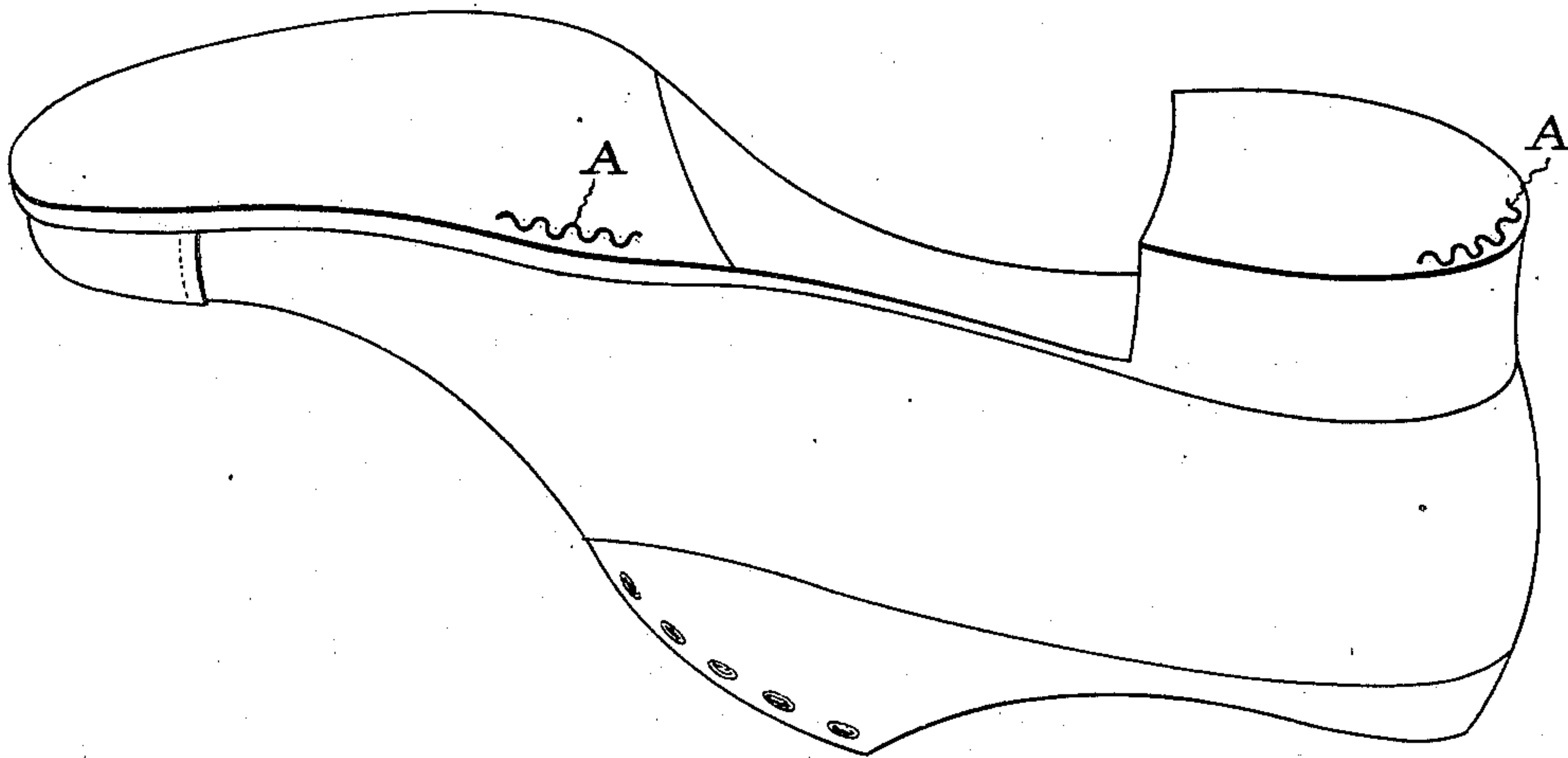


Fig. 2.



Witnesses:

Fenton S. Belt,

Henry C. Hazard.

Inventor:

Allen G. Williams, by
Prindle and Russell, his Attys

UNITED STATES PATENT OFFICE.

ALLEN G. WILLIAMS, OF BALTIMORE, MARYLAND.

HEEL-PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 661,833, dated November 13, 1900.

Application filed April 10, 1900. Serial No. 12,348. (No model.)

To all whom it may concern:

Be it known that I, ALLEN G. WILLIAMS, a citizen of the United States, and a resident of Baltimore, in the State of Maryland, have
5 invented certain new and useful Improvements in Heel-Protectors; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

10 Figure 1 is a perspective view of a heel-protector embodying my invention, and Fig. 2 is a perspective view of a shoe having a protector such as is shown in Fig. 1 applied to the heel thereof.

15 The object of my invention is to provide a heel-protector which shall have among other advantages the qualities of having a large wearing-surface, while being also readily embedded in the bottom surface of the heel,
20 such wearing-surface being capable of being made sufficiently large so that a single protector shall be capable of fully protecting the heel and the amount of such surface being easily varied to suit the special
25 needs of the case, of being capable of use when having substantially no greater thickness than the thickness of the top lift, of causing but small displacement of the leather by the insertion of the protector, and of causing but little mutilation of the leather; and
30 to such ends my invention consists in the heel-protector substantially as hereinafter specified.

In carrying my invention into practice I
35 provide a long body A, having, preferably, but moderate width and having a depth equal to the maximum amount which it is permissible that the protector shall wear. The body A is preferably formed in a sinuous, zigzag, or
40 other line or series of lines, by which a considerable amount of the material of the body is available for use within a short space, so that a large wearing-surface is provided. If desired, the material of the body A can be
45 formed into scrolls, letters, or other ornamental design. I may use the body A as a protector without providing separate fastening means, the body being embedded edgewise in the leather; but I prefer to provide fastening

means in the form of tangs B, which project 50 from the lower surface of the body A. The tangs are located at the outer portions of the curves of the strip. I find it convenient to form both body and tangs by punching a flat strip of sheet metal to form the spaces C 55 between the tangs and then, when the zigzag or sinuous form is to be produced, pressing the punched strip between two parts having ribbed surfaces, as a pair of gear-wheels, to give the desired shape in plan view to the 60 protector.

I can form the protectors from pieces of material large enough to make but a single protector, or I can form the protectors in a continuous strip and can cut up such strip 65 either at the time of making the strip or at the time of driving a protector.

My protector, while preventing undue wear of the heel, does not destroy the cushioning effect of the leather. It will be observed that 70 my protector can readily be made of such vertical height that it can be entirely contained in the top lift of the heel, while at the same time having the requisite extent of wearing-surface. 75

In applying my protector it is only necessary to place the protector on the surface to be protected and apply pressure to the wearing-surface of the protector, when the latter will readily be forced into the material of 80 such surface.

My heel-protector is as well adapted for use on the sole of the shoe as on the heel. Its construction enables it to be made with as little vertical height as is desired and particu- 85 larly adapts it for use on the sole, which, being thinner than the heel, cannot receive a protector of the ordinary type, such as is embedded in the material of the shoe.

Having thus described my invention, what 90 I claim is—

1. A heel-protector, consisting of a narrow sinuous strip of metal having tangs projecting from the outer portions of the curves thereof, said tangs being of substantially uni- 95 form cross-sectional area throughout their length, such protector being so constructed as to be capable of being driven into the bot-

tom of the heel, leaving the edge of the strip exposed, substantially as and for the purpose described.

2. A heel-protector consisting of a sinuous
5 strip of metal having tangs projecting from the outer portions of the curves of such strip, substantially as and for the purpose described.

In testimony that I claim the foregoing I have hereunto set my hand this 7th day of 10 April, 1900.

ALLEN G. WILLIAMS.

Witnesses:

EDWIN J. PRINDLE,
HENRY C. HAZARD.