## L. YOUNG.

PROTECTING PLATE FOR THE HEELS AND SOLES OF BOOTS AND SHOES.

No. 250,410.

Patented Dec. 6, 1881.

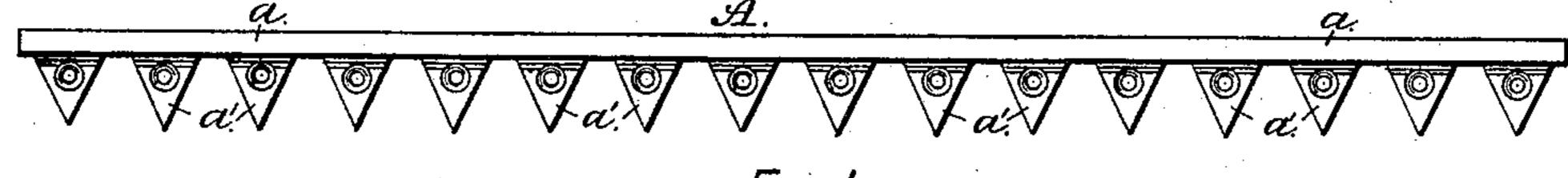
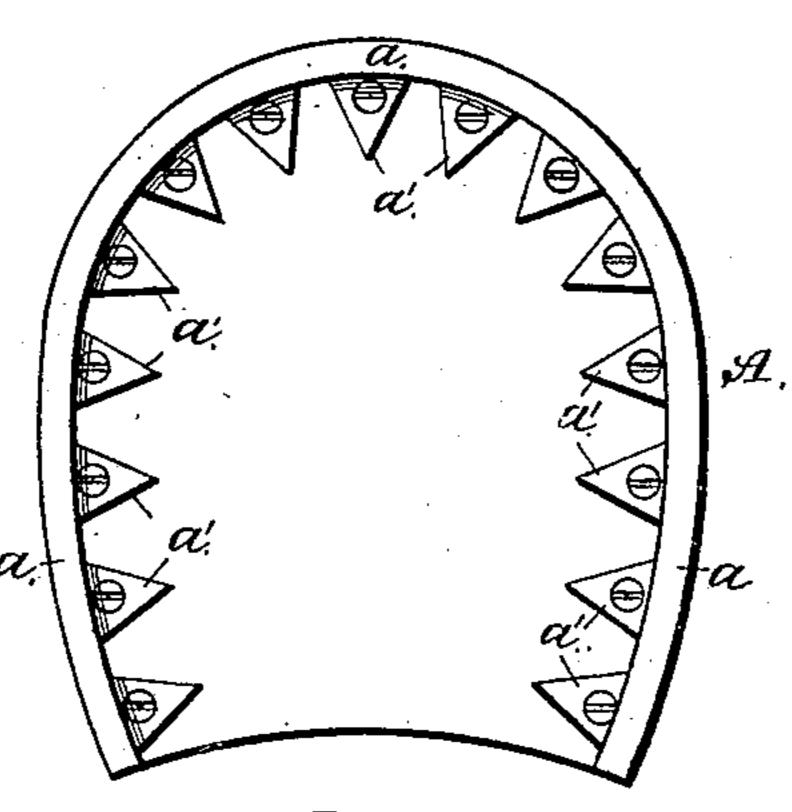


FIG. 1.

a: 7 a.

FIG.2



F1G.3.

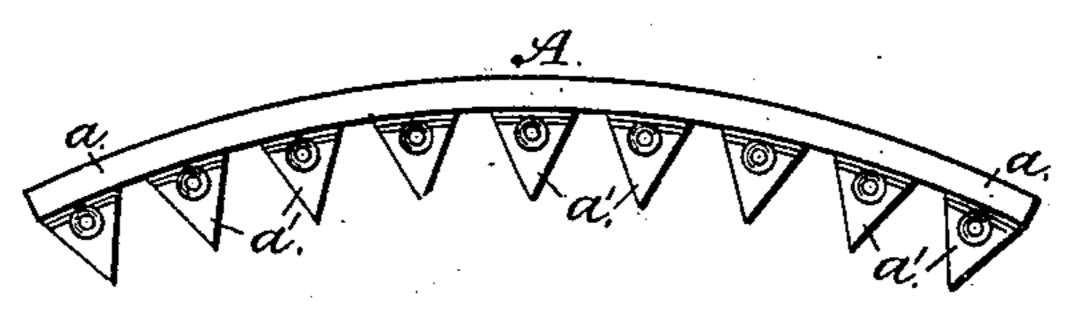


FIG. 4.

Witnesses,

Edward W. Rawhiw.

Inventor;

L. Young,

Attorney.

## United States Patent Office.

## LEONARD YOUNG, OF ALBANY, NEW YORK.

PROTECTING-PLATE FOR THE HEELS AND SOLES OF BOOTS AND SHOES.

SPECIFICATION forming part of Letters Patent No. 250,410, dated December 6, 1881.

Application filed June 3, 1881. (No model.)

To all whom it may concern:

Be it known that I, Leonard Young, of the city and county of Albany, and State of New York, have invented certain new and useful Improvements in Protecting-Plates for Heels and Soles of Boots and Shoes, of which the following is a full and exact description.

My invention relates to improvements in plates for protecting the heels and soles of boots and shoes against excessive wear at any particular part thereof; and the object of my improvement is to provide a blank or strip adapted to form a protecting-plate that can be readily adjusted to fit any size and form of heel or sole, and by so doing avoiding the necessity of providing a large variety of plates of different patterns to fit boots and shoes whose difference in form and size is almost unlimited. This object I attain by means of the device illustrated in the accompanying drawings, which form part of this specification, and in which—

Figure 1 is a plan view of my improved plate before it is bent into shape for use; Fig. 2, a transverse section of the same; Fig. 3, a plan view of a protecting-plate for a heel, and Fig. 4 a like view of a similar plate for the edge of a sole, both of which are formed from a blank or strip shown in Fig. 1.

As represented in Fig. 1 of the drawings, A is the blank or strip adapted to form my protecting-plate, made of any malleable or ductile metal possessing sufficient tenacity to endure the wear to which such plates are commonly 35 subjected. Said plate may be cut by means of punches and dies from wrought metal, or it may be produced by casting it of any suitable metal run in molds. This plate is first produced in a strip, usually straight, as shown in 40 Fig. 1; but it may be made in a curved form, if desired. Its outer edge is made of a continuous bar or rib, a, that is provided on one side with a series of lugs, a', which, for the purpose of facilitating the operation of bend-45 ing the strip to a curved line, I preferably make of a serrated form. Said lugs are all,

or many of them, provided with suitable holes

for receiving nails or screws, whereby the

plates are secured in place. By leaving suitable spaces between the points at which the 50 lugs a' are attached to the bar a, the bending of the strip to the required form is rendered facile. The strip in its cross-section may be made of a varying thickness, either abruptly, as shown in Fig. 2, or on a regular bevel from 55 the rib a to the end of the lugs a', and in this manner the requisite strength to reduce wear will be obtained with the least weight of material. It may be made of any convenient length, from which pieces may be cut to form 60 the required protecting-plate, and any short pieces remaining therefrom can be utilized for small protecting plates. The strips can be readily bent edgewise to adapt them to fit the form of the heel or sole to which they are ap- 65 plied.

I do not confine myself to the particular form of lugs shown in the drawings, as any form of separated lugs attached to a continuous bar that will permit the plate to be bent into 70 the required shape will answer the purpose and is included in the scope of my invention.

I am aware that protecting-plates for heels have heretofore been made in a curved form with V-shaped cuts in their inner flanges; but 75 such plates have always been combined with a counter-support which formed an integral part of the device, and which precluded their use at any part of a boot or shoe other than at the heel, and such plates were not adapted, like 80 mine, to be cut to any required length after they were cast to suit the use to which they were to be applied.

I claim as my invention—

As a new article of manufacture, a mallea- 85 ble metallic blank or strip, A, adapted to be bent to form protecting-plates for heels and soles of boots and shoes, composed of a continuous bar, a, provided at one of its edges with separated lugs a', as and for the purpose speci- 90 fied.

LEONARD YOUNG.

Witnesses:
WILLIAM H. LOW,
CHAS. S. BYINGTON.