

(No Model.)

W. ROSENFELD.
HEEL PLATE ATTACHING MACHINE.

No. 472,397.

Patented Apr. 5, 1892.

Fig. 3.

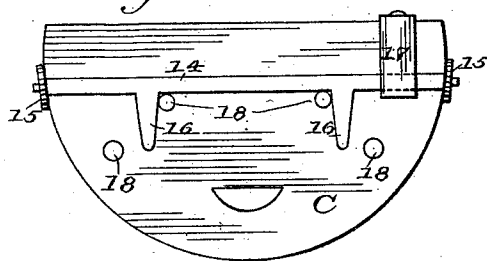


Fig. 5.

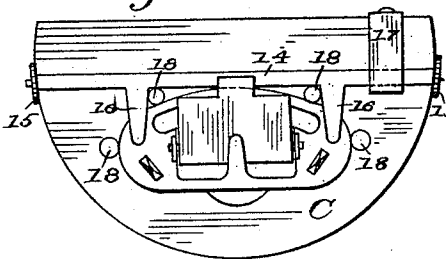


Fig. 2.

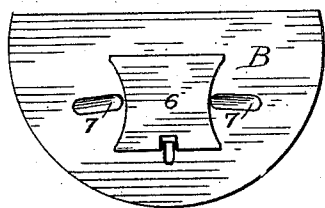


Fig. 4.

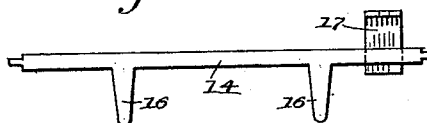
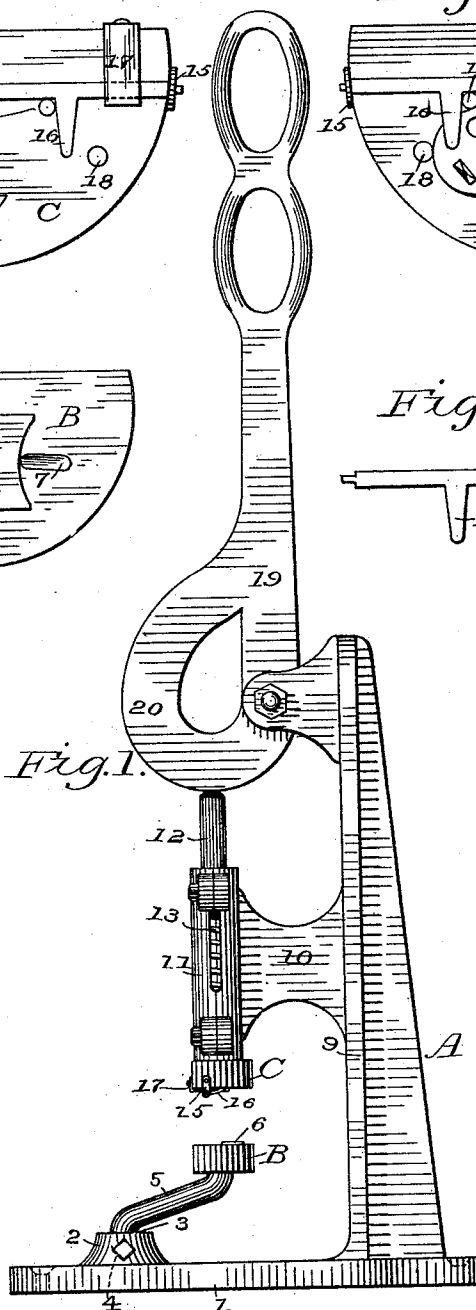


Fig. 1.



Witnesses

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WILLIAM ROSENFELD, OF MANISTEE, MICHIGAN.

HEEL-PLATE-ATTACHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 472,397, dated April 5, 1892.

Application filed January 11, 1892. Serial No. 417,677. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM ROSENFELD, a citizen of the United States of America, residing at Manistee, in the county of Manistee and State of Michigan, have invented certain new and useful Improvements in Machines for Attaching Heel-Plates to Boots or Shoes; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to machines for attaching heel-plates to boots or shoes; and the object is to construct an improved means for fastening plates to any portion of the heel or sole of boots or shoes.

In the accompanying drawings, Figure 1 is a side view of the machine. Fig. 2 is a plan view of the lower die of the machine. Fig. 3 is a plan view of the upper die, showing the device for holding the plate to the outside of the sole or heel. Fig. 4 is a detail of the clamp removed from the die. Fig. 5 is a bottom plan view of the plunger-die with a heel-plate held thereto.

A designates the frame of the machine, consisting of a base-piece 1, provided with suitable holes at each end, through which nails or screws may be passed to secure it to a support. On the base-piece is a projection 2, formed with a socket 3 to receive the end of the support of the lower die of the machine, which is held in the socket by a set-screw 4, substantially as shown in Fig. 1 of the drawings.

In the socket 3 is held arm or support 5 of the lower die B. This arm projects horizontally from the socket and carries the die B on its outer end, as shown. This die B consists of a substantial piece of iron or steel mounted rigidly on the projecting free end of the arm 5 and having a rounded outer edge substantially of the curved contour of a heel to set readily in the boot or shoe. On the central portion of the die-face is secured a plate 6, which serves to support the middle of an inner or clinching plate when laid on the die preparatory to the outer plate being fastened

to the heel or sole of the shoe. Grooves 7 are also formed in the face of the die to properly direct and turn the points of the nails or rivets by which the plate is held in position. The side of the die is cut down below the face, as at 8, to provide a seat for the spring which holds the plate clamped on the upper die. It will be perceived that by mounting the die B on the projecting arm plates may be secured to any portion of the shoe to which the die may be applied, and that the supported die may be placed in the shoe at parts beyond the opening of the ankle portion.

From the base-plate is projected a standard 9, formed with an arm 10, terminating in a vertical sleeve 11, in which is arranged the stem 12 of the upper die C. The sleeve is made in two parts, so as to be convenient in removing and arranging the die in the machine. A spring 13 is arranged in the sleeve about the stem of the die to lift the die when moved down by the lever. On the lower end of the stem 12 is secured the upper die C, carrying across its face a flat bar 14, mounted in bearings 15, fixed to the side faces of the die and formed with fingers or prongs 16, which serve to hold the plate to the die. A spring 17 bears with its end on the bar 14 and by its pressure holds the plate clamped to the under face of the die. Short guide pins or studs 18 are fixed in the face of the die and guide the plate when being put on the die. These studs or pins 18 also serve as stops to prevent the dies from being forced together so close as to endanger the integrity of the plate. On the upper end of the standard is fulcrumed a lever 19, having a curved end 20, which bears on the end of the stem 12 of the upper die and operates that element.

The operation is readily perceived from the foregoing description. The heel-plate being arranged in the upper die and the inside plate, if one is used, being put on the lower die, the shoe is arranged on the lower die, and then the upper die carrying the plate is forced down and the attachment effected. It will be observed that on boots or shoes having bottoms of leather an inside plate is not necessary, such being essential only in rubber shoes or boots or others having similar flexible heels and soles.

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

1. The combination of the standard A, 5
formed with an arm 10, having a vertical sleeve on its outer end, a reciprocative bar in the sleeve, a die on the lower end of the sleeve, a spring-actuated plate-holding bar journaled across the face of the said die, formed with 10
fingers, a lever fulcrumed at the upper end of the standard to push the lever down, and a lower die B, as and for the purpose specified.
2. The combination of the standard A, formed with an arm 10, having a vertical

sleeve on its outer end, a reciprocative bar in 15
the sleeve, a lever to operate the bar, a die on the lower end of the bar, a plate-holding bar journaled across the die, formed with fingers, a spring to hold the plate-holder down on the face of the die, an arm 5, extending from the 20
base of the standard, and a die on the end of the arm, substantially as described.

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

WM. ROSENFELD.

Witnesses:

PHILIP W. NISKER,
S. A. CAHILL.