No. 832,987.

PATENTED OCT. 9, 1906.

W. J. LINWOOD & J. BENNETT.

METAL PROTECTING SOLE FOR FOOTWEAR.

APPLICATION FILED MAY 17, 1905.

Fig. 1.

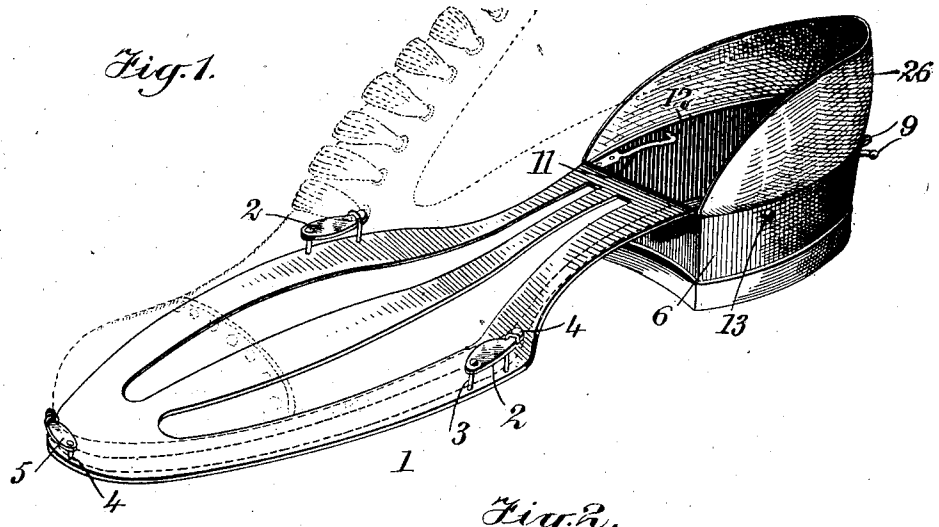


Fig. 2.

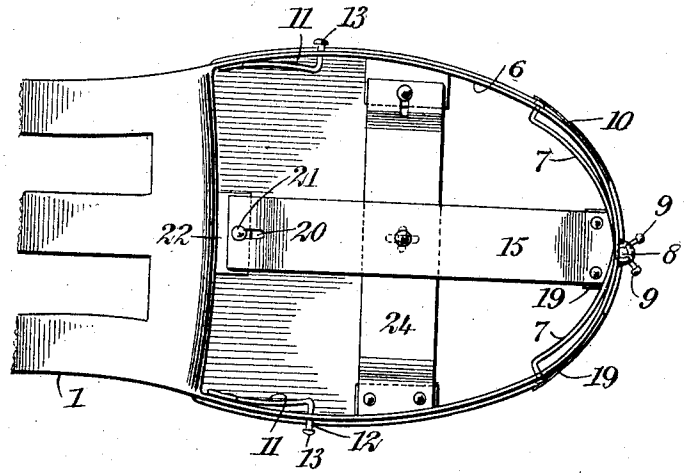
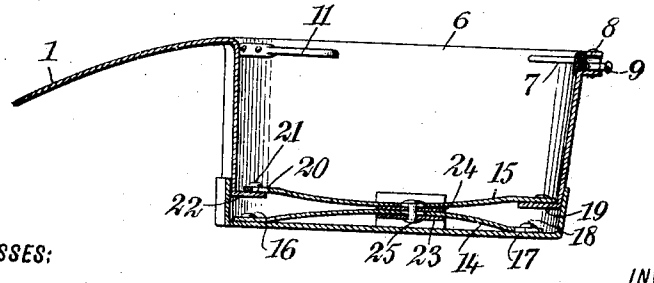


Fig. 3.



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METAL PROTECTING-SOLE FOR FOOTWEAR.

No. 832,987. Specification of Letters Patent. Patented Oct. 9, 1906.

Application filed May 17, 1905. Serial No. 260,822.

To all whom it may concern:

Be it known that we, WILLIAM J. LINWOOD and JENNIE BENNETT, citizens of the United States, and residents of Raton, in the county of Colfax and Territory of New Mexico, have invented a new and Improved Metal Protecting-Sole for Footwear, of which the following is a full, clear, and exact description.

This invention relates to improvements in metal protecting-soles for boots and shoes, the object being to provide a device of this character that will be light, yet strong, and adapted to readily yield to the varying movements of the boot or shoe, and therefore not cramp the wearer's foot.

Another object is to provide a novel means for securing the device to a boot or shoe.

We will describe a metal protecting-sole for footwear embodying our invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a protecting-sole embodying our invention. Fig. 2 is a plan of the rear portion thereof, and Fig. 3 is a sectional elevation of said rear portion.

The invention comprises a sole-plate 1, that may be made of any suitable spring-yielding material—such, for instance, as thin sheet-steel. This sole-plate is made of skeleton form or has longitudinal slots, whereby it is not only made light, but will to a great extent prevent slipping upon ice or hard snow. Secured to the sole-plate near its edges and at opposite sides are devices for securing the plate to the sole of a boot or shoe. These devices consist of plates 2, which are spring-yielding and are mounted to swing on pins 3, extended upward from the plate. The free ends of the plates 2 are designed to be engaged by hook-shaped keepers 4 on said sole-plate. A similar fastening device or plate 5 is mounted on the toe portion of the sole-plate, and it will be noted that the inner edges of these fastening-plates are longitudinally curved to extend beyond the pins 3 and the keepers 4, whereby said fastening-plates may engage on the upper side of the projecting portion of a boot or shoe sole. At the rear end of the shank portion of the sole-plate is a heel-casing 6, which may be formed integral with the sole-plate.

Arranged in the rear portion of the heel-casing are fastening devices consisting of oppositely-extended curved arms 7, which at their meeting ends are mounted to swing on a pivot 8, and these meeting ends have outwardly-extended finger-pieces 9. The inner ends of the arms 7 are curved outward and pass through openings in the vertical wall of the heel-casing, and the headed ends of said outwardly-extended portions engage with spring-plates 10, designed to press the said arms into engagement with the upper sides of a boot or shoe heel. The fastening devices are pressed into the heel-casing by the springs 10; but other fastening devices are arranged near the front portion of the heel-casing and consist of spring-yielding wires 11, the free ends of which are extended outward, as indicated at 12, these portions 12 passing through perforations in the vertical wall of the heel-casing, and the outer ends of the portions 12 are provided with heads 13 to prevent the said fastening devices from moving too far inward.

To provide for an easy tread at the heel portion, spring-yielding devices are arranged in the bottom thereof. These spring-yielding devices are arranged in two pairs, one pair crossing the other. The horizontally-disposed member consists of an upwardly-curved spring-plate 14 and a downwardly-curved spring-plate 15, the said plate 14 having one end rigidly riveted to the bottom wall of the heel-casing, as indicated at 16, while the other end is provided with a slot 17, to which a lug 18, attached to the bottom wall of the heel, passes. One end of the upper plate 15 is rigidly attached to a lug 19, while the other end is provided with a slot 20, through which a pin 21 on a front lug 22 passes. Transverse plates 23 24 are also bowed or curved longitudinally, the one upward and the other downward, and these cross spring-plates are connected to the heel-casing in a similar manner to the first-named spring-plates. At their crossing-point the two pairs of spring-plates are secured together by means of a pin 25, which passes through slots in said spring-plates. It will be understood that these spring-plates

should have comparatively little resiliency, just sufficient to permit of an easy pressure of a boot or shoe heel thereon. Extending around the upper portion of the heel-casing is a hood 26, consisting of a suitable flexible fabric—such, for instance, as rubber cloth or the like.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. A protecting-sole for footwear, comprising a sole-plate, fastening devices at the sides and toe of the plate, a heel-casing secured to the shank portion of the heel-plate, pivoted and spring-pressed fastening-arms pivoted at the rear portion of the heel-casing and provided with outwardly-extending finger-pieces, and spring fastening devices at the forward portion of the casing, one on each side thereof.

2. A sole-protector for footwear comprising a metal sole-plate, a heel-casing, oppositely-extended fastening-arms pivoted in the rear portion of the heel-casing, said arms having their free ends extending out through the casing and provided with outwardly-extended finger-pieces at their pivotal ends, and springs for pressing said arms inward.

3. In a sole-protector for footwear, a heel-casing, oppositely-extending fastening-arms pivoted at the rear portion of the casing and having finger-pieces at their pivoted ends, said arms having their free ends extending out through the casing, and springs on the outside of the casing and engaging the projecting ends of said arms.

4. A sole-protector for footwear, comprising a sole-plate, and fastening devices for securing the sole-plate to a boot or shoe, said fastening devices having swinging relation to said sole-plate and consisting of pivoted plates, and hook-shaped keepers on the sole-plate for receiving the free ends of said pivoted plates.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

WILLIAM J. LINWOOD.
JENNIE BENNETT.

Witnesses:
HUGH MCKEE,
T. D. LIEB.