

D. N. HURLBUT.

India-Rubber Horse Boots.

No. 152,640.

Patented June 30, 1874.

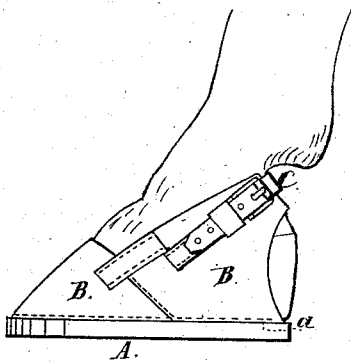


Fig. 1.

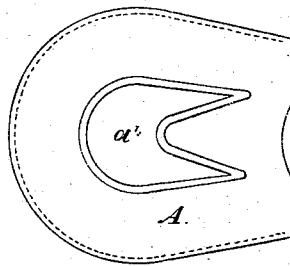


Fig. 3.

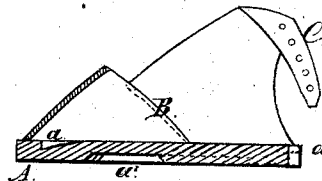


Fig. 2.

Witnesses:
John W. Munday
Heinrich L. Bruns.

Inventor:
Daniel N. Hurlbut

UNITED STATES PATENT OFFICE.

DANIEL N. HURLBUT, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN INDIA-RUBBER HORSE-BOOTS.

Specification forming part of Letters Patent No. **152,640**, dated June 30, 1874; application filed November 21, 1873.

To all whom it may concern:

Be it known that I, DANIEL N. HURLBUT, of Chicago, Illinois, have invented certain Improvements in India-Rubber Horseshoes, of which the following is a specification:

This invention relates to an india-rubber sole to cover the whole under surface of the hoof, constructed so as to be capable of being applied to the hoof (over the iron shoe, if necessary, or upon the naked hoof) without the use of nails or any permanent attachment, so that the device may be removed or applied at pleasure without trouble, the result sought being a shoe which may be applied in slippery weather to the foot of the horse, affording a perfect safeguard against slipping, and which shall be a protection at the same time against the concussion and jar upon the joints of the legs in traveling upon city pavements and hard road-beds; which shall be a safeguard also against injury to the soft parts of the foot by sharp gravel, &c.; which shall also prevent the clogging or impeding caused by the collection of snow within the hoof, termed "balling;" and which shoe may be removed and applied with great ease, without disturbing the ordinary iron shoe, if such is worn, and without the intervention of a blacksmith; and the invention consists of an india-rubber overshoe with a sole of proper shape to conform to the outline of the hoof as it rests upon the ground, provided with cavities to receive the toe and heel calks of the iron shoe, and with an inclined band or upper, which bears across the outer upper surface of the hoof at the toe and sides, and a heel-strap, which passes over the heel, and serves, in conjunction with the upper, to hold the shoe securely to the hoof, as will more fully hereinafter appear.

In the accompanying drawings, which form a part of this specification, Figure 1 represents a side view of my improved shoe applied to the foot of a horse. Fig. 2 is a central vertical section of the shoe from toe to heel, and Fig. 3 is a bottom view of said shoe.

In said drawings, A represents the sole, made of india-rubber partially vulcanized, as prepared in the sheet-rubber of commerce.

This sole is made of a shape to conform to the outline of the bottom of the hoof, is flat upon the upper surface, or it may be molded to the projections and cavities of the hoof and frog; but I prefer that it should be flat upon the upper surface, excepting the cavities *a*, which are intended to receive the toe and heel calks of the common iron shoe. The under surface of said sole is also made flat, excepting the cavity *a'* cut in the lower surface of the sole, conforming in outline to the frog of the foot. This cavity renders the sole immediately below the frog, and upon which it rests, more elastic and yielding, whereby the natural condition of the foot is more nearly approached, and the spring of the frog in stepping allowed. This cavity *a'* also increases the holding power of the sole against slipping upon wet pavements, as will be readily understood, and at the same time, being shallow, and constantly in motion, springing back and forth, from the pressure of the frog, will not retain snow to form a ball. Attached to the sole, or forming a part therewith, is the fillet or band B, forming an "upper," which, when the shoe is applied to the foot, sets over the outside of the hoof at the toe and sides, while a strap, C, is arranged to set over the heel, below the fetlock and above the hoof, affording a means of securing the sole to the hoof in such manner that it may be easily put on and taken off. This fillet B and strap C may be made of rubber, and molded with the sole, or they may be made of leather and fastened to the sole.

Having thus described the object and nature, and the construction and operation, of my invention, that which I claim as new, and desire to secure by Letters Patent, is—

The india-rubber sole A, covering the entire under surface of the foot, provided with the cavities *a*, to receive the calks of the iron shoe, and suitable means for securing it to the hoof, substantially as specified.

DANIEL N. HURLBUT.

Witnesses:

JOHN W. MUNDAY,
HEINRICH F. BRUNS.