

No. 728,773.

PATENTED MAY 19, 1903.

J. SERFASS.  
NAILLESS HORSESHOE.  
APPLICATION FILED NOV. 21, 1902.

NO MODEL.

FIG. 1.

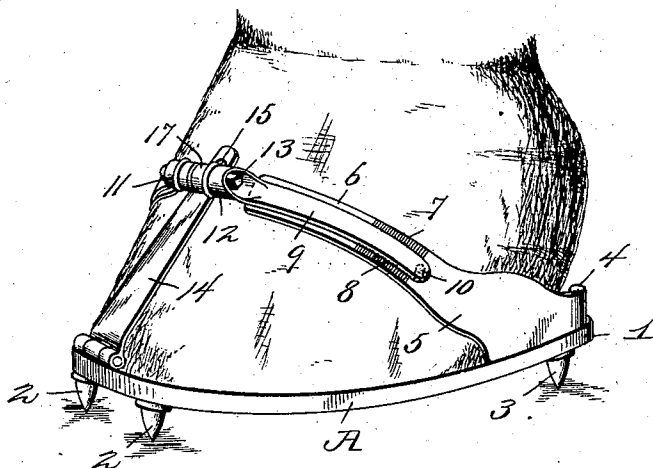
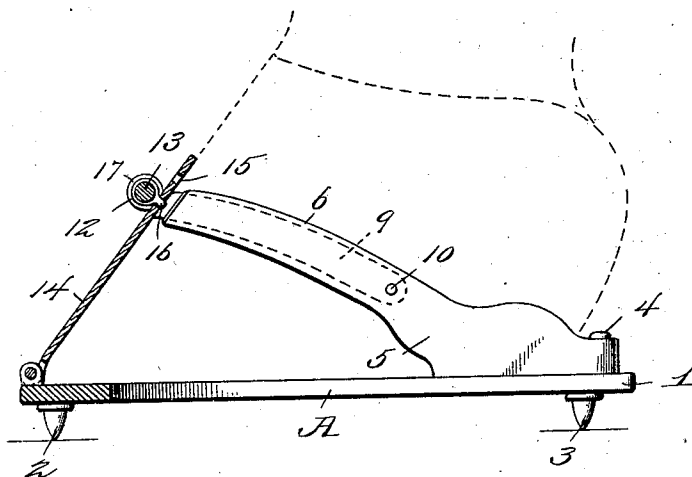


FIG. 2.



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Witnesses

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# UNITED STATES PATENT OFFICE.

JOSIAH SERFASS, OF HAZLETON, PENNSYLVANIA.

## NAILLESS HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 728,773, dated May 19, 1903.

Application filed November 21, 1902. Serial No. 132,267. (No model.)

*To all whom it may concern:*

Be it known that I, JOSIAH SERFASS, a citizen of the United States, residing at Hazleton, in the county of Luzerne and State of Pennsylvania, have invented new and useful Improvements in Nailless Horseshoes, of which the following is a specification.

My invention has relation to improvements in farriery, subclass shoes of that kind or class denominated "nailless;" and the object is to provide a nailless horseshoe which may be readily applied to the hoof of the animal and serve all the purposes that a shoe does when nailed to hoof.

The improvements will be first described, and then the novelty claimed will be particularly and distinctly pointed out.

I have fully and clearly illustrated the improvements in the annexed drawings, to be taken as a part of this specification, and wherein—

Figure 1 is a perspective of a horse's hoof having a shoe equipped with my improved device secured thereto. Fig. 2 is a central vertical sectional view through the shoe and toe-bar.

Referring to the drawings, A designates the plate of the shoe, the heel portions of which are somewhat extended beyond the heel of the hoof, as at 1, to afford ample room for the disposition of the draw-straps. The plate is preferably flat on its upper face, as usual. The plate is provided with heel and toe calks 2 3 of any proper style. I have shown the calks as of the conical shape, as being probably the best suited to this kind of shoe.

To the opposite heel portions of the shoe, closely adjacent to the ends thereof, are rigidly secured vertical pins or studs 4, on which are hinged or pivotally secured the rear ends of the draw-straps 5 6. The draw-straps are made of suitable metal strips having their ends pivotally secured to the studs 4, and at their rear portions are made to fit the contour of the hoof, with their base edge straight and in alinement with the top face of the shoe and broadened in their vertical height to embrace the heel portion of the hoof, substantially as

shown in the drawings. The tongues 6 of the draw-straps have parallel edges and are integral with the base or rear portion and at a proper place are formed with transverse serrations 7, extended over such distance as may afford suitable engagement to coincident serrations 8 on tongue-straps 9. The tongues 9 are pivotally secured to the draw-straps at 10 and extend beyond the ends of the draw-straps and are formed at their ends with alining sleeves 11 12, provided with interior screw-threads, with which engage a threaded clamping-bolt 13, projected through the sleeves, and whereby the tongue-straps and draw-straps can be drawn tight into position.

To the toe of the shoe is pivotally connected the toe-strap 14, adapted to be vertically and centrally against the hoof, and is formed with a series of holes 15, which are engaged by a lug 16, projecting from a sleeve or washer 17, mounted on the clamping-bolt 13 between the ends of the sleeves 11 12, so that when the lug is engaged in the desired hole the toe-straps will be held firmly in position and the front of the shoe be strongly held to the hoof.

It will be perceived that I have provided the art with a nailless horseshoe composed of very few parts, yet so constructed and arranged that the shoe is very strongly held to the hoof.

The shoe may be applied and secured in place by swinging the draw-straps outwardly with the tongue-straps and then turning the toe-straps forward and placing the shoe on the hoof ready to be fastened in place. This may be accomplished by swinging the toe-straps back against the hoof, then arranging the lug of the sleeve 17 in one of the holes, then bringing the draw-straps and tongues about the hoof, and then inserting and screwing up the clamping-bolt, and the shoe is fixed in position.

Having described my invention, what I claim is—

A nailless horseshoe comprising a shoe, draw-straps pivotally secured to the heels of the shoe and provided with transverse serrations, tongues pivotally secured to the draw-

straps and having serrations to engage with those on the draw-straps, and formed with sleeves on their outer ends provided with interior screw-threads, a toe-strap hinged to  
5 the toe of the shoe and having apertures in its upper end, a washer formed with a lug to engage the apertures, and a threaded clamping-bolt through the sleeves and washer.

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

JOSIAH SERFASS.

Witnesses:

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A. F. BUTLER.