(No Model.)

J. OTT.

ATTACHMENT DEVICE FOR HORSESHOES.

No. 373,091. Patented Nov. 15, 1887.

Fig. I.

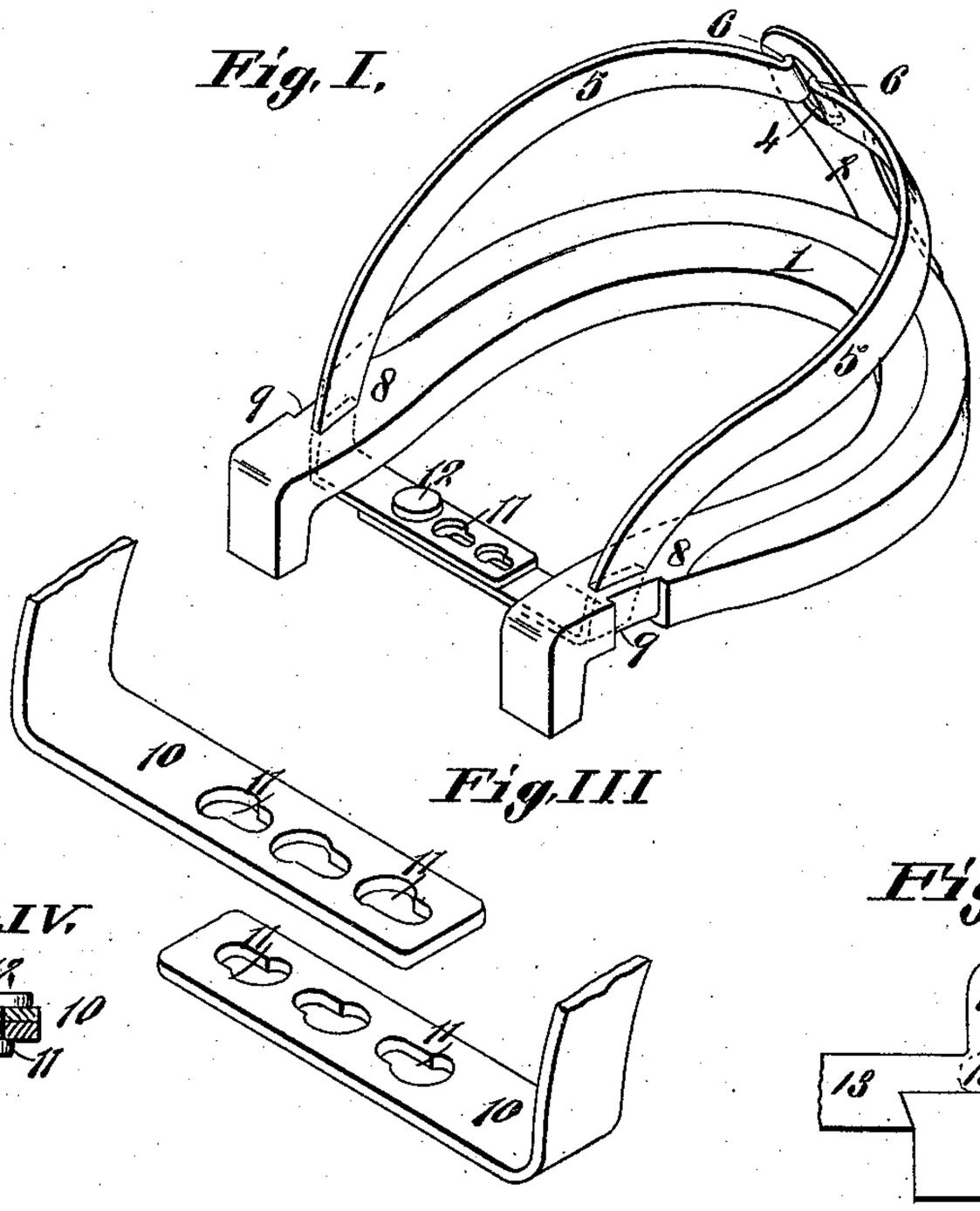


Fig. III

Fig. IV.

Fig. V.

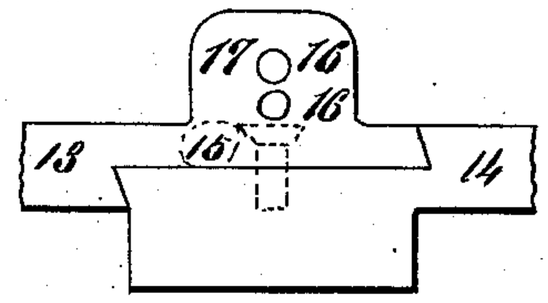
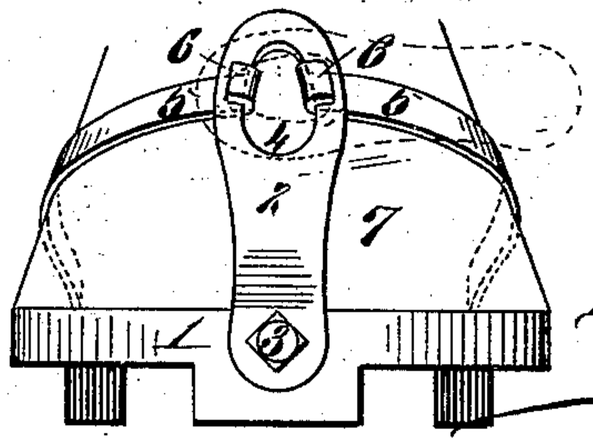


Fig. II.



Attest;

H. B. Knight.

E. Arthur.

Inventor;

John Ott.

By Knight Bros.

Attys

UNITED STATES PATENT OFFICE.

JOHN OTT, OF ST. LOUIS, MISSOURI.

ATTACHMENT DEVICE FOR HORSESHOES.

SPECIFICATION forming part of Letters Patent No. 373,091, dated November 15, 1887.

Application filed May 17, 1887. Serial No. 238,539. (No model.)

To all whom it may concern:

Be it known that I, JOHN OTT, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Attachment Devices for Horseshoes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure I is a perspective view of my adjustable devices for the attachment of horseshoes, showing the frontlet or toe-strap secured to the toe of the shoe and the sandal-straps hooked into engagement with a slot in said frontlet and extending back through slots in the heels of the shoe to their adjustable connection beneath said shoe. Fig. II is a front view showing the shoe in position on a horse's foot. It also shows the toe-strap, in dotted lines, in the position it is made to assume in the process of attachment or detachment of the shoe. Fig. III is a detail of the sandal-straps, showing the adjustable straps with the key-hole perforations, in which the key-button engages to secure the adjustment of the straps. Fig. IV is a vertical cross-section taken on a line through the side straps and button-key, showing the button-key seated in the narrow ends of the key-hole slot, thus locking the sliding straps; and Fig. V is a detail front view of a modification of the shoe, in which the shoe is made in two sections that are pivoted together in front, to facilitate the spreading or contraction of the heels when being adjusted by the slides of the sandal-straps.

This invention relates to devices for the adjustment of shoes to the size of the horse's foot and for securing the shoe to the foot without the use of nails; and the invention consists in features of novelty, hereinafter fully described, and pointed out in the claims.

Referring to the drawings, in which similar figures of reference indicate like parts in all the views, 1 represents a horseshoe, to which is secured my adjustable attachment device.

2 is the frontlet or toe-strap, which is secured to the toe of the shoe by a square-headed screw, 3, that passes through the toe-strap and screws into the toe of the shoe.

4 is an oval slot (that may be enlarged at its lower end) through the upper end of the toe-strap.

5 are the sandal-straps, which have hooks 6 at their front ends, that engage in and grip the edges of the slot 4, and, passing back over and grasping the horse's hoof 7, pass through slots 8 near the heel of the shoe; or, should it better accord with the size of the horse's foot, the straps are seated in recesses 9 on the outer edges of the shoe, near its heel, and in either case bend under the foot and form adjustable slides 10, being extensions of the sandal-straps, that overlap each other, and thus slide together in reverse directions, and are provided with key-hole slots 11, which are arranged coincidently in connection with each other, and are there locked by the key-button 12, so as to adjust the strap to fit tightly over and around the hoof and firmly hold the shoe on the foot.

It will be seen that as there are a number of key-hole slots in the straps they can be easily adjusted to tightly embrace any sized foot, and before the vertical toe-strap 2 has been secured at the bottom by the screw 3 it may be elevated into the position shown in dotted lines in Fig. II, loosening the straps by transferring the grip of the hooks from the sides to the ends of the oval slot 4, and then, the key-holes in the straps being brought into coincident position, the smaller head of the button is dropped through the circular enlargements of the key-holes in both straps. Then, when the lower end of the toe-strap is drawn down in its permanent position for the insertion of the screw, the sliding ends of the straps are drawn thereby, so that the stem of the button becomes seated within the narrow slot ends of the key-holes and locks its engagement there, and the sandal-straps above firmly embrace the foot of the horse and secure the attachment of the shoe.

As the narrow ends of the key-hole slots point toward the ends of the slides 10 of the sandal-straps, in which the button engages, it is evident that the stem of the key-button draws therein, and the attachment which binds the shoe to the foot cannot loosen of itself; but when the shoe is to be removed all that is required to effect the same is to remove the screw 3, that connects the bottom of the toe-strap to the toe of the shoe, and turn the strap to the position shown in dotted lines, (see Fig. II,) when the slides 10 of the sandal-

straps will be loosened, and the button-keys, being slid to the circular enlargement of the key-holes, are withdrawn. The shoe can then be removed without any impediment, or will drop off of itself.

In Fig. V is shown a modification, in which the shoe is made in two sections, 13 and 14, that dovetail into each other and are secured together at the toe by the pivot screw-pin 15. It will be seen that by this means the shoe is adjustable to the size of the horse's foot, for the slides of the sandal-straps draw the heel of the pivoted sections of the shoe together until the straps above tightly clamp the hoof, and the key-button is then seated in the key-hole slot and loosely locks the adjustment. The lock is then tightened by the use of the toe-strap 2, the lower end of which is then turned down and fastened by the screw 3, that engages in the screw-holes 16, of which in this modification there are two shown, (and may be more,) in a frontal stud or toe-clamp, 17.

My improved shoe obviates the objection of being nailed onto the horse's hoofs, and can be removed from them with great ease and dispatch.

I claim as my invention—

1. In an attachment device for horseshoes, the combination of the slotted shoe, the sandal-straps 5, that pass through the slots in the shoe and are provided with hooks 6, the slotted toe-strap 2, the screw 3, for securing the strap to the toe of the shoe, with the extension-slides 10 of the sandal-straps, that overlap each other, and the key-buttons 12, that engage in key-holes 11 in said slides and lock the straps to the horse's feet, substantially as described, and for the purpose set forth.

2. In an attachment device for horseshoes, the combination of straps 5 with their grip-hooks 6 and extension-slides 10, having key-holes in which key-buttons engage to loosely lock the straps that hold the shoes to the horse's feet, with the screw 3 and the toe strap that is provided with the oval slot 4, in the ends of which the said grip-hooks hold loosely when the lower end of said strap is elevated, while when the strap is turned down said hooks grip the sides of the slot and thus tighten the straps that hold on the shoe and change the loose lock of the key-button fastening into a tight lock, the toe-strap being held at its lower end by the screw 3, substantially as described, and for the purpose set forth.

3. In an attachment device for horseshoes, the combination of the shoe in two sections, pivoted at the toe, with the sandal-straps, the toe-clamp-fastening screw 3, and the toe-strap 2, having an oval slot, 4, in which the grip-hooks of the sandal-straps engage, said straps having extensions 10, that slide on each other, and key-holes in which key-buttons engage to loosely lock the straps that hold the shoes on the horse's feet, and said toe-strap arranged when the lower end is elevated to loosely hold said sandal-straps by their grip-hooks, that then engage in the ends of the slot, and when said toe-strap is turned down and adjustably fastened in the screw-hole in the stub-stud or toe-clamp 17 by the square-headed screw 3 to tightly hold the sandal-straps that secure the shoe and tightly lock the key-button in the key-holes of the sliding straps, substantially as and for the purpose set forth.

JOHN OTT.

In presence of—
ERNEST G. WINTER,
BENJN. A. KNIGHT.