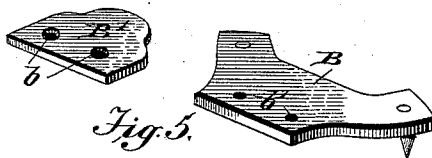
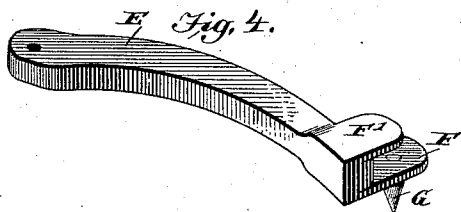
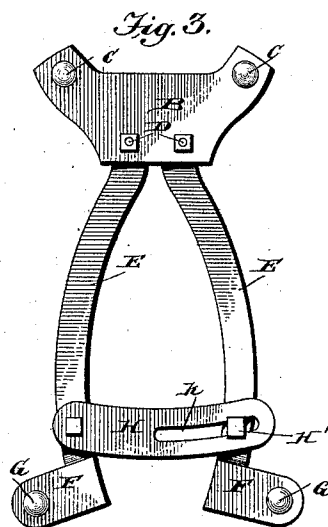
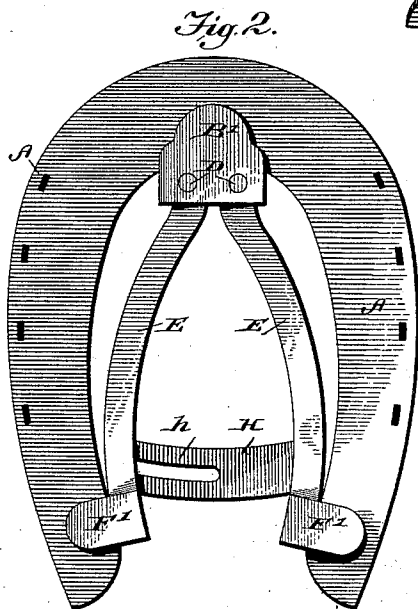
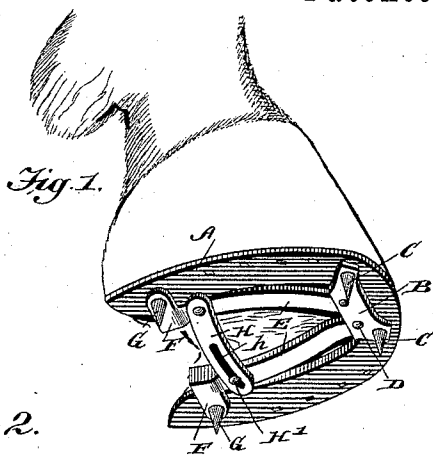


(No Model.)

J. MALKEN.
HORSESHOE ATTACHMENT.

No. 577,661.

Patented Feb. 23, 1897.



WITNESSES:

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JOHN MALKEN, OF BABYLON, NEW YORK.

HORSESHOE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 577,661, dated February 23, 1897.

Application filed March 16, 1896. Serial No. 583,466. (No model.)

To all whom it may concern:

Be it known that I, JOHN MALKEN, residing at Babylon, in the county of Suffolk and State of New York, have invented a new and useful Improvement in Horseshoes, of which the following is a specification.

This invention relates, broadly, to horseshoes, and particularly to an improved attachment, the object of which is to prevent the shoe slipping on ice.

Another object of the device is to prevent the frog of a hoof being filled with snow.

A further object is to provide an attachment which can be quickly and easily attached to and detached from any of the horseshoes now in use.

Another object is to provide an attachment which can not only be attached to horseshoes now in use, but can be attached without altering the shoe.

Another object is to provide an attachment which can fit different sizes of shoes.

Another object is to provide an attachment so constructed that should any one part become broken it can be readily repaired or replaced.

With these objects in view my invention consists in the peculiar construction of the details and also in the novelties of combination, all of which will be first described, and then pointed out in the appended claims.

In the drawings hereto annexed and forming a part of this specification, Figure 1 is a perspective view of my invention. Fig. 2 is a top plan view of a shoe provided with my attachment. Fig. 3 is a detail view of the attachment ready for use, and Figs. 4 and 5 show details of construction.

Referring to the drawings, A indicates an ordinary horseshoe to which my attachment is applied prior to nailing the shoe to the horse's foot. Broadly speaking, this attachment consists of a top plate carrying toe-calks, heel-plates carrying heel-calks, connecting-bars uniting the heel and toe plates, and an adjusting spreader-bar for regulating the distance between the heel-plates.

Describing the parts in detail, the toe-plate B is somewhat wider at the forward end than at the rear and carries the toe-calks CC, said calks being screwed into the said plate, as

clearly shown. A supplemental toe-plate B' is arranged to rest upon the inner face of shoe, said plate having apertures *b b*, which register with apertures *b' b'* in the plate B, said apertures being designed to receive the bolts D D, which unite the connecting-bars E E to the plates F F integral with the rear ends. The plates F F are substantially parallel, as shown, to receive the rear ends of the shoe between them, the inner plate F' being somewhat shorter than the outer plate F, and each plate F also receives a heel-calk G. The inner heel and toe plates are also much thinner than the outer plates.

Now in attaching the device the toe-plates are set in place and the heel-plates spread to engage the heel portions of the shoe and hold said parts in this position. I employ an adjusting or spreader bar H, which is pivoted to one of the connecting-bars and has a slot *h* at the outer end, and passing through said slot into the other connecting-bar is a set-screw H', by means of which and the slot the connecting-bars can be adjusted and secured at any width desired, and after being so adjusted are securely held in place.

The attachment can be quickly connected with the shoe as soon as slippery or icy weather appears and can be as quickly removed when the necessity for their use ceases. It will also be noticed that it is not necessary to make any change to the ordinary horseshoe, and it will also be observed that by means of the adjusting-bar the attachment can be placed upon any size of horseshoe within a certain limit.

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

1. In a horseshoe attachment, the heel and toe plates united by the connecting-bars, and the adjusting-bar connected to one connecting-bar and to the other connecting-bar, by a set-screw working in a slot made in the end of the adjusting-bar, substantially as shown and described.

2. The combination, with the connecting-bars, of the heel-plates at their ends, the heel-calks, the toe-plates and bolts connecting the bars and toe-plates, and the adjusting-bar pivoted at one end and slotted at the opposite

end, and the set-screw, all arranged substantially as shown and described.

3. The combination with the horseshoe A, of the toe-plates B and B', the toe-calks attached to the plate B, the connecting-bars E
5 having their ends pivoted between the plates B and B', the bolts D for securing said connecting-bars; the plates F and F' arranged upon the rear ends of the connecting-bars E
10 and substantially parallel, the plate F being longer than the plate F', and the heel-calks

G attached to the said plates F, and an adjusting or spreading bar H pivoted to one of the connecting-bars and having a slot *h* at the opposite end, and the set-screw H' adapted to
15 pass through the said slot into the connecting-bar, all arranged and adapted to operate substantially as shown and described.

JOHN MALKEN.

Witnesses:

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