

J. Austin, Horseshoe.

N^o 57,433

Patented Aug. 21, 1866.

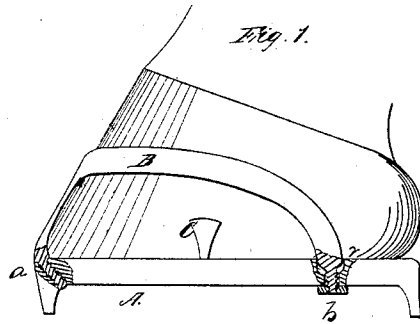


Fig. 4.



Fig. 2.

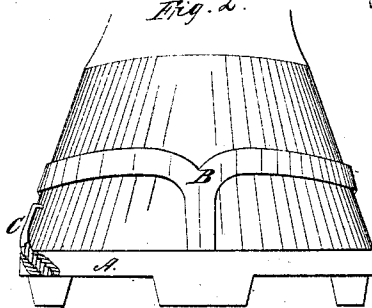


Fig. 5.

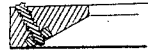
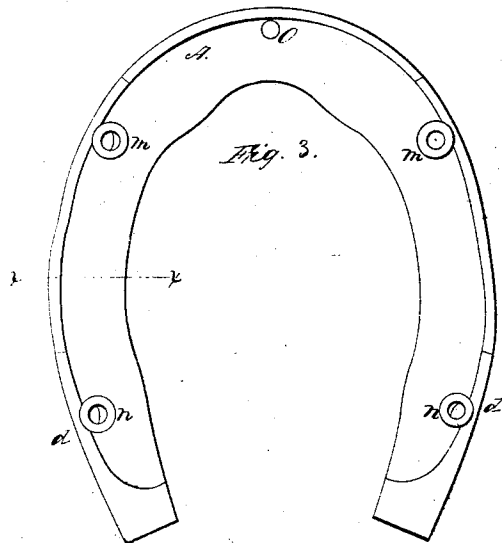


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN HORSESHOES.

Specification forming part of Letters Patent No. 57,433, dated August 21, 1866.

To all whom it may concern:

Be it known that I, JOHN AUSTIN, of Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Horseshoe-Fastenings; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, like letters indicating like parts wherever they occur.

To enable others skilled in the art to construct and use the invention, I will proceed to describe it.

The nature of my invention consists in securing the shoe to the feet of horses and similar animals by means of a band of peculiar construction in conjunction with clips, both the band and the clip being secured to the shoe by means of screws and nuts.

Figure 1 represents a side view of a foot with the shoe attached. Fig. 2 is a front view of the same; Fig. 3, a bottom view of the shoe; Fig. 4, a transverse vertical section of the same, taken on the line *xx* of Fig. 3; and Fig. 5, a perspective view of one of the clips detached.

Like letters indicate like parts wherever they occur.

I first construct the shoe with its under surface inclined upward from its outer to its inner edge, as shown in cross-section in Fig. 5.

B represents the band used for fastening the shoe to the foot, this band being formed of any proper metal, sheet-steel being suitable for the purpose. This band rises from the toe of the shoe in a vertical direction for a short distance, as shown in Fig. 2, when it is divided into two equal parts or branches extending backward around each side of the hoof, as shown in Fig. 1, the rear portions of the band being curved downward and joined to the shoe near the heel, as shown. At the points of junction with the shoe the band rests in recesses or notches cut in the hoof, as described in my former patent, the arrangement in this respect being the same in this case as in that.

The band B, both at its central front end or point, *a*, and also at its rear ends *b*, is made round, and has a screw-thread cut on it, as shown. The shoe at its front point or toe has

a hole, *o*, with a screw-thread cut in it to receive the point *a* of the band, holes *n* being formed near the heel on each side to receive the rear ends of the band. These holes enter at the outer edge of the shoe upon its upper surface, and are inclined inward as they pass through the body of the shoe for the purpose of leaving a sufficient amount of metal outside to give strength to the shoe and at the same time bring the projecting points of the band or of the clips so far inward on the under surface of the shoe as to permit nuts to be screwed thereon and not project beyond the outer edge of the shoe, as shown in Fig. 5.

To attach the shoe, the band B is first secured thereto by screwing the point *a* into the hole *o*, as shown in Figs. 1 and 2. The shoe is then placed on the foot, and the rear ends, *b*, of the bands are inserted in the holes *o*, and the nuts *c* are screwed thereon, so as to draw the band tightly into the recesses cut in the hoof and bind the shoe firmly to the foot.

In some cases, especially with heavy horses, additional fastenings may be required, and for this purpose I provide the clip C, one being secured to the shoe on each side about midway between the front and rear points of attachment of the band on each side, as shown in Fig. 1, holes *m* being provided for them in the shoe, as shown in Fig. 3. The upper point of the clips are bent inward to form a hook, which is fitted into a corresponding recess cut in the hoof to receive them.

It will be observed that the upper end or head of the clip is rounded or curved, and that the hook has a corresponding curve, by which means its hold upon the hoof is rendered much more certain than when constructed in the usual manner.

Upon the upper side of the shoe the holes for the reception of the band and the clips are enlarged sufficiently to permit the shoe to be tightened up by screwing up the nuts and drawing the band ends and the clips, if used, down into the enlarged hole in the upper part of the shoe, as shown in Fig. 1.

The holes are countersunk on the under surface of the shoe to permit the rounded surface of the nuts to rest therein, and thus prevent their protruding too far from the under surface of the shoe, the inclined surface forming

a right angle to the stem of the band or clip, so as to permit the nuts to be screwed up without jamming or binding.

The rear calks, *d*, are extended for some distance forward, forming a rim along the outer edge of the shoe, as shown in Fig. 3, thereby forming a guard to protect the nuts on the ends of the band from injury.

If desired, lugs or a similar rim may be formed on the shoe to protect the nuts on the clip when the latter are used. If desired, the clips alone may be used and the band dispensed with; but I do not consider them so effectual as the band for holding the shoe in place.

The advantage of this form of band over my former one is that, having but one point at the front, the point can be screwed into the shoe, and thus be securely attached without the use of a nut at that point, which could not be done with the other. By this manner of constructing the parts, the shoe can also be tightened up at any time without removing it from the foot, and without heating or changing any of the parts. Any person can attach the shoe at

any time or place without the loss of time and travel in going to a blacksmith.

Having thus described my invention, what I claim is—

1. The band B, constructed and attached to the shoe in the manner substantially as shown and described.
2. The clip C, having its upper end provided with the curved hook for taking hold upon the hoof, with its lower end screw-threaded, as set forth, in combination with the nut, as shown and described.
3. The enlarged hole or recess *r* in the upper side of the shoe, in combination with the band B or clip C, to permit the flat portion of the band or clip to be drawn down therein in tightening up the shoe, as described.
4. The guards *d*, for protecting the nuts which secure the rear ends of the band, as shown and described.

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Witnesses:

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