(No Model.)

G. W. M. SIMMS.

HORSESHOE.

No. 260,057. Patented June 27, 1882.

Fig. 1.

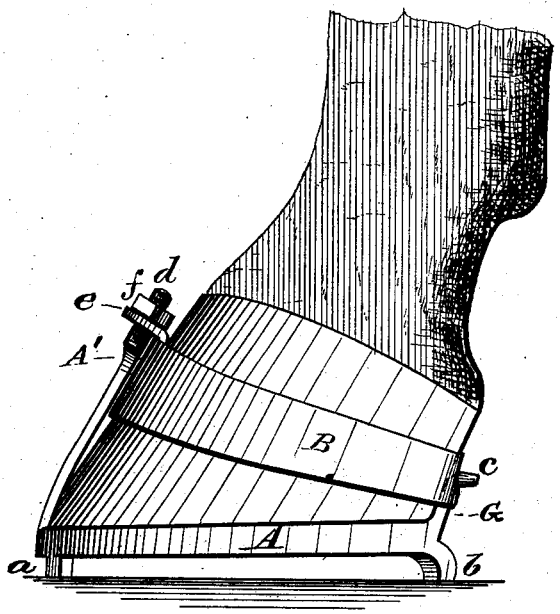


Fig. 2.

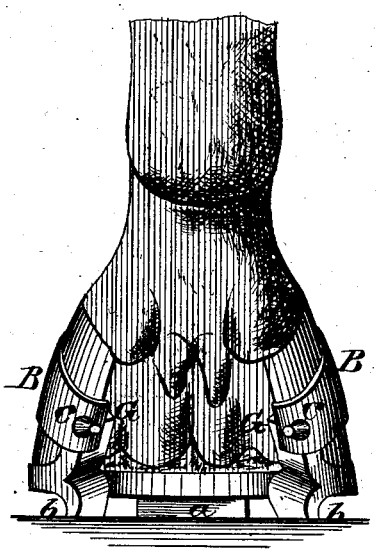
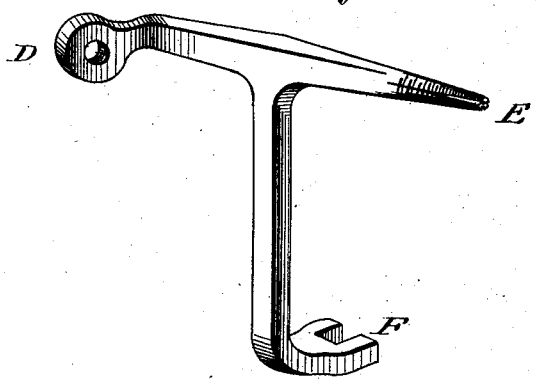


Fig. 3.



WITNESSES

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HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 260,057, dated June 27, 1882.

Application filed July 8, 1881. (No model.)

To all whom it may concern:

Be it known that I, G. W. M. SIMMS, a citizen of the United States, residing at Madison Court-House, in the county of Madison and State of Virginia, have invented a certain new and useful Improvement in Horseshoes; and I do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in horseshoeing to make and use the same.

This invention relates to horseshoes of the kind which are applied to the feet by clamps instead of nails.

My invention consists in a horseshoe which is formed with rear upward extensions arranged obliquely, and provided with studs or spurs, and also with a toe-strap provided with a screw-thread on its upper end, in combination with a band which embraces the hoof, and is attached to said studs or spurs, and secured to the screw-threaded portion of the said strap by means of a nut, the said parts being so constructed that when applied to the hoof they can be readily and safely confined in place, as will be hereinafter explained.

In the annexed drawings, Figure 1 is a side elevation of a horse's foot having my improved shoe applied to it. Fig. 2 is a rear view of Fig. 1. Fig. 3 is a perspective view of a wrench and screw-tap adapted for use with my improved shoes.

Similar letters of reference indicate corresponding parts in the figures.

The letter A designates the body of the shoe, which may be made of steel or iron, and which may be constructed with the toe-calks *a* and heel-calks *b*. The heels G G of the shoe are turned up and bent obliquely, so that their front surfaces are directed forward and outward from a vertical plane passing through the center of the shoe. The front surfaces of these heel-pieces G G are preferably grooved, and thus adapted to receive and to fit snugly the heel portions of the hoof, as shown in Fig. 2. These upturned heel-pieces prevent lateral and forward displacement of the shoe on the hoof, and they have formed on them tapered studs *c c*, which are directed backward and a little outward. To the front or toe part of the shoe A, I weld a strong strap, A′, which extends upward and backward and terminates in a screw, *d*.

B designates a broad metal band, which is shaped to fit snugly the front, the sides, and the rounded heel portions of the hoof about midway between the sole and upper termination of the horny portion. This band or brace B is constructed with a lip, *e*, through which the screw *d* on strap A′ passes, which screw receives a nut, *f*, for fastening the parts. The rounded heel portions of the band or brace B have holes through them which receive the studs *c c*. If desired, the frog may be protected from balling and from injury by concussion with stones and other objects by interposing a thin plate of metal between the shoe and frog. A thin sheet of india-rubber may also be combined with the said metal plate to modify shocks.

The tool represented by Fig. 3 has three arms, on one of which a wrench, F, is formed for tightening the nut *f*, on the other arm a female screw-tap, E, for repairing the thread in the nut *f*, and on the other a male screw-tap, D, for repairing the thread on the screw *d*.

The shoe is rigidly secured to the foot by passing the studs *c c* through the rear ends of the band B, and slipping the screw *d* through the lip *e* of this band, then setting up the nut *f* by means of the wrench F on the T-shaped tool represented by Fig. 3.

The studs *c c* on the upturned heel-pieces G G are made conical, so that in the act of clamping the shoe and band B to the hoof these studs will operate like wedges, and aid in drawing tight the parts at the heel. Then, again, should the shoe become loose in consequence of concussions and other causes, a slight turn of the nut *f*, aided by said conical or wedge-form studs, will tighten the shoe again. I therefore consider these studs an important feature of my invention. It will also be seen that the heel-pieces G G and the heel-calks *b b* are formed from the body of the shoe by simply splitting the heels of the shoe and turning said parts in opposite directions.

What is claimed as the invention is—

The combination of a horseshoe having upwardly and obliquely inclined heel-pieces G G, and conical studs *c c*, projecting thereform, the band B, receiving through its ends the studs *c c*, and constructed with an ear, *e*, the toe-strap A′, and the nut *f*, applied thereon, substantially as described.

G. W. M. SIMMS.

Witnesses:

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