

J. R. HOWARD.
Horseshoe.

No. 200,301.

Patented Feb. 12, 1878.

FIG. 1.

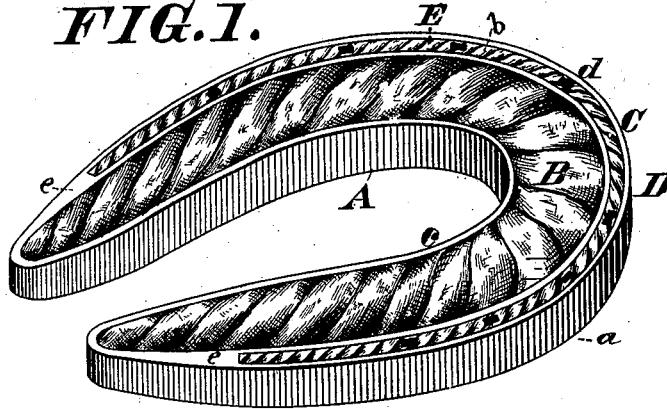


FIG. 2.

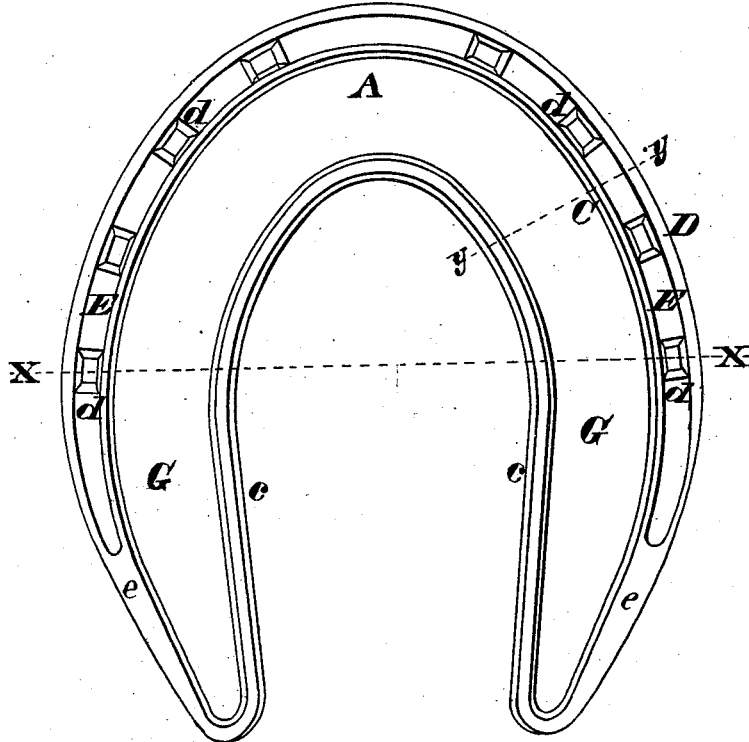
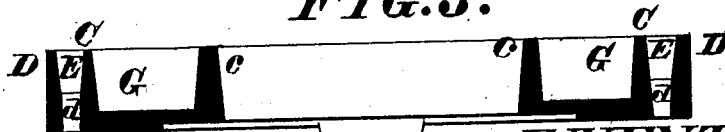


FIG. 3.



ATTEST.

Alex J. Thomson
Jas Hudson

INVENTOR.

FIG. 4.



J. R. Howard

UNITED STATES PATENT OFFICE.

JAMES R. HOWARD, OF ST. LOUIS, MISSOURI, ASSIGNOR TO MARCUS I. WRIGHT, OF SAME PLACE.

IMPROVEMENT IN HORSESHOES.

Specification forming part of Letters Patent No. 200,301, dated February 12, 1878; application filed August 9, 1877.

To all whom it may concern:

Be it known that I, JAMES R. HOWARD, of St. Louis, in the county of St. Louis and State of Missouri, have invented certain new and useful Improvements in Horseshoes; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective bottom view of the complete shoe. Fig. 2 is a bottom plan, the elastic filling or packing having been removed. Fig. 3 is a cross-section on line *x x* in Fig. 2; and Fig. 4 is a section on line *y y*, Fig. 2.

Similar letters of reference indicate corresponding parts in all the figures.

My invention relates to that class of horseshoes which have recesses filled with an elastic packing, such as rubber, paper, tarred rope, or other similar material; and it consists in a shoe with two channels, both filled with packing.

The object of my improvement is to provide a means for securing shoes of this class properly to the animal's foot, and also utilize the full width or face of the shoe for the tread or bearing-surface thereof, substantially as hereinafter more fully explained.

In the drawings, A is the shoe, made preferably of cast-iron, and afterward decarbonized to the softness of wrought-iron. This shoe has a triple wall or flange on its under side, viz., the inner flange *c*, outer flange *D*, and intermediate flange *C*, by which two pad-recesses are formed, *G* and *E*, the outer narrow recess or groove *E* being only about half the depth of the inner recess *G*, so as to form a re-enforced thickened verge or edge, *a*. Channel *E* is perforated by the nail-holes *d*, and does not reach all the way back to the heel of the shoe, leaving a solid part, *e*, on each side, as shown.

The recesses *G* and *E* may be packed with

any suitable material; but I prefer to use for the larger recess *G* a tarred three-fourths or seven-eighths hemp rope, and for the smaller recess *E* a well-twisted tarred marline of suitable size. Both of these rope-sections are first heated, so as to soften the tar, and are then inserted into their respective recesses, and pressed firmly in place by the use of hydraulic or other powerful presses.

On cooling, the packing will have acquired the requisite degree of hardness and elasticity, after which holes are burned through the outer packing *h* by inserting a slender iron rod, heated to a red heat, through the nail-holes *d* from the under side of the shoe, after which the shoe is complete and ready for use.

By this construction the nails may be inserted through the shoe into the hoof with perfect accuracy, avoiding all injury of the hoof by the misplacement of nails. The packing *h* in the outer or nail-channel *E* will, after the nails have been inserted and driven home, close up over their heads, thus preserving them from rust and preventing them from working loose.

The intermediate flange *C* may be made considerably thinner than the flanges *c* and *D*, if desired.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

As an article of manufacture, the padded horseshoe herein shown and described, consisting of a metal body having a pad-recess, *G*, extending below the surrounding nail groove or channel *E*, whereby a re-enforced verge or edge, *a*, is formed, having perforations *d* for the nails, substantially as and for the purpose herein set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JAMES R. HOWARD.

Witnesses:

JNO. HUDSON,
LOUIS E. BEAUMONT.