

H. GOURDIER.

HORSESHOE.

No. 175,347.

Patented March 28, 1876.

Fig. 1

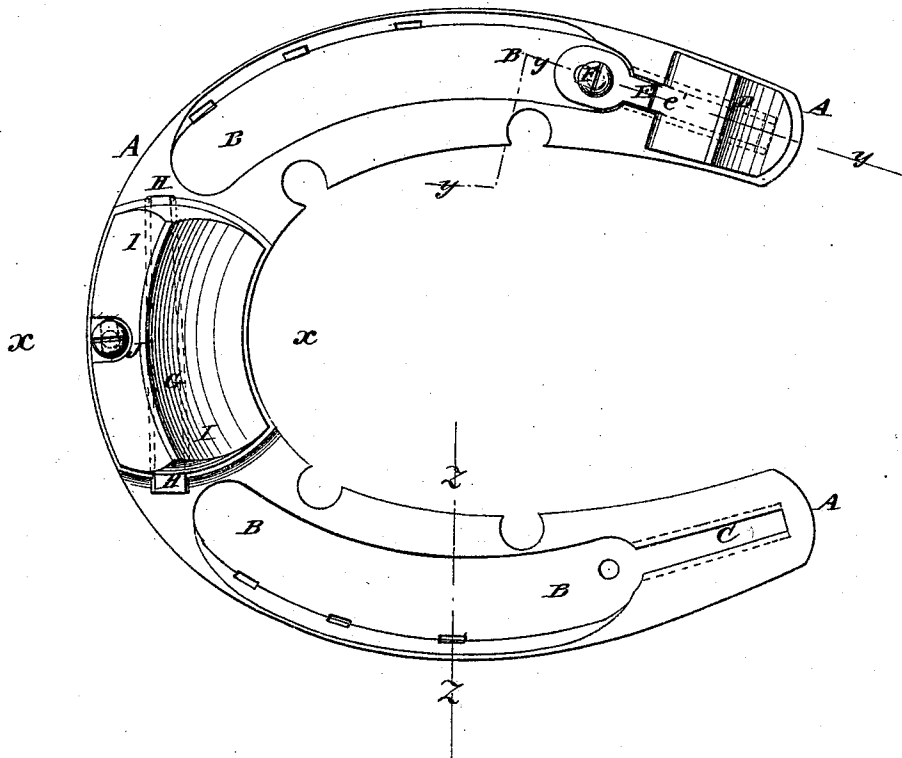


Fig. 2

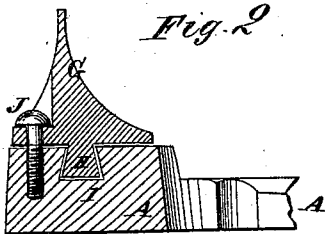


Fig. 3

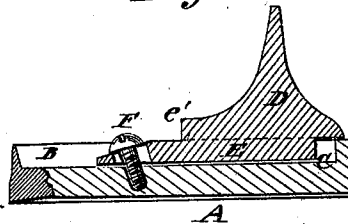
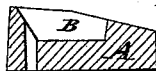


Fig. 4



WITNESSES:

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UNITED STATES PATENT OFFICE.

HENRY GOURDIER, OF NEW YORK, N. Y.

IMPROVEMENT IN HORSESHOES.

Specification forming part of Letters Patent No. **175,347**, dated March 28, 1876; application filed January 4, 1876.

To all whom it may concern:

Be it known that I, HENRY GOURDIER, of the city, county, and State of New York, have invented a new and useful Improvement in Horseshoes, of which the following is a specification:

Figure 1 is a face view of my improved horseshoe, one of the heel-calks being removed. Fig. 2 is a detail section taken through the line *x x*, Fig. 1. Fig. 3 is a detail section taken through the line *y y*, Fig. 1. Fig. 4 is a detail section taken through the line *z z*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved horseshoe, strong and durable, and so constructed that the calks may be readily replaced with new ones when required, and in which the calks will be held securely in place when the shoe is in use.

The invention will first be described in connection with the drawing, and then pointed out in the claim.

A represents the body of the shoe, which is designed to be cast of malleable iron, and has grooves B formed in its face, to reduce the thickness of metal to such an extent that it may be properly annealed.

In the ends of the shoe, and longitudinally therewith, are formed slightly-tapering dovetailed grooves C, which do not extend quite to the ends of the shoe, as shown in Figs. 1 and 3.

D are the heel-calks, which have slightly-tapering dovetailed tongues E formed upon their bases to fit into the dovetailed grooves C. The rear ends of the tongues E do not extend quite to the closed ends of the grooves C, so that the calks may be firmly driven into place and tightened, should they become loose.

The forward ends of the tongues E are extended, are inclined, and have slots formed longitudinally in them to receive screws F, which are screwed into holes formed in the body of the shoe at such an angle that the

said screws may be at right angles with the inclined ends of the said tongues.

Upon the tongues E, at the inner side of the calks D, are formed shoulders *e'*, to receive the blows of the hammer when driving the said calks into place.

G is the toe-calk, upon the base of which is formed a slightly-tapering dovetailed tongue, H, to fit into a slightly-tapering dovetailed groove, I, formed across the forward part of the shoe.

The ends of the tongue H project to receive the blows of the hammer by which the calks G are driven into and out of place.

The toe-calks G may be further secured in place by screws J passing in through short slots in the flanges of the said calks G, and screwing into the body of the shoe. If desired, two toe-calks, G, may be used, one upon each side of the forward part of the shoe.

The parts of the shoe in which the grooves C and I are formed may be made thicker, so that the said grooves may be below the body of the shoe, or they may be partly or wholly within said body, as may be desired.

I am aware that horseshoes have been made with longitudinal dovetail mortises, wider at one end than at the other, closed near ends, and having calks with tenons of corresponding shape, held by screws set at the front end of said tenons. This construction is, therefore, distinctly disclaimed; but

What I do claim is—

The tongues E, formed upon bases of heel-calks, and having forward end projecting, beveled, and slotted, to receive screws F, in combination with shoe having longitudinal dovetail slots G and closed ends, the said tongues being caused to enter slots of shoe in the same plane with lower surface of shoe, as and for the purpose specified.

HENRY GOURDIER.

Witnesses:

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