

C. H. PERKINS.

MANUFACTURE OF HORSESHOES.

No. 187,727.

Patented Feb. 27, 1877.

FIG.2.

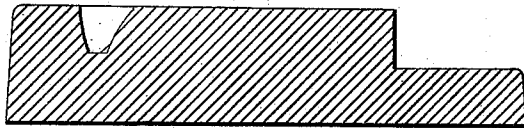


FIG.1.

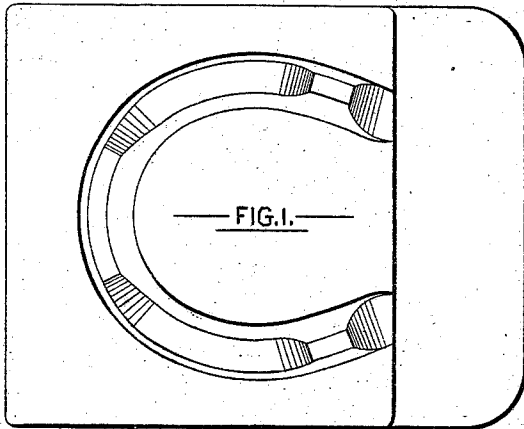


FIG.4.



FIG.6.

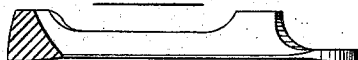


FIG.3.

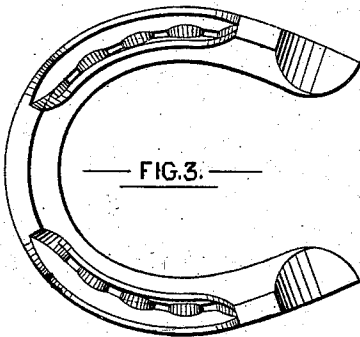
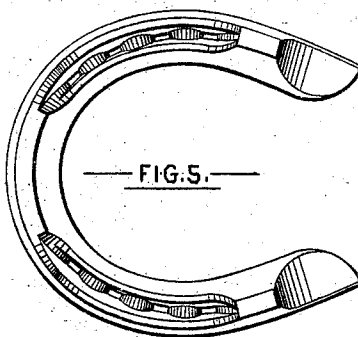


FIG.5.



WITNESSES.

Walter B. Hine
Henry B. Knight

INVENTOR.

C. H. Perkins

UNITED STATES PATENT OFFICE.

CHARLES H. PERKINS, OF PROVIDENCE, RHODE ISLAND.

IMPROVEMENT IN THE MANUFACTURE OF HORSESHOES.

Specification forming part of Letters Patent No. 187,727, dated February 27, 1877; application filed November 8, 1876.

To all whom it may concern:

Be it known that I, CHARLES H. PERKINS, of Providence, in the State of Rhode Island, have made certain new and useful Improvements in the Manufacture of Horseshoes; and I do hereby declare that the following specification, taken in connection with the drawing making a part of the same, is a full, clear, and exact description thereof.

Figure 1 is a view of the die. Fig. 2 is a section of same. Fig. 3 is a view of the shoe before being acted upon by the die. Fig. 4 is a section of same. Fig. 5 is a view of the shoe after being acted upon by the die. Fig. 6 is a section of same.

The object of my invention is to increase the rapidity with which horseshoes can be manufactured, and at the same time reduce the cost of production; and consists in rolling the shoe with grooves and calks complete, and subsequently shaping the sides in a die, as hereinafter described.

It will be seen, by reference to Letters Patent of the United States for horseshoe-blanks, granted to me on the 21st day of March, A. D. 1876, and numbered 174,924, that double blanks for horseshoes have heretofore been rolled and subsequently divided and bent into shape.

In my invention I roll the blank with calks, grooves, and nail-holes, and subsequently divide and bend, as heretofore, then finish in a die, as hereinafter set forth, thus producing a complete shoe without the intervention of hand-labor.

The nail-holes, however, are not carried entirely through by the rolling process, but require the subsequent action of any suitable mechanism to finish them.

The degree of sharpness of the calks may be easily varied to suit the condition of the surface over which the horse is to travel.

In order to enable the blank to undergo the bending necessary to bring it into the required shape, I roll it with the inner edge lower between the calks than the outer edge, the obvious effect of which is to reduce the strain upon the latter at the points where the greatest strain is sustained during the bending process by the sudden depression of the inner edge, and the gradual depression of the outer edge upon either side of the toe-calk toward the heel.

The cutting-edges which make the grooves, if made sufficiently large to withstand the strain, spread apart the outer and inner edges to an extent which renders a subsequent partial closing or forcing together necessary. In order to accomplish this I make use of a die, as shown in Fig. 1, into which I place and force the shoe while hot, which gives to the outer edge an inward curve, and brings the two edges nearer together.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. As an improvement in the art of finishing horseshoes made of iron creased and punched by rolling, and of the form substantially in cross-section as described in my Patent No. 174,924, the swaging of said shoe in a die for the purpose of partially closing the distended creases and nail-holes, and otherwise imparting a finished form to the shoe, as herein set forth.

2. The die constructed as herein described, for curving and shaping the sides of the shoe, and partially closing the grooves, as specified.

C. H. PERKINS.

Witnesses:

WALTER B. VINCENT,
HENRY C. KNIGHT.