J. RUSSELL.

Blanks for Horseshoes.

No. 146,146. Patented Jan. 6, 1874.

FIG: 1.

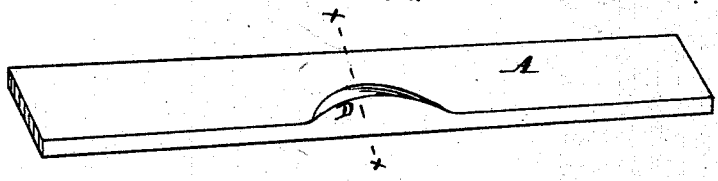


FIG: 2.

FIG: 3.

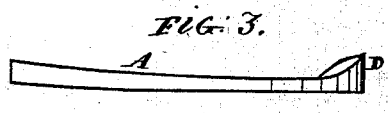


FIG: 4.

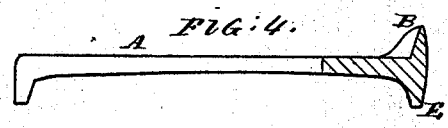


FIG: 5.

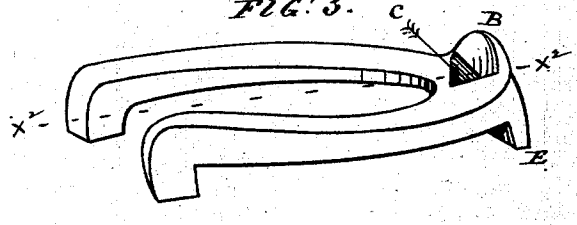
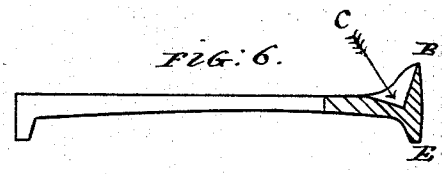


FIG: 6.



Witnesses
R. Rowley
Charles L. Barrick

Inventor
Jacob Russell

AM. PHOTO-LITHOGRAPHIC Co. N.Y. (OSBORNE'S PROCESS)

UNITED STATES PATENT OFFICE.

JACOB RUSSELL, OF NEW YORK, N. Y.

IMPROVEMENT IN BLANKS FOR HORSESHOES.

Specification forming part of Letters Patent No. **146,146**, dated January 6, 1874; application filed September 16, 1873.

To all whom it may concern:

Be it known that I, JACOB RUSSELL, of the city, county, and State of New York, have invented certain new and useful Improvements in the Manufacture of Blanks of rolled bar-iron for making Horseshoes therefrom; and I do hereby declare the following to be a full description of the same.

As explanatory of the object of my invention, and at the same time point out its utility, it perhaps will not be deemed improper to make a preliminary statement of the common way of making horseshoes. In the ordinary way of making horseshoes, the blank is formed from a bar of iron, rolled of a uniform thickness and width, according to the weight of shoe to be made. This is bent to the required shape, having heel-calks formed by bending down the ends of the blank, and the toe-calks formed by welding a suitable piece of metal to the lower front edge of the shoe. To prevent the shoe from slipping when fitting it to the hoof of the horse, a shoulder of metal is gouged from the upper front edge of the shoe-plate, so as to form a solid and firm support for the toe of the horse to brace against. When the shoe is nailed to the hoof, as this shoulder of metal or toe support is wholly drawn up from the body of the plate its effects are to weaken the shoe at that point. My invention is therefore designed to remedy this defect in the construction of horseshoes. And the nature of my invention consists in the new article of manufacture of horseshoe-blanks from rolled bar-iron, having formed thereon at the time of rolling the bar of iron a toe-supporting reserve of metal, whereby, in forming the support on the shoe-plate for the toe of the horse's foot to brace against, the body of it will not be diminished in strength, as would be the case if gouged out of the body of the plate, as is the common practice.

But to describe my invention more particularly, I will refer to the accompanying drawings forming a part of this specification, the same letters of reference, wherever they occur, referring to like parts.

Figure 1 is a perspective view of the horseshoe blank. Fig. 2 is a transverse cut section of the same through the line $x\,x$, Fig. 1. Fig. 3 is an edge view of the blank when bent into the shoe-shape. Fig. 4 is a view, showing the toe-supporter formed thereon. Fig. 5 is a perspective view of an ordinary horseshoe, showing the toe-supporter as gouged out of the shoe-plate. Fig. 6 is a cut sectional view of the same through the line $x^2\,x^2$, Fig. 5, showing the cavity formed in the shoe-plate to form the toe-supporter.

Letter A represents a flat bar of metal, of such suitable width and thickness, as well as weight, as may be required for the various kinds of horseshoes to be made. These bars are formed in the usual rolling-mills, and of such convenient length as will admit of being cut into some ten, or more or less number of lengths or blanks for forming a horseshoe. These lengths or blanks are about twelve inches long. In forming the horseshoe, and to support and steady it on the horse's foot, it is customary to form a toe-supporter, B, on the front upper edge of the shoe-plate, by gouging a piece of metal out of the plate, as shown at *c*, Figs. 5 and 6. As will be obvious, this greatly weakens the plate, and especially at a point of the shoe requiring the most strength. To obviate this weakening of the plate, a reserve of metal, D, is formed on the upper front edge of the blank, at the proper point, in the process of making or forming the bar of metal in the rolling-mill. By this means the toe-supports can be formed on the plate to give a solid support to the toe of the horse's foot to brace against, and at the same time preserve the full thickness of the shoe-plate to sustain any strain thereon, as well as give greater strength to the plate for welding the toe-calk E to the under side thereof.

Having now described my invention, I will proceed to set forth what I claim and desire to secure by Letters Patent of the United States.

I claim—

The new article of manufacture of horseshoe rolled-metal blanks having a toe-supporting reserve of metal, D, thereon, when formed in the process of rolling the bar of metal, substantially as described, and for the purposes set forth.

JACOB RUSSELL.

Witnesses:

R. ROWLEY,

CHARLES L. BARRITT.