J. WIKE.

Bars for Horseshoe Blanks.

No. 166,238. Patented Aug. 3, 1875.

Fig 1.

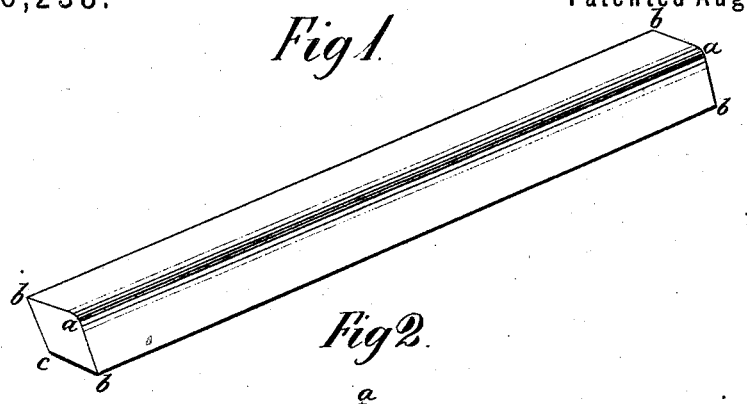


Fig 2.

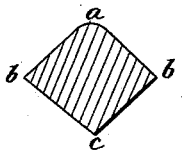
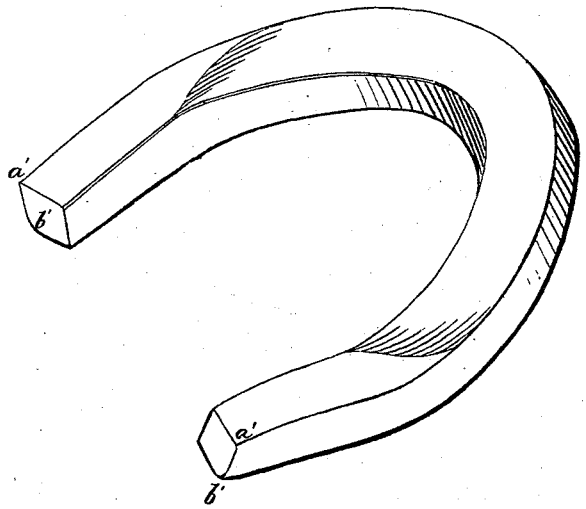


Fig 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOHN WIKE, OF PHILLIPSBURG, N. J., ASSIGNOR TO JACOB RUSSELL, OF NEW YORK, N. Y.

IMPROVEMENT IN BARS FOR HORSESHOE-BLANKS.

Specification forming part of Letters Patent No. **166,238**, dated August 3, 1875; application filed June 15, 1875.

To all whom it may concern:

Be it known that I, JOHN WIKE, of Phillipsburg, in the county of Warren and State of New Jersey, have invented an Improvement in Blanks for the Manufacture of Horseshoes, of which the following is a specification:

In the manufacture of machine-made horseshoes from blanks of the usual square cross-section it is found that a surplus of metal is inevitably forced from the shaping-dies, and made to form a fin along the outer edges of the shoe as it comes from the said dies, the removal of which fin in the completion of the shoe is a constant source of expense, trouble, and loss. Moreover the acute four corners of the hereinbefore-named ordinary blank do not yield readily in the fitting of the blank to the peculiar curves of the dies employed in the fabrication of the most approved patterns, and hence a greater application of power in operating the dies is required, or a less perfectly-shaped shoe is formed than would be the case if the blank was of a character readily fitting to the section of the dies, and avoiding the projection of a surplus quantity of metal upon the edges of the shoe as just set forth.

My invention is designed to provide a blank in which the objections referred to shall be wholly obviated, and from which a perfect horseshoe may be turned by the easy working of the dies. To this end my invention consists in a horseshoe-blank, more or less diamond-shaped in its cross section, and with one of its longitudinal corners rounded, so that in cross-section one of the sides of the blank shall pass into that next adjoining on a curve or arc, the blank as thus made fully securing the object and results desired.

Figure 1 is a perspective view of a horseshoe-blank made according to my invention, and Fig. 2 is a cross-section of the same. Fig. 3 is a perspective view of a horseshoe made from my improved blank, showing the shoe as it comes from the dies, and illustrating the advantageous results arising from my said invention.

The blank is of any requisite kind or quality of iron, and drawn to the proper cross-section, herein presently fully described, by any ordinary or suitable rolling-machinery. The iron may be first formed into long rods, having the required diameter and shape in transverse cross-section, the rods being then divided into blanks, either cut off automatically in the horseshoe-machine, to which the rod may be fed, and in which it may be severed, by suitable mechanism, or, in lieu of this, the rod may be cut into lengths, each suitable for the production of a horseshoe, and these lengths, constituting the blanks, may be fed singly into the horseshoe-machine in any usual or suitable way.

The blank in its cross-section, with the exception of the longitudinal corner *a*, is more or less diamond shaped. For example, the two opposite longitudinal corners *b* are acute angles, while of the two remaining corners *c* is an obtuse angle, and *a* would also be obtuse if its two adjoining plane surfaces were carried to the extent of joining with each other, but the said corner, instead of being brought to an angle, is rounded, as fully represented in the drawings, thus, in connection with the more or less diamond shape in cross-section, hereinbefore described, giving a novel and peculiar form and construction to the blank. When the blank as thus made is fed into and subjected to the action of the shaping-dies of a horseshoe-machine the oblique position of the sides of the blank permit it to adjust itself readily to the curvatures in the surfaces of the dies, and thereby especially to give the inward bevel, shown at *a' b'*, in Fig. 3, which bevel is requisite to the most perfect shaping of the shoe. Simultaneous with this, the rounded corner, being situate at what forms the upper inner edge of the shoe, by its form, permits the spreading of the metal of the adjacent sides of the blank sufficient to prevent the formation of any appreciable fin upon the outer upper edge of the shoe, and also sufficient to permit the filling of the dies at the said corner, the metal being brought thereat to a more or less squarely-defined corner, but without the projection of any metal to form a fin. The metal that with an ordinary blank would be squeezed out to form fins upon the shoe as it comes from the dies, being by my invention, brought into the space

provided by the rounded corner *a*, and shaped to form, without projections, the corresponding edge of the horseshoe.

What I claim as my invention is—

The blank for horseshoes, more or less diamond-shaped in its cross-section, and constructed with the rounded longitudinal corner *a*, substantially as and for the purpose herein set forth.

JOHN WIKE.

Attest:
L. G. CLAUD,
LEWIS C. REESE.