

C. H. PERKINS.
FORMING HORSESHOE BLANKS.

No. 75,456.

Patented Mar. 10. 1868.

Fig. 1.

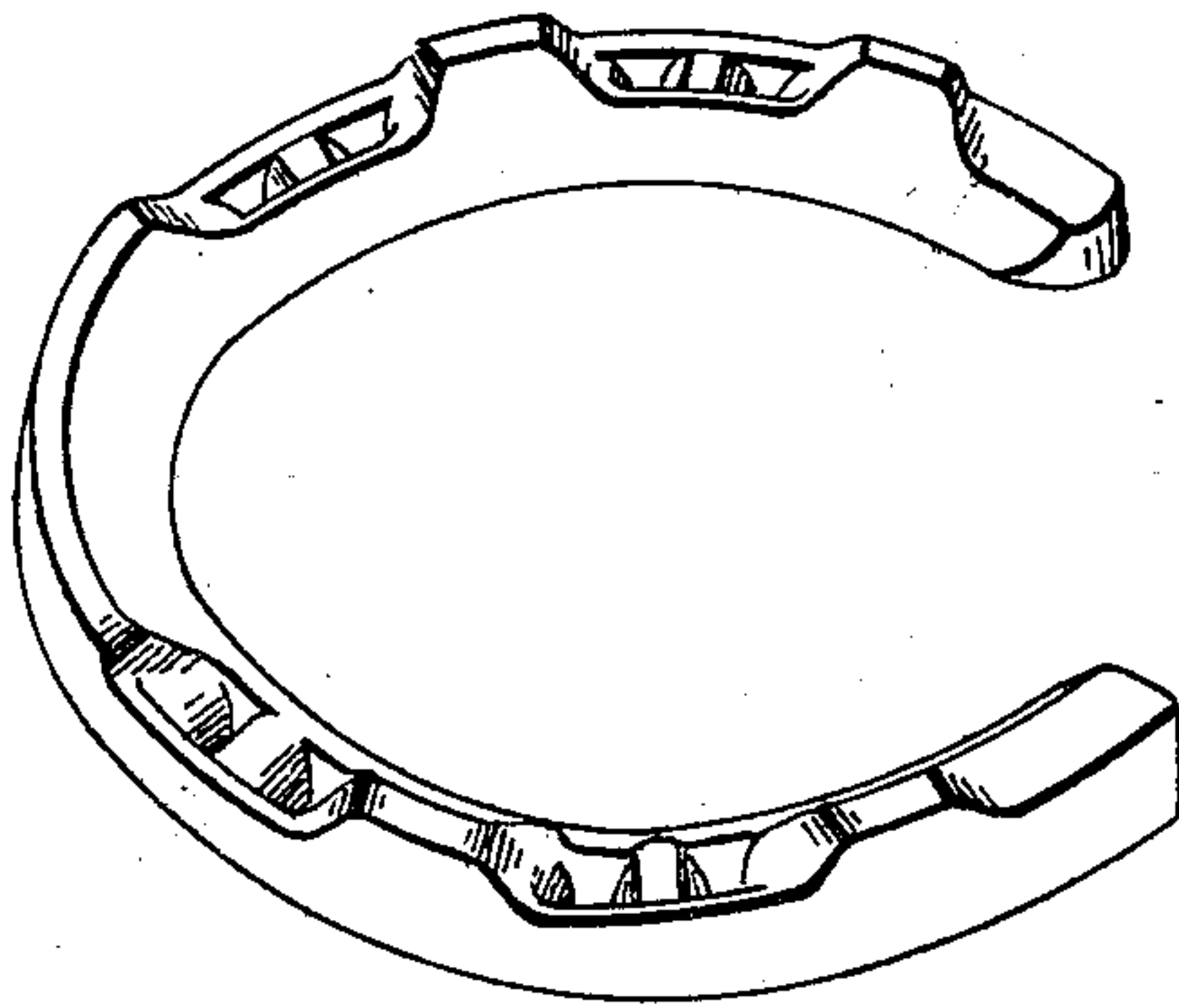
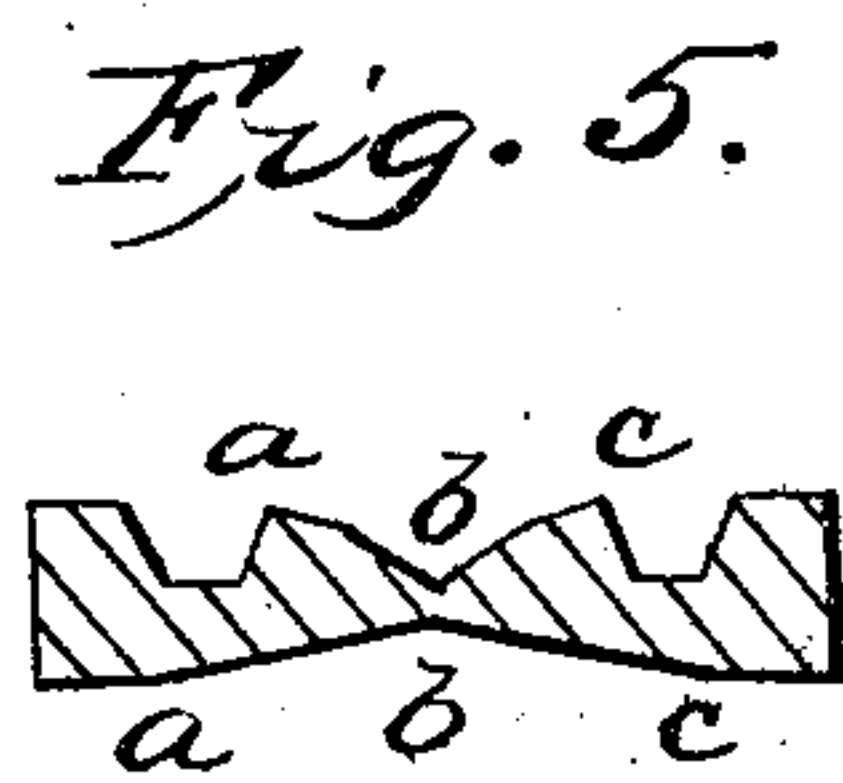
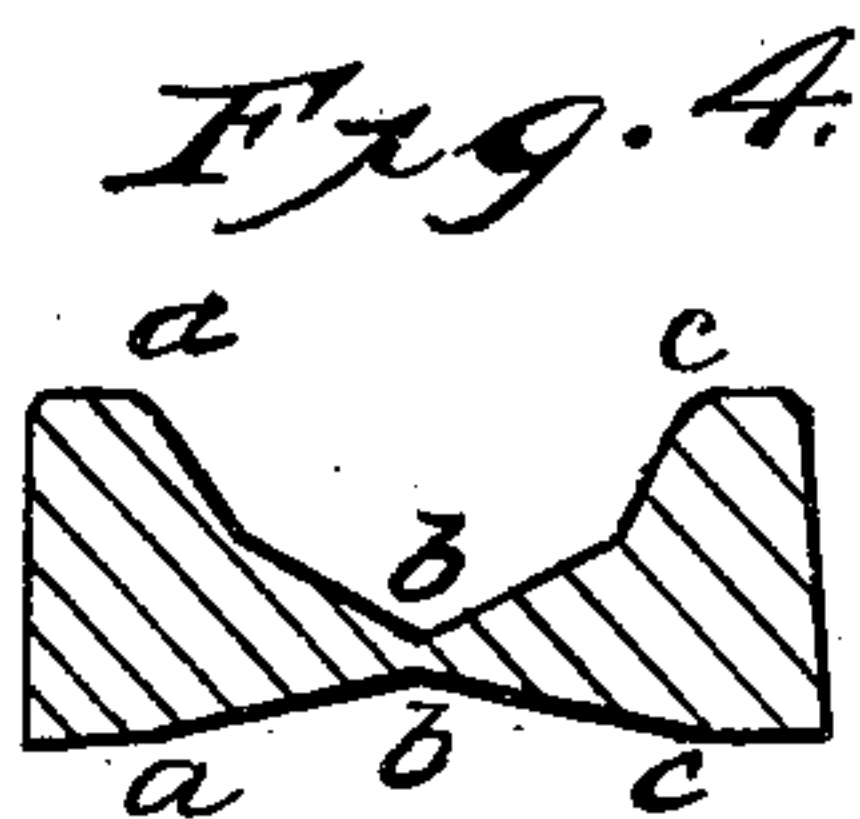
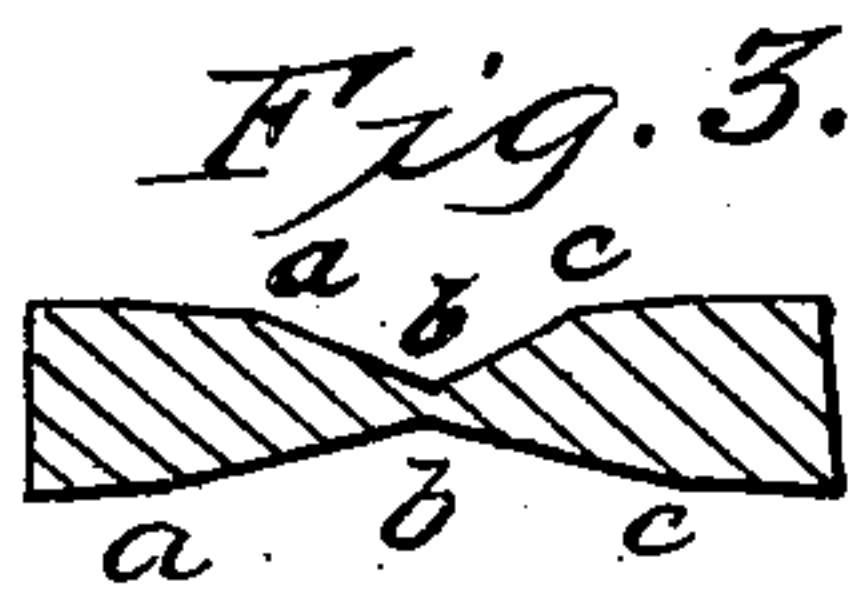
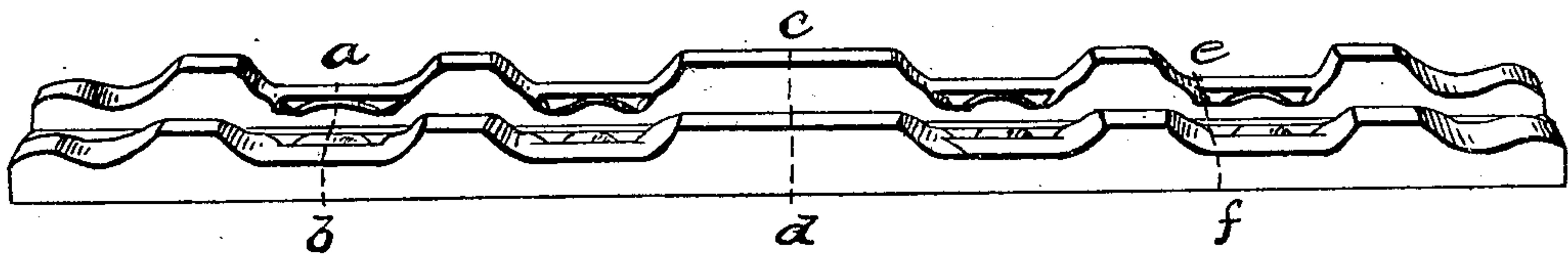


Fig. 2.



Witnesses:

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Inventor

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CHARLES H. PERKINS, OF PROVIDENCE, RHODE ISLAND.

Letters Patent No. 75,456, dated March 10, 1868.

IMPROVEMENT IN FORMING HORSE-SHOE BLANKS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, CHARLES H. PERKINS, of the city and county of Providence, in the State of Rhode Island, have invented a new and useful Improvement in the Manufacture of Blanks for Horse-Shoes; and I do hereby declare that the following specification, taken in connection with the drawings, making a part of the same, is a full, clear, and exact description thereof.

Figure 1 represents a horse-shoe made from a blank, such as my improvement in the method of manufacture produces.

Figure 2 exhibits a double blank as it appears after being rolled, and which, after it has divided longitudinally, will furnish blanks for two shoes like that shown in fig. 1.

Figures 3, 4, and 5, are sections of such double blank on the lines *a b*, *c d*, *e f*, respectively.

My invention is of importance, particularly in the manufacture of shoes for animals, which are made by the process of rolling as distinguished from the process of forging.

In shoes for animals made by both processes, it is important that the inner edge should be much thinner than the outer, as shown in the several views in section; the portion which is made concave or bevelled upon the face of the shoe in contact with the hoof being so made to prevent too great pressure upon the tenderer portions of the animal's foot, and the outer or ground face being made concave, to prevent the shoe from retaining stones and snow-balls.

While it is entirely practicable to give this conformation to a shoe which is forged between dies after it has been bent into form, it is practically impossible to roll a blank for a single shoe into this shape, and as the economy of manufacturing shoes by the rolling is much greater than by the forging process, it is very desirable to devise a means for giving to the rolled blanks the required form in these particulars.

My invention consists in rolling a single bar into the form of a double blank, or one suitable for making two shoes, whereby the tendency which each single blank of the form described, if attempted to be rolled separately, would have to slip away from the acting faces of the rollers forming the bevelled or concaved sides, is counteracted by rolling at one operation a double blank, in which the bevelled or concaved faces pertaining to each of its parts respectively are in opposition.

In the drawings, fig. 2 represents a double blank, which, when divided longitudinally through its centre, will be capable of forming two shoes, each of which will, when bent into form, be like that shown in fig. 1. The peculiar form and arrangement of the calks upon the surface of the shoe represented, constitute no part of the invention. The drawings in that particular are illustrative only of one form of shoe. It will be seen that the faces *a b*, *b c*, *d e*, *e f*, of the respective parts of the double blank shown in section at figs. 3, 4, and 5, are inclined toward each other, or toward what will be, after the blank has been divided and the bending operation has been performed, the inner edge of the shoe.

It is quite obvious to any one familiar with the art of rolling metals that a pair of rollers can be constructed which will, without the least difficulty, make concave along the central axis, upon both surfaces, a bar of metal suitable for a double blank, and also such additional functions for making creases, raising calks, or forming depressions appropriate to the desired form, which in other respects than that to which this invention relates, it is desired to give to the shoe, can also be given to such rollers quite as well for rolling a double as a single blank. After the double blank has been rolled, it is to be divided into two parts longitudinally by any suitable shear or other cutting-apparatus, when each single blank so resulting will be ready to have the bending operation performed upon it.

I claim the improved double blank for horse-shoes herein described, as an article of manufacture.

CHAS. H. PERKINS.

Witnesses:

WM. W. RICKARD,
I. M. COSGROVE.