

(No Model.)

R. DE EICKEN.  
HORSESHOE.

No. 502,354.

Patented Aug. 1, 1893.

FIG-2-

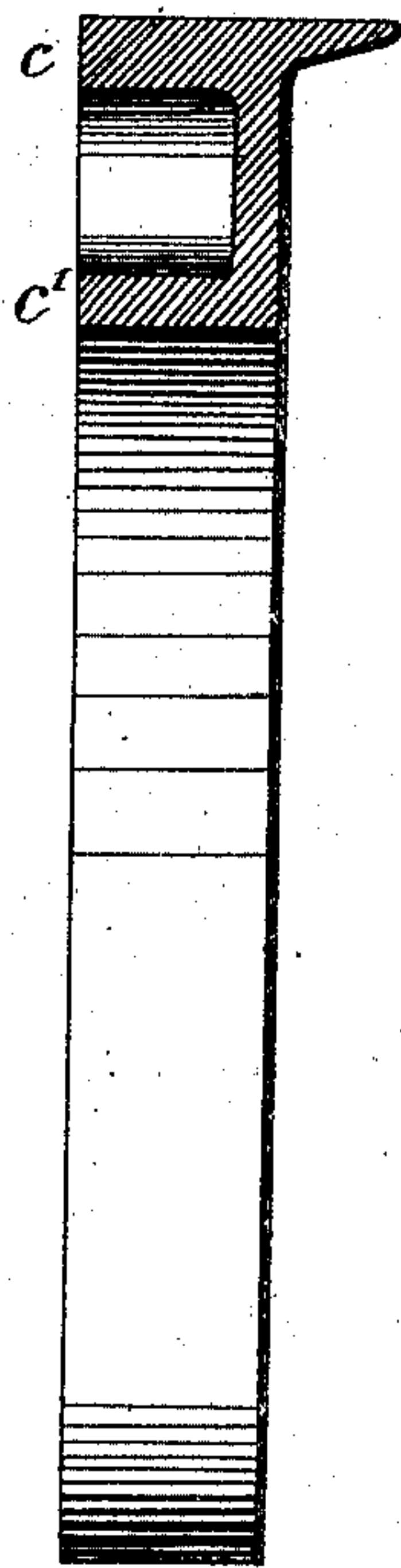


FIG-1-

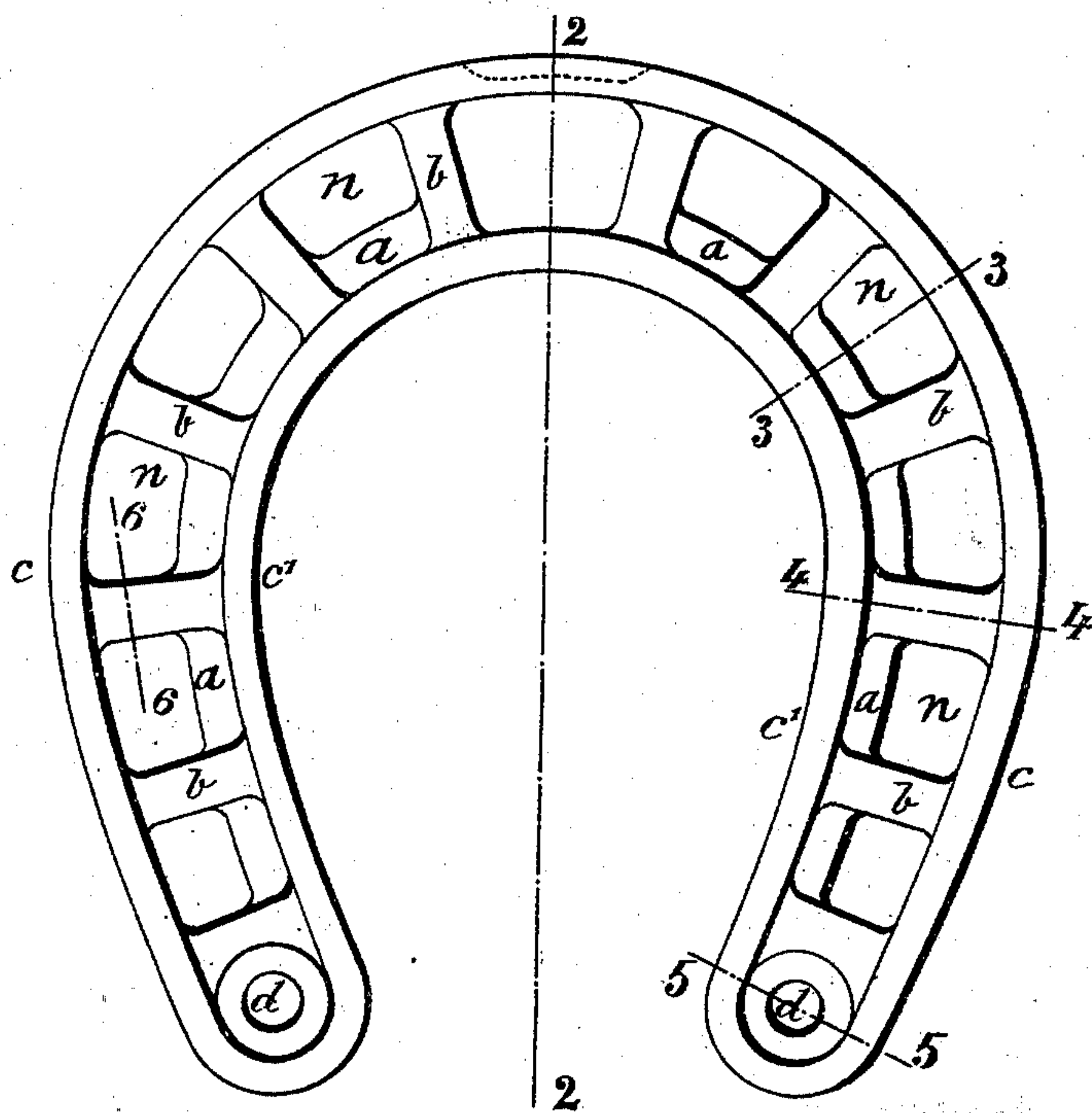


FIG-3-

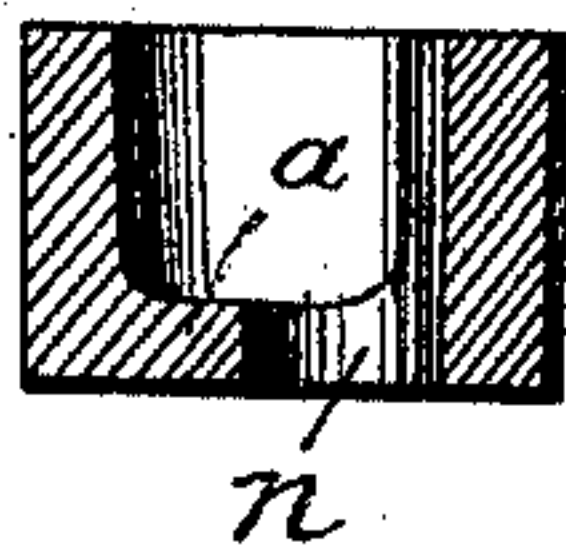


FIG-4-

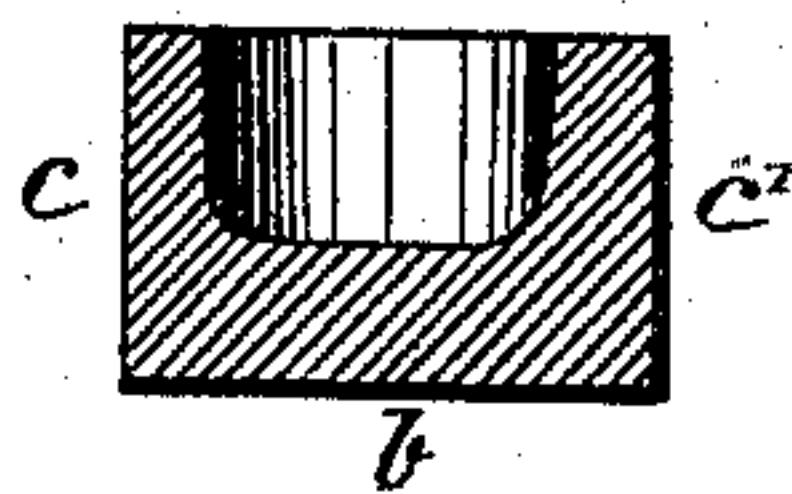


FIG-5-

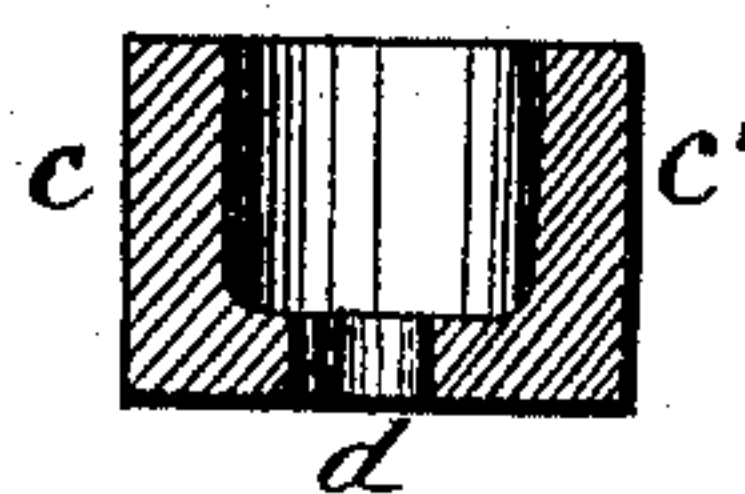


FIG-6-



*Charles Chivry  
forgettaurent*

*Richard de Eicken*



# UNITED STATES PATENT OFFICE.

RICHARD DE EICKEN, OF PARIS, FRANCE.

## HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 502,354, dated August 1, 1893.

Application filed March 28, 1893. Serial No. 467,922. (No model.) Patented in France November 22, 1892, No. 225,854.

*To all whom it may concern:*

Be it known that I, RICHARD DE EICKEN, civil engineer, of No. 117 Boulevard de la Villette, Paris, Republic of France, have invented certain new and useful Improvements in Horseshoes, (for which I have obtained Letters Patent of France for fifteen years, No. 225,854, dated November 22, 1892;) and I do hereby declare that the following is a full and exact description thereof, reference being made to the accompanying drawings.

My new system of horse shoe has for its object to prevent the several defects of the horse-shoes heretofore employed. The metal of the shoe hollowed out in the shape of a U-shaped continuous groove as devised by me, allows of putting in such groove, to prevent the horse from sliding, a material such as hemp, rope, india rubber, and the like, and which being pierced by the nails constitutes that which joins the iron to the horse's foot.

Heretofore it has generally been necessary to drive the nails of horses' shoes about in the same place because of the position of the nail holes and thus they would not get so secure a hold, but with my invention, when one place in the hoof gets weak because of successive driving, another may be selected. In endeavoring to obviate this defect a U-shaped groove has been cut right through the metal of the shoe in order to be able to place the nails anywhere, but this shoe, formed by two bands of steel only joined together by rivets, is completely hollowed out, the two bands of steel being entirely separated from each other, so that they open out under the action of the contact with the ground, their strength of resistance not being sufficient. The rivets too soon become cut, the shoe falling off, the horse's foot remaining provided only with the elastic stuffing, cord or the like.

By my system I obtain a light shoe having quite sufficient resistance and allowing to choose the suitable places for the nails.

Figure 1 of the accompanying drawings is a bottom plan view of a horse-shoe embodying my invention. Figs. 2, 3, 4, 5, and 6 are cross sections respectively on the lines 2—2, 3—3, 4—4, 5—5, and 6—6 of Fig. 1.

The section of the iron is in the shape of a U, but the parts *n* hollowed out (Figs. 1 and 3) give quite sufficient room for choosing the

healthy parts of the horse's foot, for shoeing as usual or for frost, and the partitions *b* (Fig. 4), which connect the two side walls *c* and *c'* of the shoe, at intervals, partially forming the bottom of the continuous U-shaped groove, make the shoe quite strong enough, prevent the side walls from being forced apart, maintain the cord or india rubber in preventing it from falling, a thing which often occurs when the shoe is completely hollowed out in U shape. Other bottom-sections *a* partly close the spaces between the cross-partitions *b* and leave large nail-hole spaces *n* for driving the nails at the particular points and angles desired. The elastic stuffing, made of cord, india-rubber or the like, comes in contact with the horse's foot through the hollow spaces *n*; and the said stuffing being pierced by the nails becomes as it were a part of the shoe on account of the partitions *b*, the shoe, the stuffing, and the nails being firmly held to the horse's foot.

At *d. d.* (Figs. 1 and 5) I show two cylindrically hollowed spaces intended to receive the frost-nails, in allowing the latter to remain rigid. These hollowed spaces may, of course, be of any desired shape to suit the frost-nails or screws, which are to be placed in them.

I reserve to myself the right of making my new horse-shoes either in cast steel or malleable iron, in stamped steel or iron, but the most practical method will be to get them made in lengths by rolling of the exact shape, the said lengths being afterward bent to the required extent or degree.

I claim—

In a horseshoe having in its tread a continuous groove, the combination of the side walls *c* and *c'*, partitions *b* connecting these walls at intervals and forming in part the bottom of the groove, and other bottom sections *a* partly closing the space between the cross partitions and providing nail-holes for the attachment of the shoe, substantially as set forth.

In witness whereof I have hereunto set my hand in presence of two witnesses.

RICHARD DE EICKEN.

Witnesses:

CHARLES THIERNE,  
GEORGE LAURANT.