

(No Model.)

J. N. CLARKE.
Horseshoe Blank Bar.

No. 240,967.

Patented May 3, 1881.

FIG. 1.

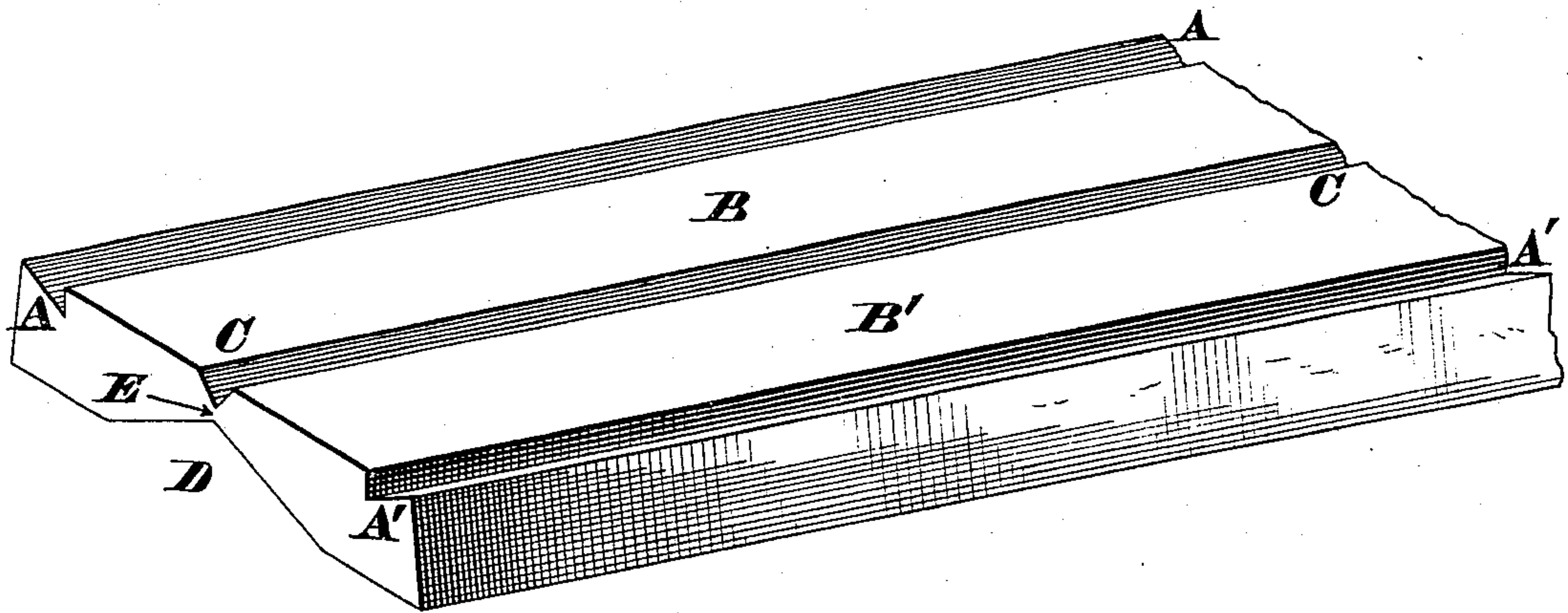


FIG. 2.

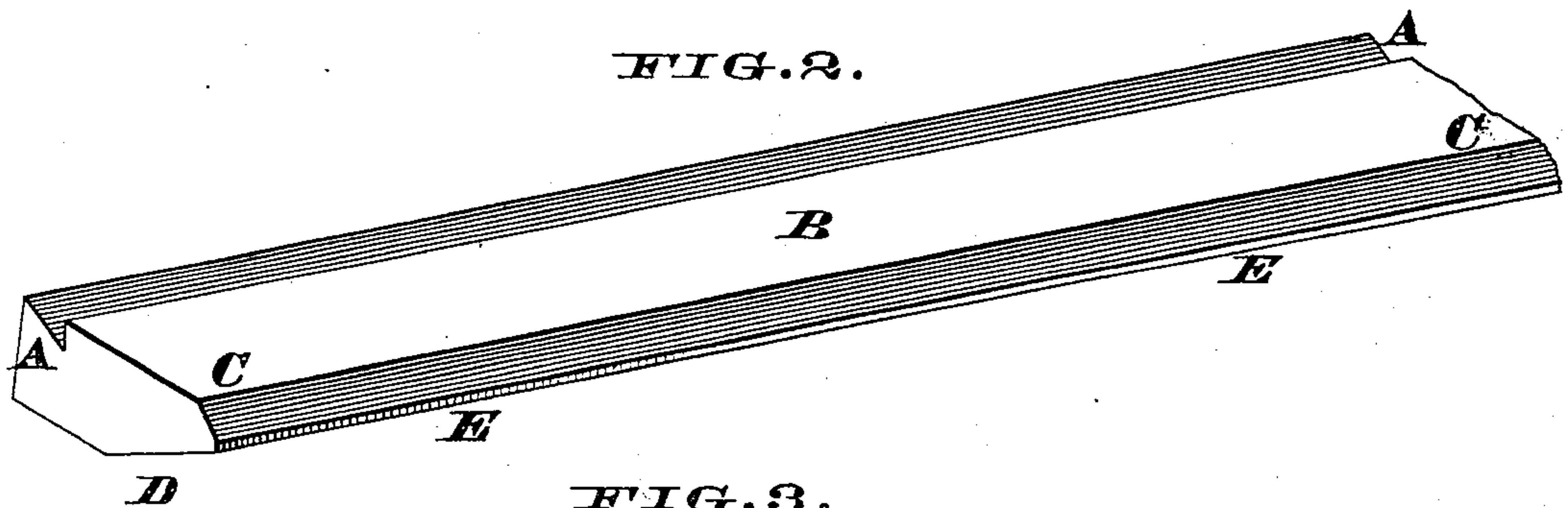
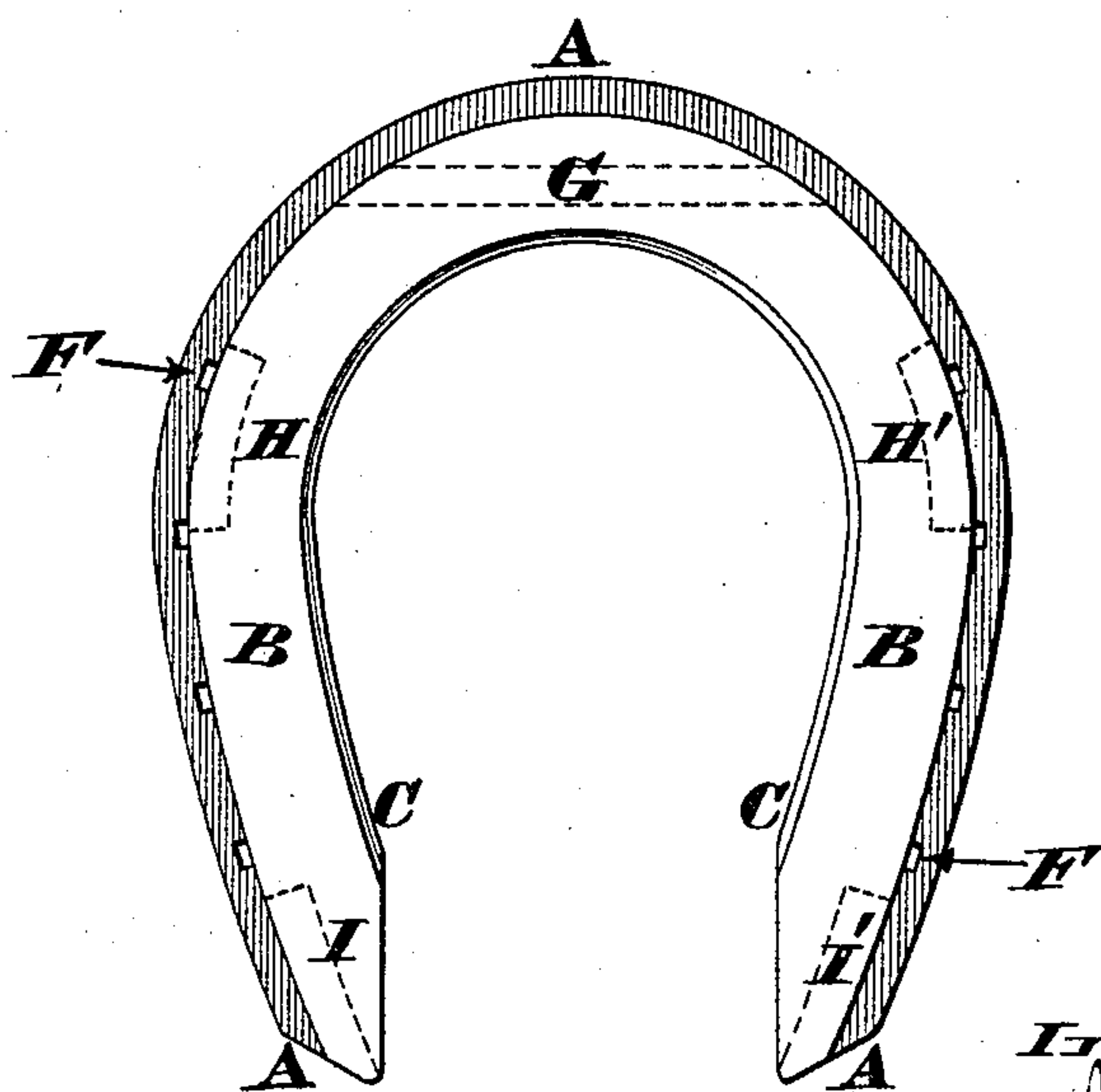


FIG. 3.



Attest.

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UNITED STATES PATENT OFFICE.

JOHN N. CLARKE, OF CINCINNATI, OHIO, ASSIGNOR OF ONE-HALF TO HENRY
McNICOLL, OF SAME PLACE.

HORSESHOE-BLANK BAR.

SPECIFICATION forming part of Letters Patent No. 240,967, dated May 3, 1881.

Application filed March 7, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOHN N. CLARKE, of Cincinnati, Hamilton county, Ohio, have invented certain new and useful Improvements in Horseshoe-Blank Bars, of which the following is a specification.

The object of my invention is to facilitate the manufacture of blanks employed for the production of smooth or uncalked horseshoes, and this result is accomplished in the following manner: A metallic bar of the proper size is first heated and then run through a pair of rolls, the "passes" of which are so arranged as to form a continuous crease along the under side of the blank and near both edges of the same, which creases protect the heads of the nail, when the blank is subsequently bent, punched, and fastened to an animal's foot. From these marginal creases the bar extends perfectly level or flat on the under side until the center of said blank is reached, where a longitudinal groove is formed running the entire length of said bar. The top of the bar is rolled into a deep longitudinal concavity, the bottom of which is in line with the center of the groove just described, a very thin web of metal being left between said concavity and groove, in order that the bar, when cold, may be readily cut or otherwise separated, so as to furnish two precisely similar blanks, the details of construction and advantages of which will be hereinafter more fully described.

In the annexed drawings, Figure 1 is a perspective view of my improved form of double blank. Fig. 2 is a perspective view of one of the blanks after being separated from the double bar. Fig. 3 is a plan of said blank after being properly bent and punched.

Referring to Fig. 1, the metallic bar is to be rolled in such a manner as to have a continuous crease, A, along its under side and near one edge, while the opposite edge of said blank is to have a similar continuous crease, A', which creases may be of any shape best adapted to protect the nail-heads. From the crease A the metal extends inwardly at B in a perfectly flat condition until the central longitudinal groove, C, is reached, which groove is preferably V-shaped, but may be of any other desired form. From this central groove the metal

again extends perfectly flat at B' until the other marginal crease, A', is reached. Consequently the under side of the blank exhibits two parallel and continuous marginal creases, A A', a pair of flat "treads," B B', and a separating-groove, C, said treads being perfectly smooth or uncalked from end to end. The upper surface of the bar, however, is more simply formed, having only one deep V-shaped concave, D, running the entire length of the blank, and having its center exactly in line with the bottom of the groove C, a very thin web of metal, E, being left between these two valleys C and D. After this duplicate bar has been rolled and allowed to cool it is then separated longitudinally and centrally, or, in other words, in line with the parting-groove C, the thin web of metal E allowing this division of the bar to be readily effected by simply striking the blank a quick blow with a hammer. This separation of the bar affords two precisely similar blanks, one of which is seen in Fig. 2, a reference to which illustration will show that the inclined portion D is adapted to constitute the "concave" of the finished shoe, while the chamfered edge C prevents dirt, ice, &c., packing tightly within the shoe and injuring the more tender portions of the horse's foot. The blank, after being bent into any approved form of horseshoe, as seen in Fig. 3, may have the holes F made in any part of the crease A that will insure the nails entering a sound portion of the hoof. Furthermore, the tread B of the blank, being perfectly flat in every direction, allows the bar to be readily bent at its ends, so as to form ordinary heel-calks, and, if desired, additional calks may be conveniently applied to this uncorrugated tread, so as to remedy any special defect in the animal's gait. One special calk may consist of a bar secured transversely of the toe, as indicated by the dotted lines G; or two calks may be applied to the shoe at H H', and another pair, I I', at or near the heel.

I am aware it is not new to roll a double bar in such a manner as to afford, when separated, a pair of corrugated blanks with indentations between the elevations to indicate the location of the nail-holes, as this construction is seen in Perkins' patent, No. 75,456, granted March 10, 1868. Furthermore, I am aware it

is not new to roll a single uncorrugated bar with a continuous crease in a marginal flange or ridge, as such a form of blank is seen in Cate's patent, No. 31,781, granted March 26, 1861. Such being the state of the art, my claim is not to be construed as an attempt to cover every form of duplicate horseshoe-blank bar, but is expressly limited to such a bar when provided with two parallel, marginal, continuous creases, a pair of parallel flat bearing surfaces or treads, a dividing-groove, and a deep concavity separated from said groove by a thin web of metal.

I claim as my invention—

15 A horseshoe-blank bar the under surface of

which is provided with two parallel continuous creases, A A', a pair of flat parallel bearing surfaces or treads, B B', and a dividing-groove, C, the upper surface of the bar having a deep longitudinal concave, D, in line with and separated from said groove C by a thin web of metal, E, as herein described, and for the purpose explained. 20

In testimony of which invention I hereunto set my hand.

JOHN N. CLARKE.

Witnesses:

JAMES H. LAYMAN,
A. C. SHATTUCK.