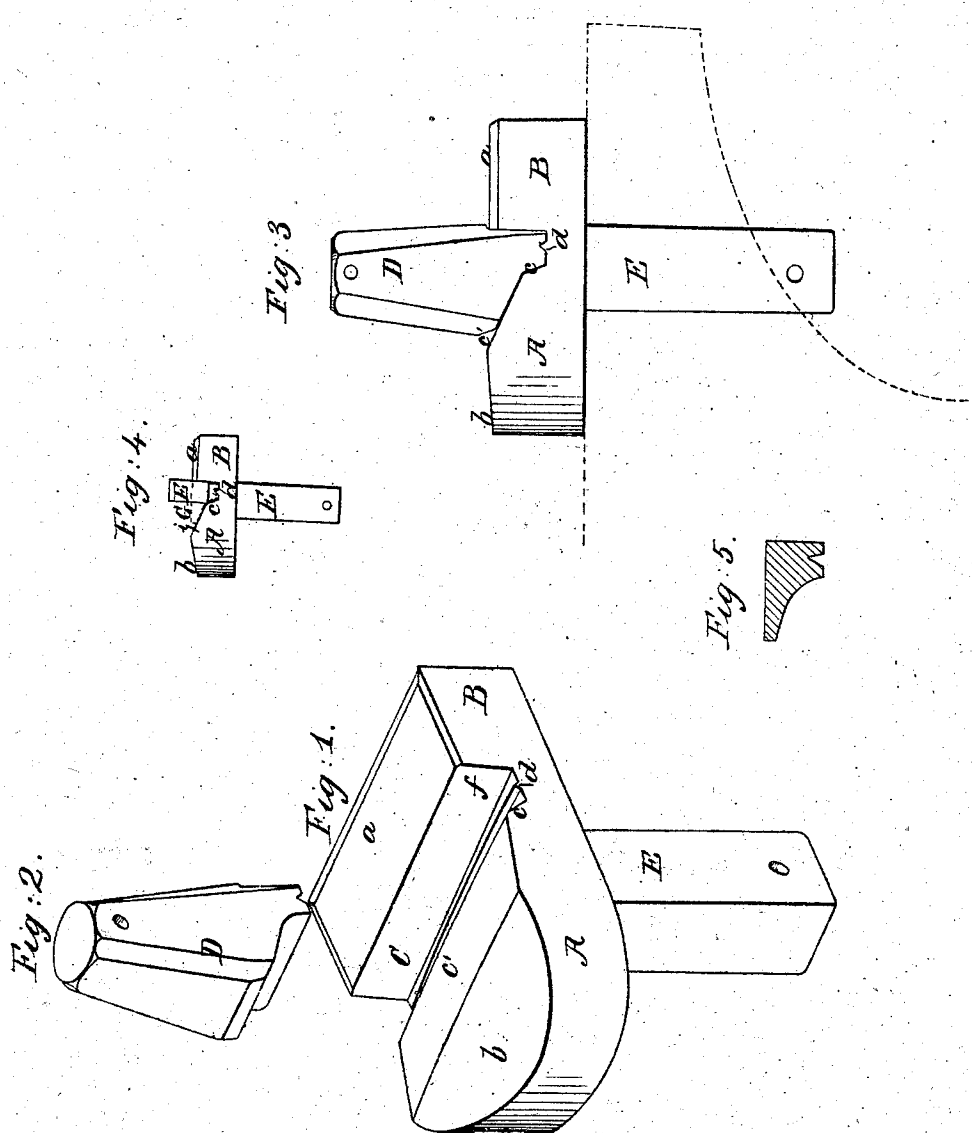
E. Cate,

Making Horseshoe Calks,

No. 31,780. Patented Mar. 26, 1861.



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UNITED STATES PATENT OFFICE.

EBENEZER CATE, OF FRANKLIN, NEW HAMPSHIRE.

DEVICE FOR FORMING HORSESHOES.

Specification of Letters Patent No. 31,780, dated March 26, 1861.

To all whom it may concern:

Be it known that I, EBENEZER CATE, of Franklin, in the county of Merrimack and State of New Hampshire, have invented a certain new and useful Device for Facilitating the Manufacture of My Improved Continuous Calked and Webbed Horseshoe; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1, represents a perspective view of my improved device. Fig. 2, represents the set by which the groove C, projection *d*, and inclined surface *c*, *c'* are formed. Fig. 3, represents a side view of the device with the set D, in position to form the groove C, projection *d*, and inclined surface *c*, *c'*. Fig. 4, represents a side view of the device when being used to fashion the iron preparatory to bending to form the shoe.

The device consists of a shank E, (which is designed to fit into a hole in an anvil, as indicated in red and black lines, Fig. 3) to the top of which is fastened the part A, B, provided with a groove or recess C, in the bottom of which is an angular projection *d*.

The surface *f*, is nearly perpendicular, while the opposite side is inclined as shown at *c*, *c'*. The top surface *a*, is nearly plane, while the surface *b*, is inclined as shown in the drawings.

In Fig. 4 F represents an end view of a bar of common iron previous to its being subjected to the action of my device, while G represents the same iron after it has been forced down into the groove or recess C.

The device is formed of iron, and it is well to be faced with steel in order to preserve the form perfect.

This device enables any ordinary smith to make my improved shoe, and that too, from small pieces of iron, since he can first weld the pieces together and then after heating the same place one edge of the iron in the groove C, and by a hammer force the iron down into the groove until it assumes the form shown in red lines Fig. 4, when he moves the iron along and finishes another part, and so on until the whole is completed. He then cuts off enough to form one shoe, and heats it again, and then bends it so that the part G will be on the inside of the shoe to form a web. The bending of the piece is effected by hammering it around the curved part A, the under surface of the part G being allowed to rest on the inclined surface *b*. It will thus be seen that the form of the top of A, as shown at *b*, is designed to support the part G of the iron while the shoe is being formed.

Holes are to be punched through the iron so that the heads of the nails will rest in the groove formed in the continuous calk by the projection *d*.

As I have described my improved shoe in other applications of even date herewith, I do not deem it necessary to enter into a more detailed description of the same at this time.

The iron after it is formed by aid of this device preparatory to being cut up and bent into shoes, is shown in Fig. 5 on an enlarged scale.

Having described my invention, what I claim and desire to secure by Letters Patent as an improved article of manufacture, is—

The portable device above described—the parts being constructed, arranged and combined in relation to each other as set forth whereby the same tool or device used to form the iron into shape also answers the further and additional purpose of a forming block or pattern to give the desired curvature and shape to the shoe.

In witness whereof I have hereunto subscribed my name.

E. CATE.

In presence of—
DANIEL BARNARD,
AUSTIN F. PIKE.