

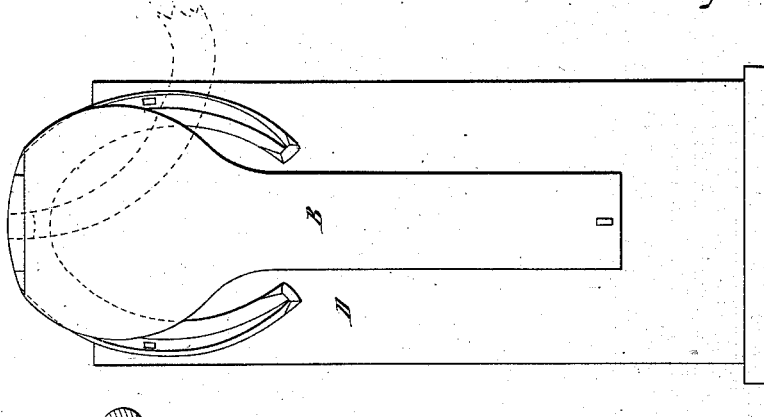
*F. B. Curtis,*

*Making Horseshoe Calks,*

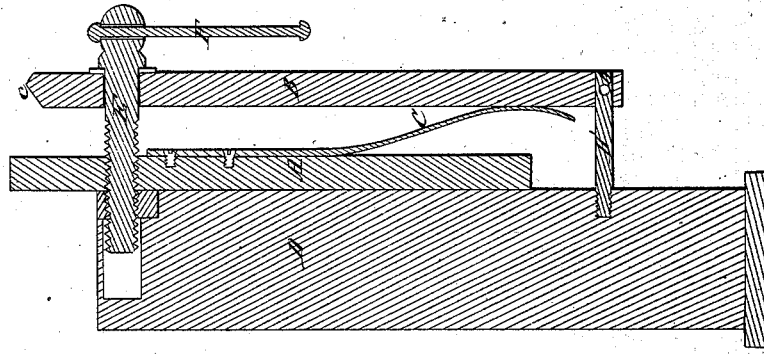
*Patented Aug. 15, 1865.*

*N<sup>o</sup> 49,388.*

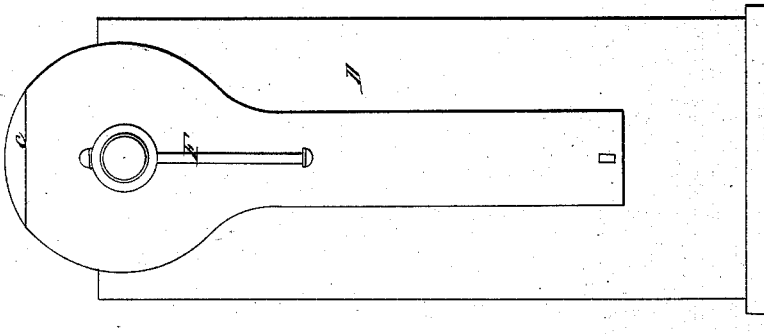
*Fig. 4*



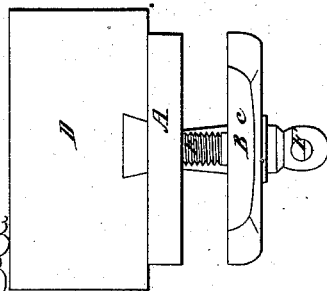
*Fig. 3*



*Fig. 2*



*Fig. 1*



*Witnesses*

*F. P. Hall*  
*W. C. Fisher*

*Inventor*

*F. B. Curtis*

*by his attorney*  
*R. H. Eddy*

# UNITED STATES PATENT OFFICE.

FORD B. CURTIS, OF GARDINER, MAINE.

## HORSESHOE-CALKING VISE.

Specification forming part of Letters Patent No. 49,388, dated August 15, 1865.

*To all whom it may concern:*

Be it known that I, FORD B. CURTIS, of Gardiner, in the county of Kennebec and State of Maine, have invented a new and useful Horseshoe-Calking Vise or Machine; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a front elevation, and Fig. 3 a vertical section, of it. Fig. 4 is a front elevation of it with a horseshoe arranged with it.

In the said drawings, A is a stationary jaw fixed to the side of a post, D, and projecting upward therefrom, as shown in Fig. 3.

B is a movable jaw to operate with the stationary jaw A, there being a spring, C, between the two for moving the movable jaw in a direction away from the other jaw. At its lower end the said movable jaw is hinged to the head or screw D', which screws into the post D—that is, the head of the screw extends into the lower part of the jaw B, and has a pin, b, passed through it and the jaw. By withdrawing the pin from the jaw and the screw and separating them from one another the screw will be left free to be turned around, so as to move its pin-hole either farther from or nearer to the post, the same being to enable the inner face of the movable jaw to be adjusted to the proper distances and inclinations relatively to the fixed jaw for horseshoes of different thicknesses.

A screw, E, provided with a hand-lever, F, goes through the movable jaw and screws into the stationary jaw, or into it and the post, and serves to clamp the jaws on a horseshoe when placed between them, in manner as shown in Fig. 4.

The clamping parts of both jaws should be made so as not only to be capable of firmly grasping a shoe when between them, but of permitting the heels thereof and their calks to project beyond the jaws or out of them, in manner as shown in Fig. 4.

The upper end of the movable jaw is scarfed

down or sloped toward the fixed jaw, or is recessed, so as to correspond in form with the inner surface of the toe-calk, the same being as shown at c. In case the shoe is to be constructed with a toe-projection rising above the calk, the other jaw may be recessed on top to receive and give shape to such projection.

The upper jaw, A, projects above the jaw B and has an arched top, the same being not only to enable a smith to impart to the calk the requisite curve to correspond with that of the toe of the shoe, but to prevent the blows of the hammer on the calk during the process of swaging it from causing the calk to spread out on the upper face of the shoe. Thus the construction of the jaw A saves the necessity of filing down the shoe at the top surface of the toe after formation of the calk.

The object of the recess or slope c is to enable a blacksmith to impart to a calk, while projecting from a shoe, its proper wedge shape, or, in other words, to sharpen it when dull. To accomplish this he places the shoe between the jaws so that the calk may rest on the inclined surface c. Next, with a hammer he beats down the calk to a sharp edge, such calk, while being so sharpened, being in a heated state.

A heel-calk of a shoe may be similarly treated, arranging the shoe in the machine in the manner as represented in part by dotted lines in Fig. 4.

I do not claim a horseshoe-calking vise made as represented in Letters Patent No. 34,786, as my vise is not formed for the reception and holding of any movable dies.

What I claim as my invention is—

The horseshoe-calking vise constructed with the calk-forming recess or slope c in one of its jaws, and having its other jaw extending above such recess and arched, substantially as and for the purpose specified.

F. B. CURTIS.

Witnesses.

H. E. FISHER,  
F. P. HALE, Jr.