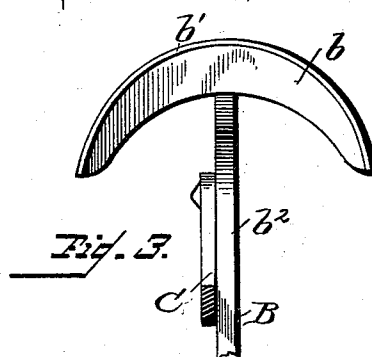
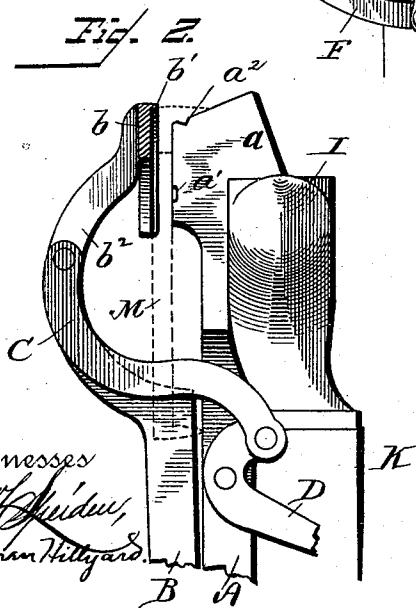
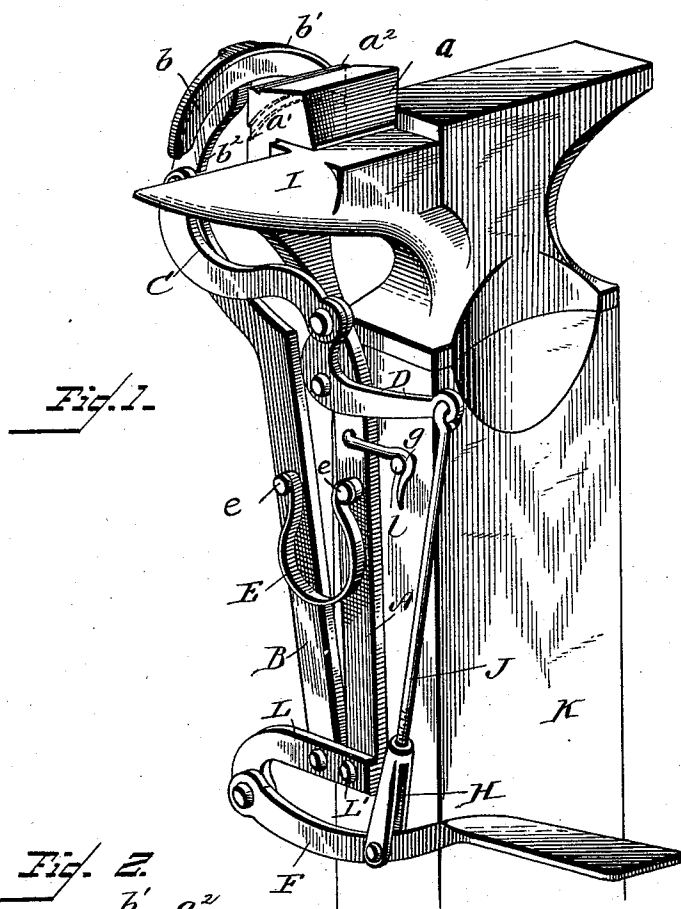


(No Model.)

A. J. NEAL.
HORSESHOE CALK SHARPENING DEVICE.

No. 485,585.

Patented Nov. 1, 1892.



Witnesses
 Wm. H. Giddens,
 Van Buren Willard.

Andrew J. Neal, Inventor.

By his

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UNITED STATES PATENT OFFICE.

ANDREW JACKSON NEAL, OF MILES, IOWA, ASSIGNOR OF ONE-HALF TO
LEMUEL H. SWANEY AND CHARLES M. NEAL, OF SAME PLACE.

HORSESHOE-CALK-SHARPENING DEVICE.

SPECIFICATION forming part of Letters Patent No. 485,585, dated November 1, 1892.

Application filed February 12, 1892. Serial No. 421,317. (No model.)

To all whom it may concern:

Be it known that I, ANDREW JACKSON NEAL, a citizen of the United States, residing at Miles, in the county of Jackson and State of Iowa, have invented certain new and useful Improvements in Horseshoe-Calk-Sharp-
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ening Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to horseshoe-calking or calk-sharpening machines, and aims to provide a machine which will obviate the spreading of the shoe when sharpening the toe-calk and which will admit of the convenient manipulation of the shoe between the jaws by the tongs, and in such other advantages resultant from the improved construction of the co-operative parts.

The improvement consists of the novel features and the peculiar construction and combination of the parts, which will be hereinafter more fully described and claimed, and which are shown in the annexed drawings, in which—

Figure 1 is a perspective view of the invention, showing it applied to an anvil. Fig. 2 is a side view of the jaws, the lower portion of the machine being removed, showing the relative position of the shoe by dotted lines. Fig. 3 is a face view of the movable jaw, showing the projecting edge which overlaps the shoe and prevents the latter from spreading.

The machine is composed, essentially, of two legs A and B, which are equipped at their upper ends, respectively, with the jaws *a* and *b*. The jaw *b* forms a T-head on the upper end of the leg B and curves in the direction of its length to conform to the closed end of a horseshoe of ordinary construction. The projecting edge *b'*, extended from the face of the jaw *b*, follows and is contiguous to the upper edge and ends of the said jaw *b* and is adapted to overlap the shoe and prevent the same from spreading. The leg B curves out rapidly just below the jaw *b*, as at *b²*, to give clearance between the legs when the jaws are closed to admit of convenient handling of the heated shoe with the smith's tongs. The jaw

a is constructed to overlap and rest upon the square portion of the horn of anvil I, and its inner face, which is projected from the plane of the inner edge of the leg A, is provided with a curved groove *a'* to assist in retaining the shoe in place when clamped between the jaws. The upper end of jaw *a* is beveled upward from the clamping-face to give the proper bevel to the calks and is lower than the upper end of the jaw *b*, the distance being about equal to the thickness of the calk. The groove *a²* in the upper end of jaw *a*, parallel with and contiguous to the clamping-face thereof, supplements the action of the curved groove *a'* and co-operates therewith to retain the shoe in place between the closed jaws when sharpening the calk. The lower ends of the legs A and B are connected with the bar L, which curves downwardly at its outer end, and to which the treadle F is pivotally connected at one end, the opposite end being expanded for the foot to obtain a purchase upon when operating the machine. The elbow-lever D, pivotally connected with the leg A, is connected at its upper end with the leg B by the approximately-ogee-shaped link C, and its horizontal member is connected with the treadle F by the coupler H J, the part H being a link having its upper end threaded and the part J being a rod, the lower end of which is threaded and screwed into the threaded end of the link H, thereby adjusting the height of the treadle to the convenience of the operator. The jaws are normally held apart by the U-shaped spring E, which is fastened at its ends to pins *e*, projected from the said legs A and B.

The machine is secured to the anvil-support K in any approved manner, preferably by screw L', on which the machine is adapted to tilt and be thrown down out of the way and the hook *g* secured to leg A and adapted to be engaged with pin *l* on the post or support K.

The shoe M is clamped between the jaws in the usual manner by depressing-treadle F and the calk is sharpened by the well-known process.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The hereinbefore - specified horseshoe-calk-sharpening machine, composed of the legs A and B, having jaws *a* and *b* at their upper ends, the jaw *b* extending laterally on each side of leg B and curving in its length and having a projecting edge *b'*, the jaw *a* having grooves *a'* and *a''*, the ogee-shaped link C, connected with the leg B, the bar L, the treadle F, connected with bar L, the elbow-lever D, pivotally connected with the leg A, and having link C, connected therewith, and an adjustable coupler connecting lever D with the treadle F, substantially as shown and described.
2. A horseshoe-calk-sharpening machine comprising the legs A and B, having the jaws *a* and *b*, respectively, the jaw *b* curving and having the projecting edge *b'*, and the jaw *a* having its upper face beveled and provided with the groove *a''* and with the curved groove *a'* in the face opposite the jaw *b*, and means for operating the said legs, substantially as described.
- In testimony whereof I affix my signature in presence of two witnesses.
- ANDREW JACKSON NEAL.
- Witnesses:
FRANK L. TUSSE,
EDWARD CATON.