SAYLOR & RHODES.

Anvil for Forming Horseshoe Calks.

No. 84,583. Patented Dec. 1, 1868.

Fig. 1.

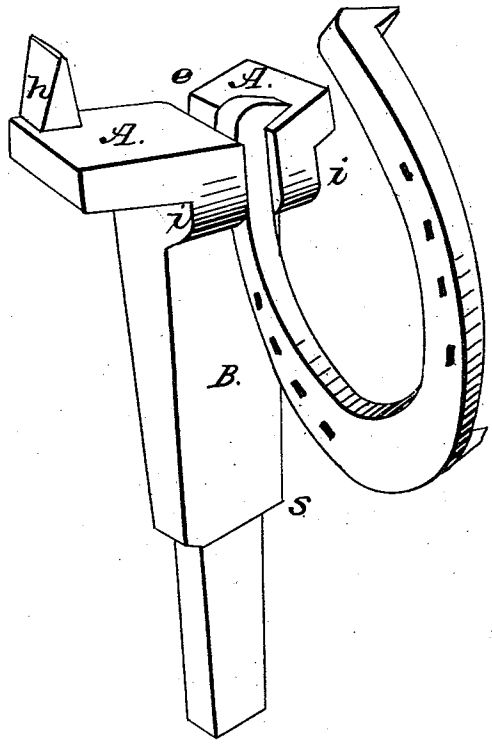
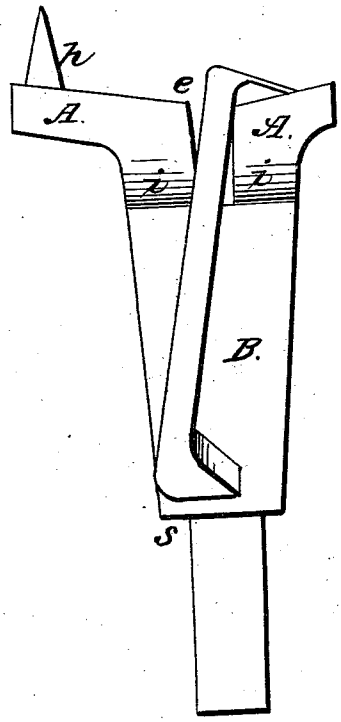


Fig. 2.



Witnesses

Hiram A. Peterman

George Johnson

Inventors.

Robert Saylor

Ch. J. Rhodes

UNITED STATES PATENT OFFICE.

ROBERT SAYLOR AND ELI T. RHODES, OF MARSHALL, MICHIGAN.

IMPROVED ANVIL FOR FORMING HORSESHOE-CALKS.

Specification forming part of Letters Patent No. 84,583, *dated December* 1, 1868.

To all whom it may concern:

Be it known that we, ROBERT SAYLOR and ELI T. RHODES, both of the city of Marshall, in the county of Calhoun and State of Michigan, have invented a new and useful Improvement in Supplementary Anvils for Forming and Sharpening Horseshoe-Calks; and we do hereby declare that the following is a full, clear, and exact description of the construction and mode of operating on the same, reference being had to the annexed drawings, forming a part of this specification, in which—

Figure 1 is a perspective view. Fig. 2 is a side elevation.

Similar letters of reference indicate like parts in the two figures.

This invention relates to an improved arrangement in a supplementary anvil, to be placed, when required, in the socket of a common anvil, for forming or sharpening the heel and toe calks of horseshoes, in a convenient and uniform manner, as will be hereinafter fully shown and described.

To enable others skilled in the art to fully understand and construct our invention, we will now, by the aid of the drawings and letters of reference thereto, proceed to describe it.

Our calk-forming anvil consists of a steel-faced plate, A, having a standard, B, the lower extremity of which is reduced and formed into a shouldered stem, which will fit into the ordinary socket provided in all blacksmith-anvils; said shoulder, as shown at *s*, resting on the face of the common anvil, and elevating the plate A above it a distance equal to the full length of the largest-sized horseshoe.

The anvil-plate A should project on one side of its standard for the insertion of a "hardy," *h*, to cut off the calks to a proper length, and on the contiguous side it must project an inch or so to admit of the insertion of the heel-plates within a deepish vertical groove, *e*, which is sunk across the plate, and divides it into two distinct plates, connected by the standard, below the groove aforesaid, although, for convenience in description, we treat them as one continuous plate.

The steel-faced surfaces of these two sections of the plate A are not a level plane, but form two inclined planes descending toward the groove *e*, of such angle as will give the proper taper to the inner sides of the calks when the horseshoe is placed within said groove, as will be hereinafter more fully explained.

The heel-calks are turned, and the toe-calks welded on, as usual. When the operator shapes and draws out the toe-calk with his hammer he places the heated shoe astride of the plate, and within the entire groove, as seen in Fig. 2; and to form the heel-calks he holds the shoe within that portion of the plate and groove projecting beyond the standard, as in Fig. 1; and when one is finished he reverses the position of the shoe in the groove and draws out the other calk. Should the plate itself not be sufficiently thick to maintain the shoe steady in shaping the heel-calks, as aforesaid, re-enforces may be forged on the standard at *i* to deepen the side walls of the groove at the overhang, where it cuts through slotwise. As horseshoes are usually thinner at the toe than at the heel, we find it best to contract the groove in width on the side of the plate opposite the projecting or heel-calk side, in order to accommodate this inequality of thickness in the shoe; but said groove should be wide enough anywhere to receive freely the largest shoe, they being kept steady by twisting or canting, as far as the freedom of space will permit, toward the side where the calk is being forged on the plate A.

All smiths who make horseshoes have experienced the difficulty of keeping a calk under the hammer on a common anvil, when slippery by the use of borax in welding the toe-calks; but all the calks in a shoe may, by the use of our supplementary anvil, be forged with great ease, rapidity, and uniformity of set and taper.

We are aware that a grooved block has been used before on an anvil for shaping the toe-calks, but are not aware of the previous use of an elevated, grooved, and inclined plate, as ours, on which the heel-calks could also be forged. Therefore,

What we claim as our invention, and desire to secure by Letters Patent, is this:

The double-inclined anvil-plate A, having a transverse groove and slot, *e*, in combination with the standard B, substantially as and for the purpose set forth.

ROBERT SAYLOR.
ELI T. RHODES.

Witnesses:
HIRAM A. PETERMAN,
GEORGE JOHNSON.