

(No Model.)

J. DEEBLE.

DIE FOR FORMING OX SHOES.

No. 359,961.

Patented Mar. 22, 1887.

Fig. 1.

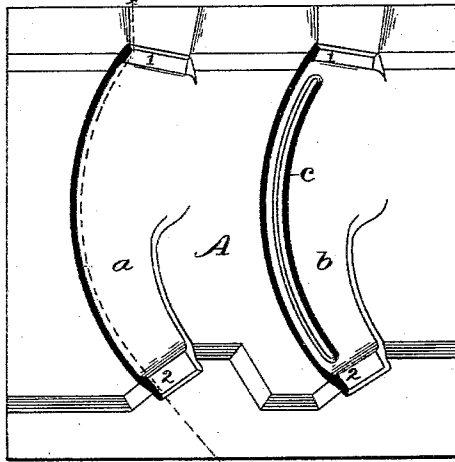


Fig. 2.

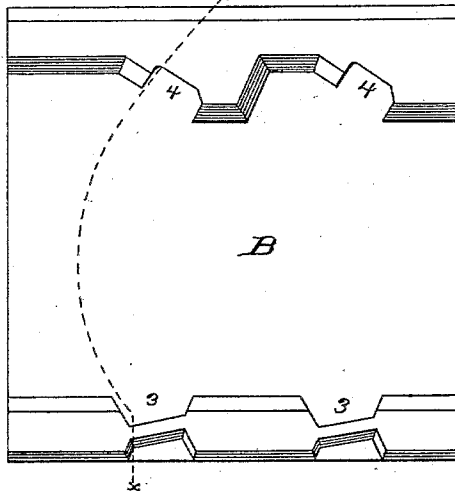


Fig. 3.

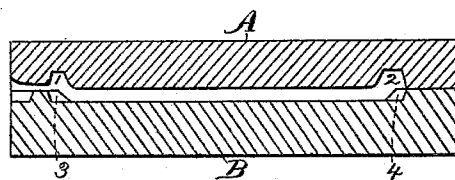
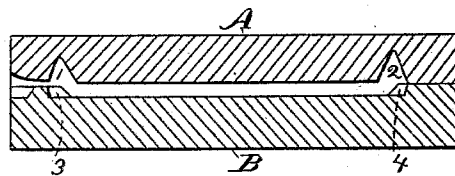


Fig. 4.



Witnesses:
John Edwards Jr.
W. H. Whiting.

Inventor.
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By James Shepard. Atty.

UNITED STATES PATENT OFFICE.

JOHN DEEBLE, OF SOUTHTON, CONNECTICUT, ASSIGNOR OF ONE-HALF
TO J. B. SAVAGE, OF SAME PLACE.

DIE FOR FORMING OX-SHOES.

SPECIFICATION forming part of Letters Patent No. 359,961, dated March 22, 1887.

Application filed January 26, 1887. Serial No. 325,609. (No model.)

To all whom it may concern:

Be it known that I, JOHN DEEBLE, a citizen of the United States, residing at South-
ington, in the county of Hartford and State of
5 Connecticut, have invented certain new and
useful Improvements in Dies for Forging Ox-
Shoes, of which the following is a specifica-
tion.

My invention relates to improvements in
10 dies for forging ox-shoes; and the objects of
my invention are to more perfectly fill the dies
at the calk-recesses and to generally improve
the efficiency of the dies.

In the accompanying drawings, Figure 1 is
15 a face view of the die which I prefer to use at
the top. Fig. 2 is a like view of the com-
panion or bottom die. Fig. 3 is a vertical
section on line *x x* of Figs. 1 and 2 of both of
said dies, and Fig. 4 is a like view of the same
20 with calk-recesses adapted for forming sharp
calks.

A designates the die-block which I prefer
to use as the upper die-block, and B the lower
die-block. In the block A, I prefer to form
25 two die-depressions, the depression *a* being of
the general form of a finished shoe, less the
nail-groove, and the depression *b* is the finish-
ing-die, having a rib, *c*, for forming the nail-
groove, as in former dies. Instead, however,
30 of making these depressions of the full depth
throughout, I only make the middle portion,
or the portion which lies between the calk-
recesses 1 2, of the depth for forming the whole
thickness of the shoe, less the fin, while the
35 face of the die is cut away at each end to make
the calk-recesses 1 2 only about one-half the
usual depth.

In the die-block B, I form partial calk-re-
cesses 3 4 for each of the depressions *a b*, and
40 in such position as to register therewith when
the dies are brought together. These, like
the calk-recesses 1 2, are only about half the
usual depth, and the die-block is made thicker
near each edge than at the middle portion to
45 enable the bottom of these recesses to be in
the same plane as the surface of the middle
of the die. In both blocks the junction of
the thicker and thinner portions is beveled

off to avoid an abrupt shoulder. Thus it will
be seen that although the middle portions of 50
the die-depressions are in only one block,
the calk-forming recesses are formed partly
in the upper and partly in the lower die-
block.

In use a heated bar of iron, either straight 55
or bent edgewise, as may be desired, is placed
upon the lower die-block, B, in position to
come under the preliminary impression *a* of
the upper block, the calk-recesses 3 4 ena-
60 bling the operator to properly locate the bar on
the block. The bar is then struck by the up-
per die-block, and then changed in position on
the lower block, to bring it under the depres-
sion *b* for the finishing stroke.

The fin or surplus metal is trimmed off by 65
cutting-dies in the ordinary manner.

By placing the die having the main de-
pressions at the top better work is believed
to be performed, on account of the tendency
of hot iron to come toward the hammer that 70
strikes it, and, furthermore, the depressions
are better kept free from scales or other mat-
ter, which often lodge in such dies when used
at the bottom and cause imperfect work.
Such dies cannot readily be used on the top 75
in connection with the ordinary plain-faced
block or hammer; but with my block B the
calk-recesses 3 4 furnish the operator a ready
means for placing the bar in proper position.
By making the bottom of the calk-recesses 80
in the block B in the same plane as the mid-
dle face of said block they are readily kept
free from scales or other refuse by an ordi-
nary air-blast.

The dies shown in Fig. 4 are the same as 85
the others, except in the shape of the calk-
recesses 1 2, which are adapted for forming
sharp calks. Such calks have not to my
knowledge been heretofore forged in drop-
dies. By forming the calk-recesses in the 90
two die-blocks I can readily form such calks.

While I prefer to employ two depressions
to be used one after the other, as described,
and divide the calk-recesses for both die-de-
pressions, it is evident that my invention is 95
applicable to die-blocks which have either

the preliminary or finishing die-depressions, and that very good results may be had by thus dividing the calk-recess for the preliminary die only.

5 I claim as my invention—

The herein-described dies for forging ox-shoes, consisting of two die-blocks having a

die-depression, with the calk-recesses formed partly in each of said blocks, substantially as described, and for the purpose specified.

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Witnesses:

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