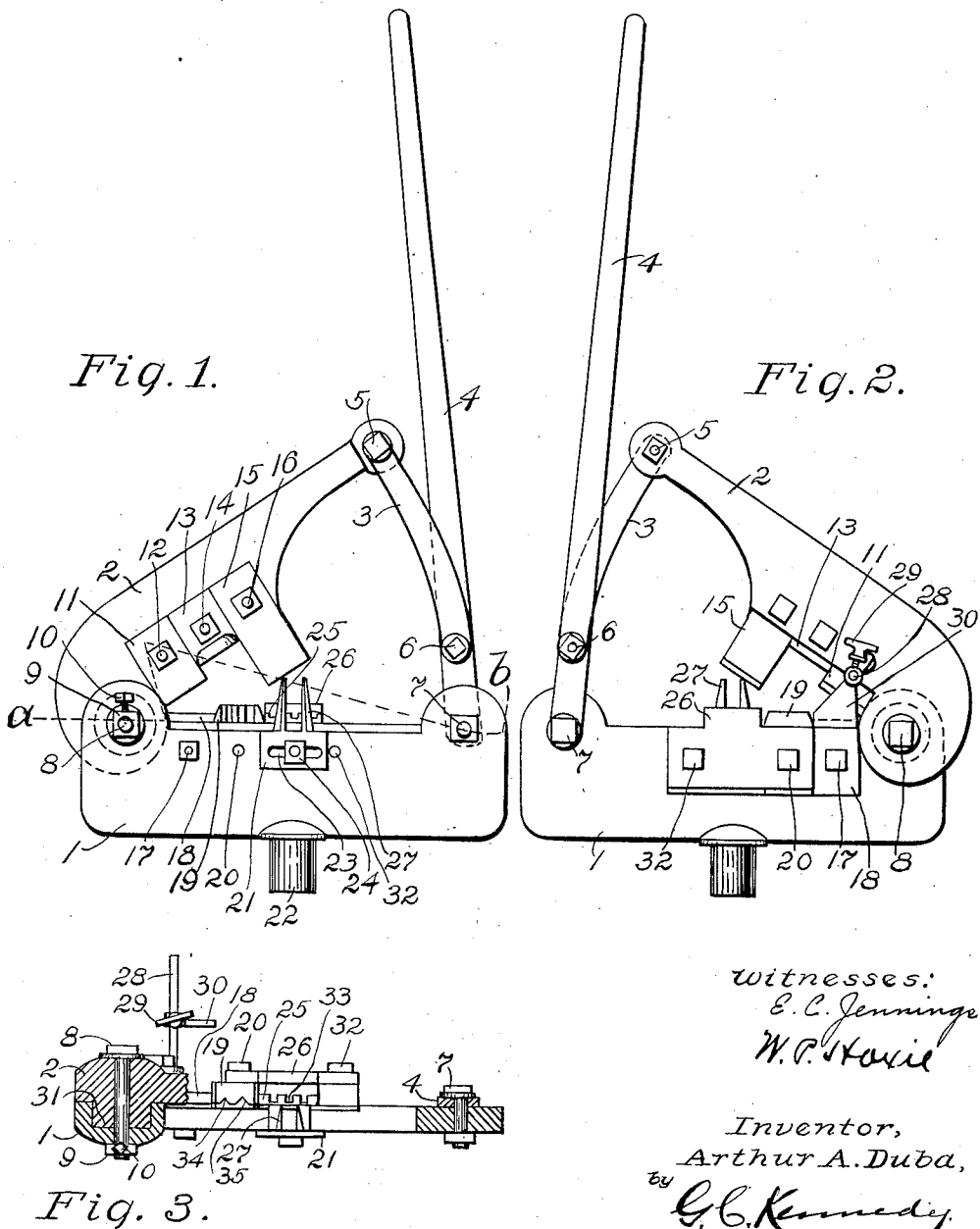


A. A. DUBA.
 APPARATUS FOR MAKING TOE CALKS.
 APPLICATION FILED JULY 25, 1911.

1,047,008.

Patented Dec. 10, 1912.



Witnesses:
 E. C. Jennings
 W. P. Storie

Inventor,
 Arthur A. Duba,
 by G. B. Kennedy,
 Attorney.

UNITED STATES PATENT OFFICE.

ARTHUR A. DUBA, OF WATERLOO, IOWA.

APPARATUS FOR MAKING TOE-CALKS.

1,047,008.

Specification of Letters Patent.

Patented Dec. 10, 1912.

Application filed July 25, 1911. Serial No. 640,383.

To all whom it may concern:

Be it known that I, ARTHUR A. DUBA, a citizen of the United States of America, and a resident of Waterloo, Blackhawk county, Iowa, have invented certain new and useful Improvements in Apparatus for Making Toe-Calks, of which the following is a specification.

This invention has for its object a simple, durable and efficient construction of apparatus for use in making toe calks for horse-shoes, the apparatus being also designed as a handy tool for blacksmiths as a shearing device, and having its working parts also designed to permit adjustment as desired.

The invention consists in certain constructions and arrangements of the parts that I shall hereinafter fully describe and claim.

For a full understanding of the invention, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a front elevation of my improved apparatus. Fig. 2 is a rear elevation of said apparatus. Fig. 3 is a longitudinal section of said apparatus taken on the line *a-b* in Fig. 1, looking downward.

Similar numerals of reference designate corresponding parts throughout the several views.

The base or supporting body 1 of my device has a medially located depending stud 22 adapted to be received in a socket in some supporting structure. At the opposite ends of said body 1 are horizontal bearing orifices for pintle-bolts 7 and 8, the bolt 8 being secured by a nut 9 having a set-screw 10 passed therethrough to engage the bolt, while the other bolt 7 is merely secured by a nut.

The numeral 2 designates a lever-arm, which has at one end a lateral cylindrical projection or boss 31 adapted to be seated in a corresponding socket in the body 1 to rock in said socket or bearing upon the pintle-bolt 8, the said boss thus preventing any buckling of said lever-arm away from said body 1 when under stress.

A relatively long hand lever 4 has its lower end pivoted on the pintle-bolt 7, and a link 3 is pivotally connected between the said lever and the outer end of the arm 2 by pivot-bolts 6 and 5 respectively.

Along the rear face of the body 1 are aligned several other bodies 18, 19 and 25, which respectively lie below other aligned

bodies 11, 13 and 15 secured to the front face of the arm 2, and therefore located suitably to be engaged with each other when the said arm 2 is moved down to the limit by means of the moving outwardly of the hand-lever 4. The oppositely located bodies 11 and 18 on the left are shear-members adapted to cooperate to sever bars placed between them. The bodies 11, 13 and 15 are secured to the arm 2 by means of bolts 12, 14 and 16 respectively, and the bolt 12 also acts to secure to the rear face of said arm 2 the foot of a rod 28 on which a stop-plate 30 is slidable and made adjustable by means of a set-screw 29. A bar placed between the shear-members 11 and 18 is pushed backward to contact with the depending stop-plate 30, which determines the length of the portion to be removed.

Next to the right-hand of the shear members 11 and 18, are the cooperating bodies 13 and 19, of which 19 is a die and 13 is a pressure member. The die is provided with a plurality of forwardly opening notches 34 and 35. When the end of a bar which has been softened by the application of heat thereto is placed on top of the member 19 above the proper die notch 34 or 35 and the forming or pressure member 13 forced down upon it, the soft metal is pressed into the selected notch to form a projection of that shape. Finally, to the right of the bodies 13 and 19 are located the cooperating bodies 15 and 25, of which the part 25 is a die while the part 15 is a pressure-member. The upper edge of the member 25 and the lower edge of the member 15 are oppositely beveled to correspondingly form the end of the bar which has undergone the previously described process, and when the member 15 is brought down forcibly upon such bar, the latter having been previously introduced between the upright fingers 27 of the adjustable plate 21, the bar-end is pressed down and the detent previously formed thereon is forced into one of the square rearwardly opening notches in the die 25. The die 25 contains a plurality of the notches 33, and the plate 21 which is longitudinally slotted at 23, is made longitudinally adjustable on the body 1 by the set-screw 24 passed through said slot, to permit adjustment of the plate, so that the uprights 27 may be properly located relative to one of the notches 33. To the rear of the die 25 and spaced apart therefrom is a back- or stop-

plate 26, which is secured to said body 1 by means of bolts or screws 20 and 32. The operation with the die 25 to form an offset or angular calk projection on the bar being completed, the end of the bar is finally introduced between the shear-members 11 and 18, and back against the adjustable stop-plate 30, and the hand-lever 4 again moved to cut off the bar to separate the formed calk. The shears may be used as a convenient tool in a shop for other work, when desired. The said processes are, by reason of their succession, very quickly performed, and any adjustments required, are as readily made.

The device as a whole is both simple, inexpensive and efficient, and is a tool useful in any blacksmith shop.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is:

1. In combination, a base, a lever pivoted thereto, a pressure member secured on said lever, and a shaping die secured to said base opposite said pressure member and provided with a plurality of transverse grooves, said pressure member being adapted to operatively coact with said die.

2. In combination, a base, a lever pivoted thereto, a pressure member secured on said lever, a shaping die secured to said base op-

posite said pressure member and having a plurality of transverse grooves, said pressure member being adapted to operatively coact with said die, and an adjustable plate removably secured on said base opposite said shaping die, provided with vertical extensions spaced apart, with its extensions adapted to be located with their interspace opposite either of said grooves in the shaping die.

3. In combination, a base, an arm fulcrumed on one end thereof, a hand-lever fulcrumed on the other end thereof, a link pivotally connecting said arm and said lever, a pressure member mounted on said arm, a shaping die mounted on said base in a position to coact with said pressure member, said die having a plurality of rectangular grooves across its upper edge, and a plate mounted movably and horizontally adjustably on said base opposite said die, provided with a pair of erect fingers spaced apart and adapted to be adjusted along the die to place the interspace of the fingers opposite any one of the grooves in the die.

Signed at Waterloo, Iowa, this 7th day of July, 1911.

ARTHUR A. DUBA.

Witnesses:

W. H. BRUNN,

GEO. C. KENNEDY.