W. D. YOUNG.

Machine for Rolling Horseshoe Blanks.

No 168,205. Patented Sept. 28, 1875.

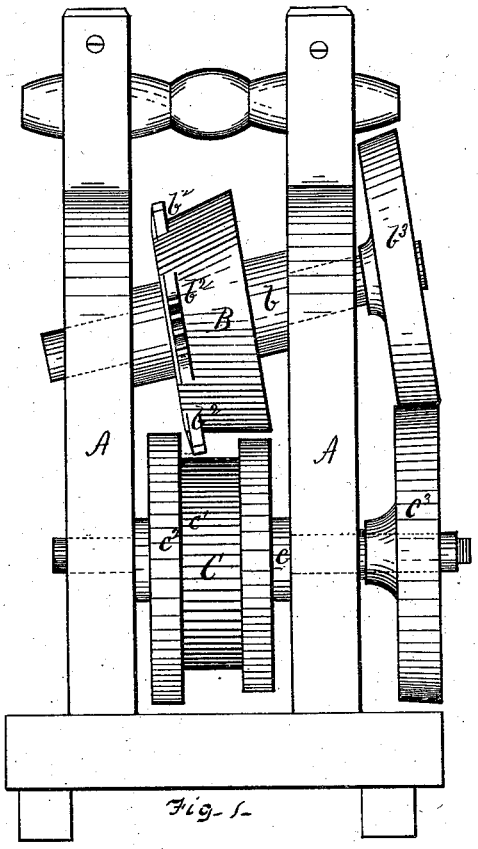

Fig. 1.

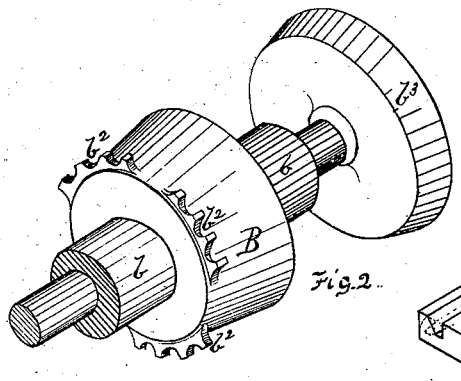

Fig. 2.

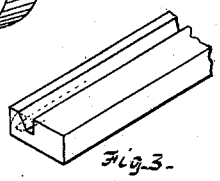

Fig. 3.

WITNESSES.

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UNITED STATES PATENT OFFICE.

WILLIAM D. YOUNG, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO SHOENBERGER & CO., OF SAME PLACE.

IMPROVEMENT IN MACHINES FOR ROLLING HORSESHOE-BLANKS.

Specification forming part of Letters Patent No. **168,205**, dated September 28, 1875; application filed March 20, 1875.

To all whom it may concern:

Be it known that I, WILLIAM D. YOUNG, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Apparatus for Rolling Horseshoe-Blanks; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is an elevation of a machine embodying my invention. Fig. 2 is a perspective view of one of the rolls. Fig. 3 is a view of a blank, the dotted line showing the old form of blank.

Like letters refer to like parts whenever they occur.

My invention relates to the construction and arrangement of rolls for rolling horseshoe-blanks; and it consists in the combination of two rolls, the axes of which cross each other at an angle while the faces of the rolls are parallel, and are provided with annular grooves and creasers, whereby the crease in the blank is inclined backward and the weight of metal may be thrown upon the outer edge of the blank, thus giving a better hold for and facilitating the driving of the nail.

Heretofore, in the manufacture of horseshoe-blanks, where the creasers have been attached to rolls having parallel axes, the weight or thickness of metal between the crease and toe has been on the creased side, which resulted in the crease having an outward slant, which prevented the nail from being properly driven in shoeing.

The object of the present invention is to correct this objectionable feature in the rolling of the blank, which I accomplish by canting the rolls; but as this of itself would destroy the parallelism of the sides of the blank, I taper the canted roll so as to preserve the rectangular condition of the blank.

I will now proceed to describe my invention, so that others skilled in the art may apply the same.

In the drawing referred to, A represents the housings, provided with the usual boxes for journaling the shafts of the rolls B and C. B is the upper roll, tapered so as to render the face thereof parallel with the face of the lower roll, and having its shaft b set at, or about at, an angle of ten degrees to the plane of the lower or second roll, C. Upon the roll B, arranged at regular intervals at right angles to the axis of the roll, are a series of creasers, b^2, between each set of which may be placed the cutters for dividing the blanks. C indicates the lower roll, having the shaft c, the axis of which is in a horizontal plane, said roll being provided with the annular groove c^1, one flange, c^2, of which is deeper than the other, and is preferably so made as to lap the edge of the tapered roll to permit the extension of the metal displaced by the creasers, so as to fill up the outside edge of the crease. The rolls B and C are also provided with the gear-wheels b^3 and c^3, so as to move in unison, and are driven from any suitable power.

The operation of the devices is as follows: The horseshoe-bar is fed between the rolls, and, being confined by the groove of the horizontal roll, the creasers, which are set at right angles to the axis of the canted roll, will indent the bar at such an angle as is shown in Fig. 3 of the drawing, the displaced metal extruding by the lapping flange c^2 to fill out the edge of the crease, and the parallelism of the faces of the blank being preserved by the taper of the upper roll. The canting of the roll also facilitates the cleaning or disengaging of the creasers.

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

1. The rolls B C, for rolling horseshoe-blanks, one provided with an annular groove, and the other provided with creasers, the axes of the rolls crossing each other while the faces of the rolls are parallel.

2. The two rolls B C, for rolling horseshoe-blanks, one provided with an annular groove and the other provided with creasers, said creasers being placed at right angles to the axis of the roll, the axes of the rolls crossing each other substantially as and for the purpose specified.

In testimony whereof I, the said WILLIAM D. YOUNG, have hereunto set my hand.

WILLIAM D. YOUNG.

Witnesses:
T. B. KERR,
F. W. RITTER, Jr.