

R. W. COMSTOCK, JR.
MACHINE FOR MAKING HORSESHOE CALKS.
APPLICATION FILED JUNE 1, 1909.

956,292.

Patented Apr. 26, 1910.

Fig. 1

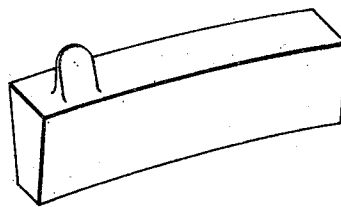
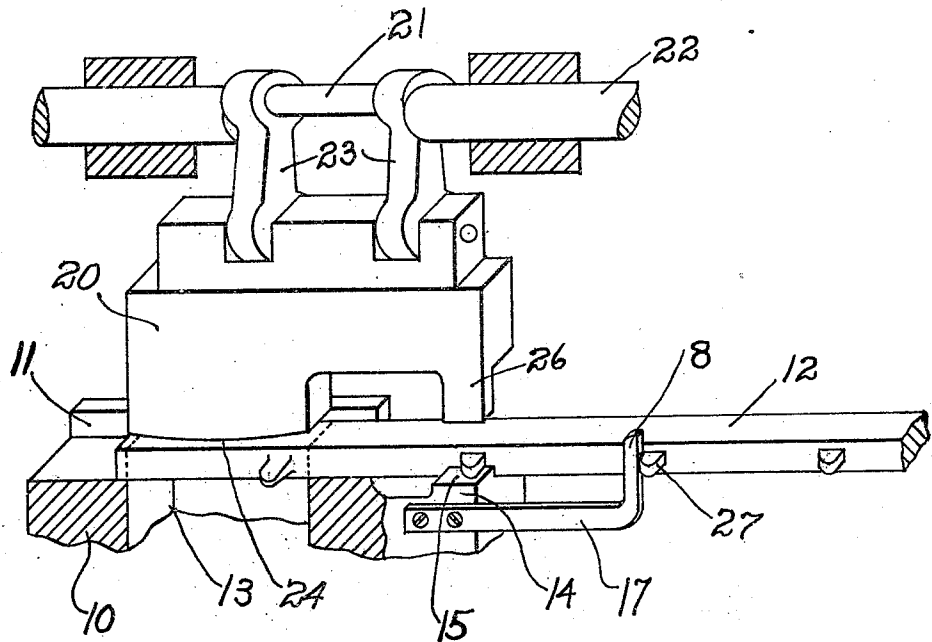


Fig. 2.

WITNESSES

Willard H. Bardeley
E. S. Ogden

INVENTOR

Richard W. Comstock Jr.

BY

Howard E. Barlow
ATTORNEY

UNITED STATES PATENT OFFICE.

RICHARD W. COMSTOCK, JR., OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO RHODE ISLAND PERKINS HORSE SHOE COMPANY, OF PROVIDENCE, RHODE ISLAND, A CORPORATION OF RHODE ISLAND.

MACHINE FOR MAKING HORSESHOE-CALKS.

956,292.

Specification of Letters Patent.

Patented Apr. 26, 1910.

Application filed June 1, 1909. Serial No. 499,371.

To all whom it may concern:

Be it known that I, RICHARD W. COMSTOCK, JR., a citizen of the United States, residing at the city of Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Machines for Making Horseshoe-Calks, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to certain new and useful improvements in machines for making horse shoe calks.

The object of the invention is to provide simple and improved means for cutting the calks from a continuous bar of metal and simultaneously curving the same to conform to the contour of the horse shoe.

A further object is to provide improved means for swaging out the spur which is employed to secure the calk in position.

A further object is to provide improved means for regulating the feed of the blank.

With these and other objects in view, the invention consists of certain novel features of construction, as will be more fully described and particularly pointed out in the appended claims.

In the accompanying drawings: Figure 1— is a perspective view illustrating my invention, parts being shown in section. Fig. 2— is a perspective view of the finished calk.

Referring to the drawings, 10 designates a base or support provided with a guideway 11 for the bar 12, said base being provided with a die opening 13 intersecting said guideway. An extension 14 is connected to or located on the base a fixed distance from the opening and is provided with a flattened surface or anvil 15. A gage bar 17 is also supported on said base having an upturned finger 18.

The plunger 20 may be operated in any desired manner but the same is shown as being supported from the cranked portion 21 of a shaft 22 by means of arms or links 23, said shaft being mounted in suitable bearings and receiving power from any suitable source. The lower face of the punch portion of said plunger is preferably provided with a curved projection 24 located over and conforming to the die opening 13, and cooperating with the anvil 15 is a pro-

jection 26 which may be formed in any desired manner, but is shown as being on one corner of the plunger 20, and spaced apart from the punch portion 24.

In practice, the strip or bar 12 is formed in any suitable way, preferably by rolling, being provided with the spaced apart integral spurs 27.

In the operation of the device, when the plunger 20 rises the bar 12 is fed forward, either automatically or by hand, until one of the spurs 27 engages the gage 18, at which point the bar 12 is held at rest and in the desired position over the die opening 13. It will be noted that the forward end of the bar projects slightly beyond the opening 13, to better support said end. When the plunger descends, the projection punch 24 engages the end of the bar, curving the same, and finally cutting off the finished calk. At the same time the spur 27 next in line, being at rest upon the anvil 15 is struck by the projection or swaging member 26, drawing out said spur into exactly the desired shape, which is rather sharp, thin and tapering, whereby it is well adapted to be readily driven into the heated shoe without bending and without tearing the stock of the shoe. In feeding the bar 12, it is first pushed back so that the spur 27 is clear of the gage bar and then it is carried forward until the next spur brings up against the gage which stops the bar in the proper position for bending and severing the next calk.

My invention is not restricted to the precise construction and arrangement of parts herein shown and described, nor to the various details thereof, the broad feature of my invention being the provision of means for cutting finished calks from a continuous bar of metal having spaced apart integral spurs, and simultaneously curving the calk and at the same time swaging or drawing out one of the spurs of the bar into the desired shape, and any means for accomplishing these objects will fall within the spirit and scope of my invention, one practical embodiment of which has been herein illustrated and described without attempting to show all of the various forms and modifications in which the invention might be embodied.

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

1. A machine for making horseshoe calks comprising a base provided with a guideway for a bar of metal, said base being also provided with a die opening, a shearing plunger
5 cooperating with said opening, a swage carried by said plunger, and an anvil cooperating with said swage.

2. A machine for making horseshoe calks comprising a base provided with a guideway
10 for a bar of metal, said base being also provided with a die opening, a shearing plunger cooperating with said opening, a swage carried by said plunger, and an anvil cooperating
15 with said swage, a gage adapted to control the position of said bar, said gage being spaced from the swage a distance greater than the distance between said swage and said die opening, said anvil being located between the gage and the die opening.

20 3. A machine for making horseshoe calks comprising a base adapted to receive a bar provided with spaced apart projections, said base being provided with a die opening, a shearing plunger cooperating with said
25 opening, a swage carried by said plunger, an anvil cooperating with said swage, and a gage for intercepting the projections on said

bar, said anvil being located between said gage and said die opening.

4. A machine for making horseshoe calks 30 comprising a base provided with a guideway for a bar of metal, said base being also provided with a die opening and an anvil, and a single member cooperating with said die opening and anvil to cut said bar into lengths 35 and simultaneously swage a portion of said bar at a point separated from the portion that is being severed.

5. A machine for making horseshoe calks comprising a base provided with a guideway 40 for the stock, said base being also provided with a die opening and an anvil spaced therefrom, a gage arm secured to said anvil, and a plunger provided with a curved punch portion and provided adjacent one end with 45 a swaging projection said punch and projection cooperating with said die opening and anvil respectively.

In testimony whereof I affix my signature in presence of two witnesses.

RICHARD W. COMSTOCK, JR.

Witnesses:

HOWARD E. BARLOW,
E. I. OGDEN.