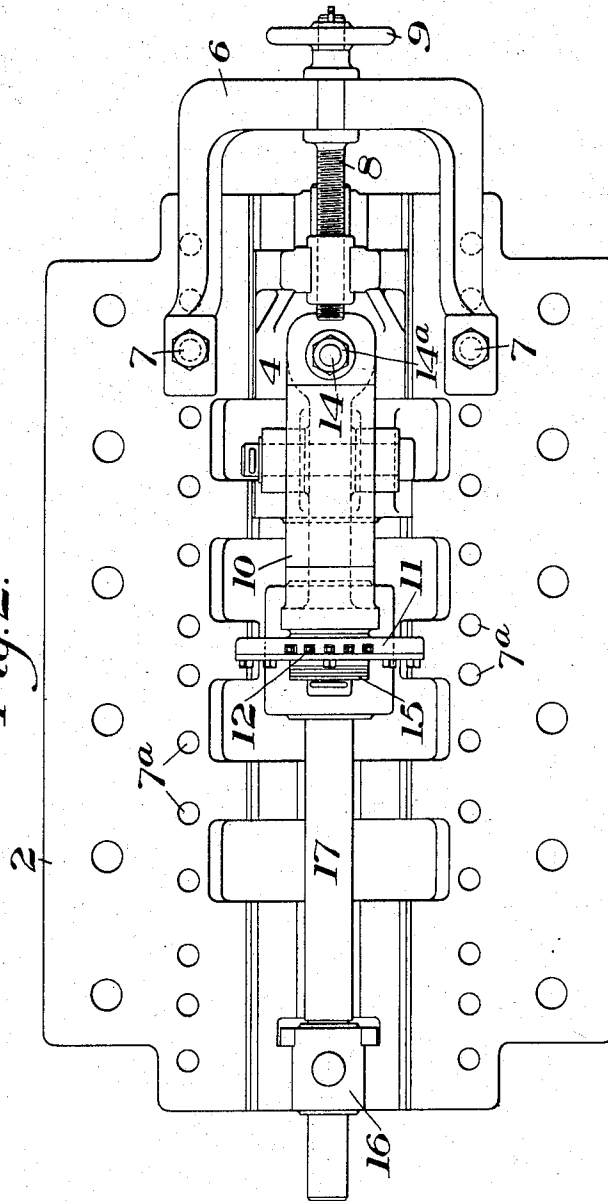
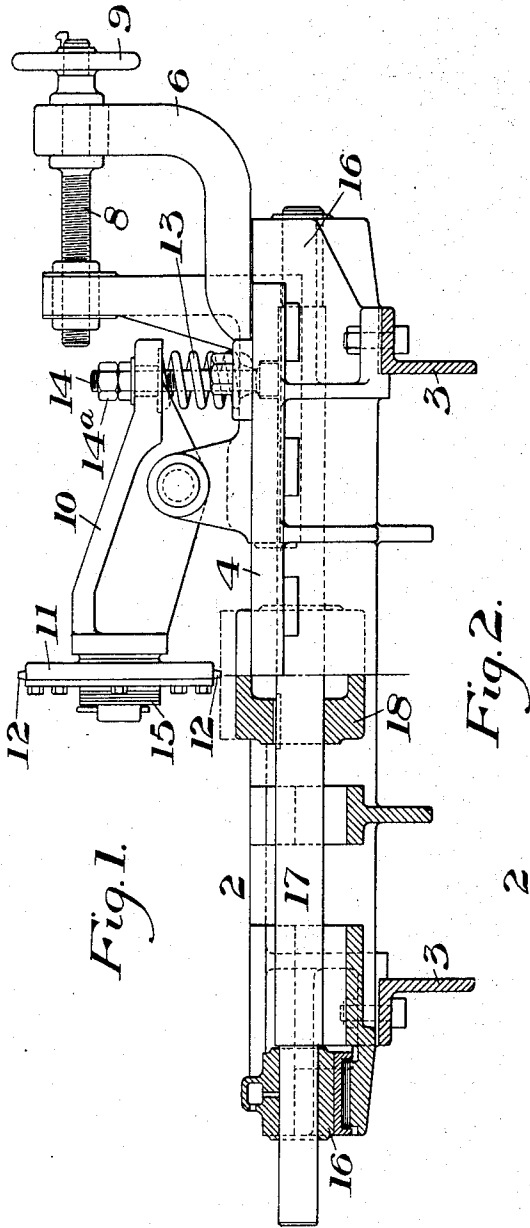


L. W. UNGER.
STAMPING APPARATUS.
APPLICATION FILED JUNE 13, 1907.

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Patented Sept. 7, 1909.
2 SHEETS—SHEET 1.



WITNESSES

R. L. Little
W. W. Swartz

INVENTOR

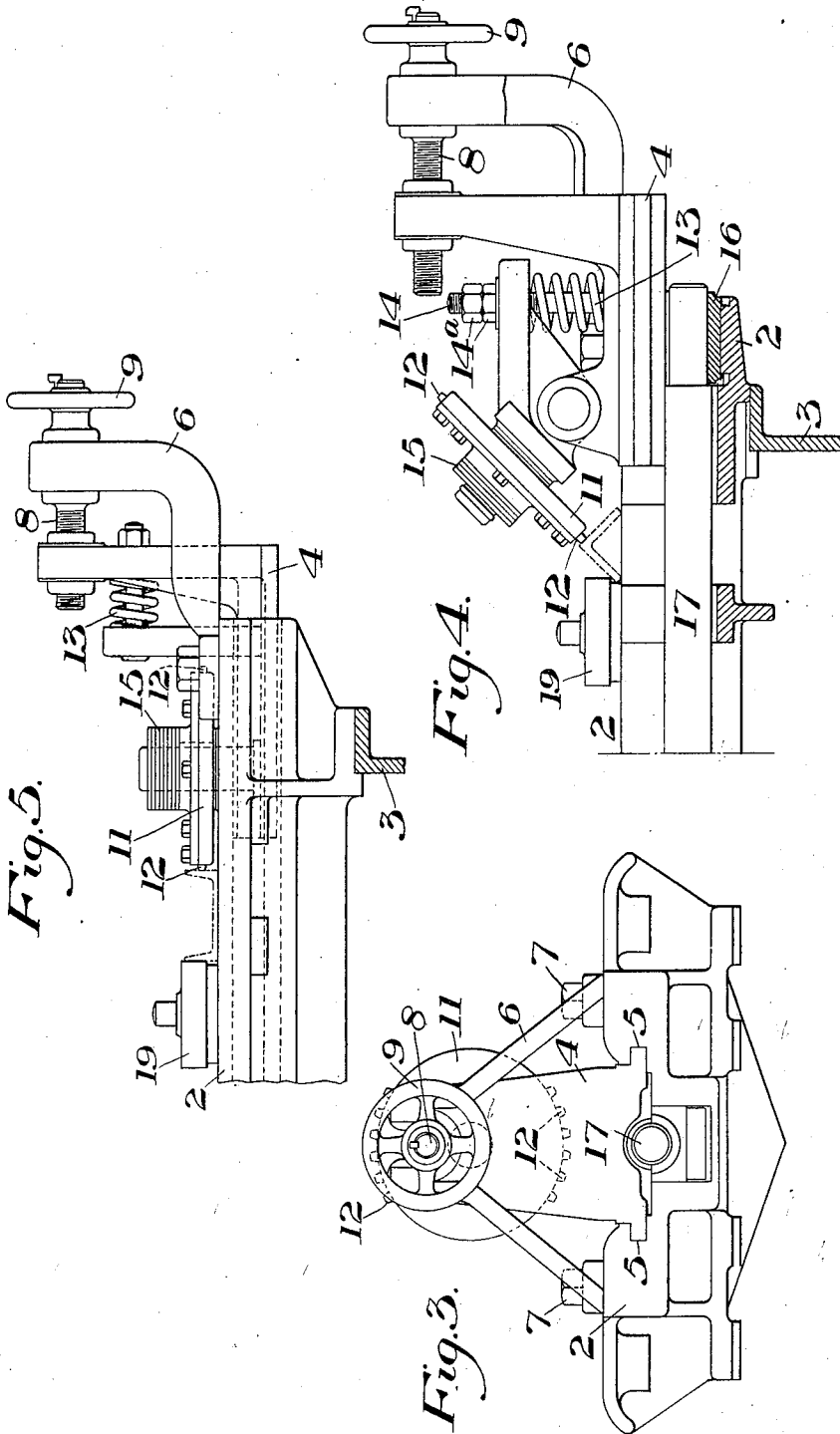
L. W. Unger
by Barlow & Holmes
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INVENTOR

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By R. D. Little & W. W. Swartz
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UNITED STATES PATENT OFFICE.

LEE W. UNGER, OF CLAIRTON, PENNSYLVANIA.

STAMPING APPARATUS.

933,733.

Specification of Letters Patent.

Patented Sept. 7, 1909.

Application filed June 13, 1907. Serial No. 378,763.

To all whom it may concern:

Be it known that I, LEE W. UNGER, of Clairton, Allegheny county, Pennsylvania, have invented a new and useful Stamping Apparatus, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of my improved apparatus as arranged for stamping the top side of the blanks being marked; Fig. 2 is a plan view of the same; Fig. 3 is an end elevation of Fig. 1; Fig. 4 is a side elevation showing the apparatus as it is arranged for stamping the side of metal shapes such as angles; and Fig. 5 is a side elevation showing the apparatus as it is arranged for stamping the vertical edge of the blanks being marked.

My invention relates to apparatus employed in stamping various materials so as to designate their class, composition or grade; and it more particularly relates to such stamping apparatus used for stamping identification marks upon rolled metal products such as billets, blooms, slabs, rounds, structural shapes, etc.

The object of the invention is to provide improved apparatus which is adapted for use in stamping rolled metal blanks of various thicknesses and widths, and which is adapted for use in stamping identification marks upon the horizontal or vertical sides of such blanks or upon a side or edge of the blanks which is at an angle to a horizontal or vertical plane.

A further object of the invention is to provide apparatus which can be adjusted sidewise to bring the marking wheel in line with any one of a series of finishing roll passes, and in which the marking wheel can be adjusted lengthwise on its shaft.

The invention consists in providing improved means for adjusting the apparatus sidewise on its bed plate or base and means for adjusting the wheel on the wheel shaft.

The invention further consists in providing apparatus having means for holding the stamping wheel in either a horizontal or vertical position or in a plane which is at an angle to the horizontal and vertical, and having means whereby the stamping wheel is yieldingly held in contact with the products being marked.

In the drawings, referring to Figs. 1, 2, 3 and 4, 2 represents the bed plate or base of

the apparatus which is mounted in place on the sides 3 of a roller feed table and 4 is a sliding frame which is secured to the base 2 so as to be adjustable in the grooves 5—5 located in the base 2. A yoke 6 is secured by bolts 7, 7 to the base 2 and the frame 4 is adjustably secured to the yoke 6 by means of the adjusting screw 8, this screw being provided with a suitable hand wheel 9. The base or bed plate 2 is provided with a series of holes 7^a which are suitably spaced to secure the yoke 6 and, through the screw 8, the frame 4 in position in line with either of a series of passes located in the rolls of a finishing roll train. Pivoted on the frame 4 is an arm 10, on the outer end of which arm the rotating wheel 11 is adjustably secured and on the periphery of the wheel 11 the removable stamps 12 are secured. The opposite end of the arm 10 is secured to the frame 4 by the spring 13 and bolt 14 so as to yieldingly hold the wheel 11 in the desired position. The tension in the spring 13 is regulated by means of the screw nuts 14^a. A series of washers or liners 15 are provided on the arm 10, so as to permit of the wheel 11 being adjusted longitudinally on its shaft and bring the wheel and marking stamps 12 on this wheel into the required position relative to the metal blanks being marked. Mounted in bearings 16 located on the base 2 is a shaft 17, and rotatably mounted on this shaft is a roller 18 which is located directly beneath the stamping wheel 11 so as to support the material and hold it in place while being marked. The roller 18 is arranged so as to permit of its being adjusted lengthwise on the shaft 17 and to permit its being removed and replaced by other rollers to suit the cross section of the particular product being manufactured.

Provision is made for keeping the blanks in position in relation to the stamping wheel when being marked upon their edge or on a side which is on an angle to a horizontal plane by means of the adjustable idler roller 19, as shown in Figs. 4 and 5. Preferably the wheel 19 is mounted upon a swinging arm so as to be adjustable to suit different sizes and kinds of materials.

In the modification shown in Fig. 5, the stamping wheel 11 is adjustably mounted in a horizontal position so as to stamp the side or edge of the materials being marked.

In the operation of the apparatus, the bed plate 2 is secured in place on the top of the

sides 3 of a roller feed table. Preferably the stamping apparatus is placed closely enough to the finishing rolls of a roll train to permit of the materials being fed through the stamping apparatus by the finishing rolls. Instead of this arrangement, the material may be fed through the apparatus by means of the roller feed table or by suitable positively driven pinch rolls. The stamping wheel 11 is secured in place on the bed plate 2 in line with the desired pass in the finishing roll train. As the metal blanks are fed forwardly by the finishing rolls they are caused to pass between the supporting roller 18 and the stamping wheel 11 and the wheel is caused to rotate by contact with the blanks. At each revolution of the wheel 11 the blank is marked twice, two sets of stamps 12 being provided at diametrically opposite points on the periphery of the stamping wheel 11. The wheel 11 is yieldingly held in contact with the blanks by the spring 13 through the wheel arm 10.

The advantages of my invention will be apparent to those skilled in the art. By means of the removable wheel arms the machine can easily and quickly be adapted for use in stamping blanks of any width or thickness and of various cross-sections. The apparatus can be adjusted so as to be in line with either of a series of passes in the finishing rolls.

Modifications in the construction and arrangement of the apparatus may be made without departing from my invention.

I claim:—

1. Apparatus for stamping comprising a rotary stamping wheel, marking dies removably secured on the wheel, an arm on one end of which the wheel is mounted, means for bringing the metal blanks into contact with the marking dies and yielding means for moving the arm and holding said dies in position to contact with the metal blanks; substantially as described.

2. Apparatus for stamping comprising a rotary stamping wheel, marking dies removably secured in the periphery of said wheel, a pivoted arm on one end of which the wheel is mounted, means for bringing the metal blanks into contact with the marking dies and yielding means engaging with the opposite end of the arm for holding said

dies in position to contact with the metal blanks; substantially as described.

3. Apparatus for stamping comprising a rotary stamping wheel, marking dies removably secured in the periphery of said wheel, an arm on one end of which the wheel is adjustably mounted and means for adjusting the wheel axially on said arm; substantially as described.

4. Apparatus for stamping comprising a rotary stamping wheel, marking dies removably secured in the periphery of said wheel, an arm on one end of which the wheel is mounted, a base on which the opposite end of the arm is yieldingly mounted and means for adjusting said arm on said base; substantially as described.

5. Apparatus for stamping comprising a rotary stamping wheel, marking dies removably secured in the periphery of said wheel, an arm on one end of which the wheel is mounted, means for adjusting the wheel axially on said arm, a base to which the opposite end of the arm is pivotally mounted and means for adjusting the arm on said base; substantially as described.

6. In apparatus for marking rolled metal shapes, the combination with a base having a sliding frame mounted thereon and means for adjusting the frame on the base, of an arm having a marking wheel adjustably mounted thereon and having means for adjusting the wheel on the arm and a spring arranged to yieldingly hold the wheel in its operative position; substantially as described.

7. In apparatus for marking rolled metal shapes, the combination with a base having a sliding frame mounted thereon, and means for adjusting the frame on the base, of a pivoted arm having a marking wheel rotatably mounted thereon, means for adjusting the wheel on said arm, and a spring arranged to yieldingly hold the wheel on said arm in its operative position; substantially as described.

In testimony whereof, I have hereunto set my hand.

LEE W. UNGER.

Witnesses:

F. H. MOYER,
C. F. FRITZ.