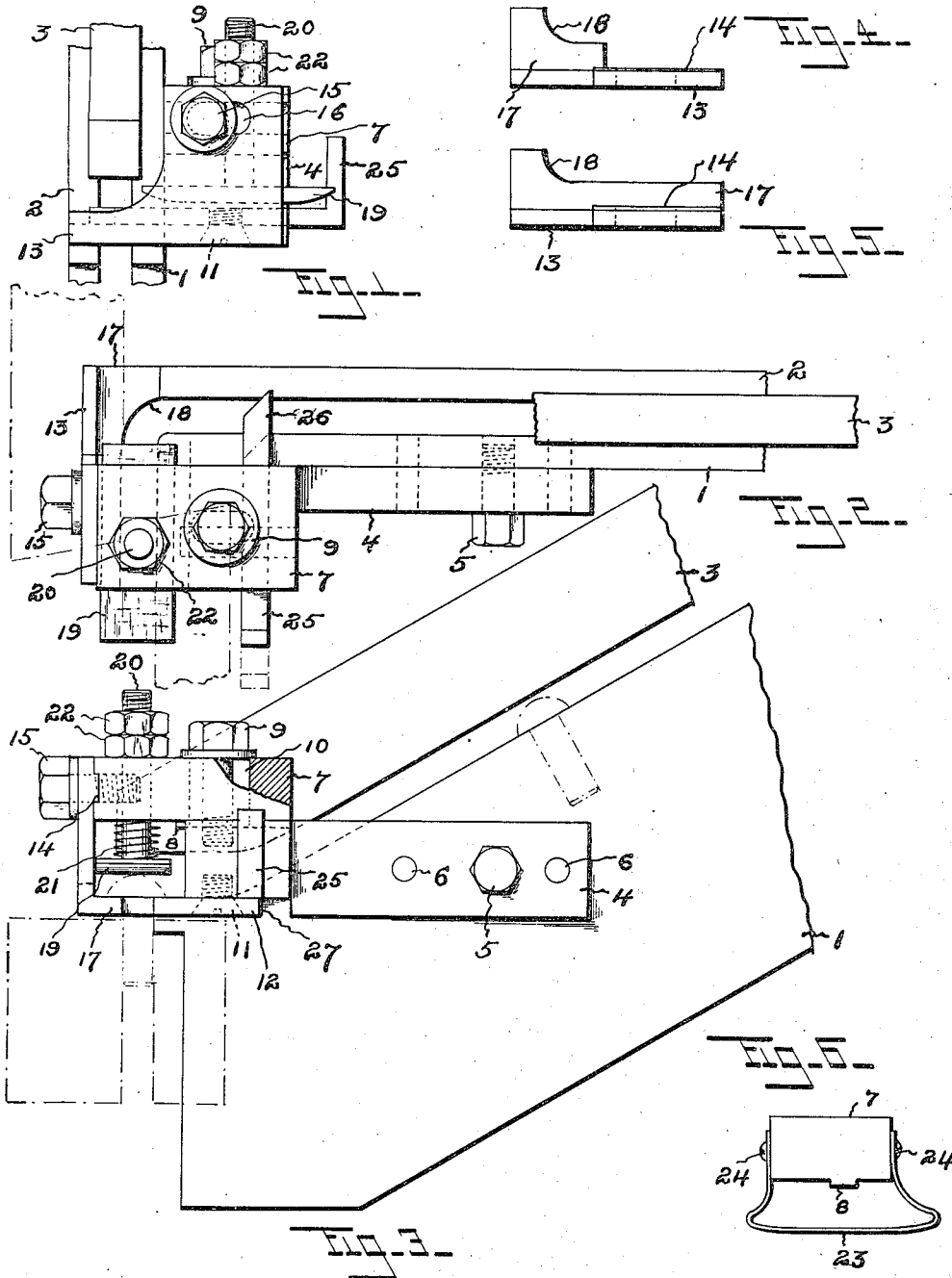


R. L. WILCOX.
BLANK HOLDING DEVICE.
APPLICATION FILED MAY 24, 1912.

1,046,700.

Patented Dec. 10, 1912.



WITNESSES:

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RICHARD LESTER WILCOX, OF WATERBURY, CONNECTICUT, ASSIGNOR TO THE WATERBURY FARREL FOUNDRY AND MACHINE COMPANY, OF WATERBURY, CONNECTICUT, A CORPORATION OF CONNECTICUT.

BLANK-HOLDING DEVICE.

1,046,700.

Specification of Letters Patent.

Patented Dec. 10, 1912.

Application filed May 24, 1912. Serial No. 699,587.

To all whom it may concern:

Be it known that I, RICHARD LESTER WILCOX, a citizen of the United States, residing at Waterbury, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Blank-Holding Devices, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to a new and improved blank holding device, referring more particularly to mechanism for receiving blanks from a hopper chute and both holding and guiding them until they have been properly alined between thread rolling dies or similar operating tools, it being the object of my invention, among other things, to construct such a device so that it may be secured to a fixed part and adjustable to accommodate blanks of various diameters, that are held against upward movement.

To these, and other ends, my invention consists in the blank holding device, having certain details of construction and combinations of parts, as will be hereinafter described, and more particularly pointed out in the claims.

Referring to the drawings, in which like numerals of reference designate like parts in the several figures: Figure 1 is a front view of my improved device, showing a fragmentary portion of the hopper chute to which it is connected; Fig. 2 is a plan view thereof; Fig. 3 is a side view looking toward the right of Fig. 1; Figs. 4 and 5 are plan views of two forms of the outer supporting plate; and Fig. 6 is a front view of the cap with a modified form of pressure mechanism.

In the drawings, the numerals 1 and 2 designate the side plates of a chute leading from a hopper (not shown) and 3 is the cover thereof, which is held above the side plates 1 and 2 so as to leave room for the head of the blank to pass thereunder with the shank between the plates 1 and 2, substantially as shown by broken lines in Fig. 3.

The detailed construction of the chute and cover is not shown herein, as it constitutes no part of my present invention.

To one of the side plates I have affixed the body member 4, preferably by a screw 5 and dowel pins 6. Upon the top side of the outer end thereof is adjustably secured the cap 7, having a tongue 8 upon its lower end,

which enters a corresponding recess in the top of the body 4, and is thereby held against lateral movement. A screw 9 passing through a slot 10 in the cap 7, and threaded into the body 4, provides means for adjustably securing the said cap in any of its adjusted positions. Fixed to the underside of the body member 4 by the screw 11, is the inner supporting plate 12, the end of which projects beyond the body member, as particularly shown in Fig. 3. The outer supporting plate 13 is provided with a tongue 14, which enters a corresponding groove in the cap 7, and is adjustably secured thereto by a screw 15, which passes through the slot 16 and is threaded into said cap. The lower end of the plate 13 is provided with an inwardly projecting lip 17 of substantially the same thickness as the plate 12, one end of which is curved at 18 to form a continuation of the side plates 1, as shown in Fig. 2.

In practice, the plates 1 and 2 are placed in relation to each other so that there is just sufficient room for the shank of the blank to pass easily therebetween, and as the plates are adjustable toward and away from each other blanks of various diameters are accommodated. The open space between the plate 12 and the lip 17 should be the same as that between the plates 1 and 2, and this is accomplished by shifting the endwise position of the plate 13 upon the cap 7, so that the end 18 moves toward and away from the body 4, and outwardly by shifting the position of the cap 7 upon the body member 4, thus providing ample adjustment of the parts in relation to each other.

In order that the underside of the head of the blank may always be held in contact with the upper surface of the lip 17 and plate 12 while the blank is passing there-through, I have provided a device which exerts a yielding endwise pressure thereon, and comprises a plate 19, upon which is a stud 20 that passes through the cap 7, a coil spring 21 that surrounds said stud between said plate and the underside of said cap, and check nuts 22 threaded on said stud to limit the movement of said pressure plate in one direction.

In Fig. 5 I have illustrated a plan view of the outer supporting plate 13 for supporting a blank that is not to be threaded to the head thereof, and in Fig. 4 is shown

a supporting plate, to be used when the blank is to be threaded to the head, the only difference being that in the form shown in Fig. 4 a portion of the lip 17 is cut away so as to permit the blank to drop off the lip 17 and rest on the top of the dies and held there by the pressure plate 19. When the outer supporting plate 13 is used, the position of the inner supporting plate 12 is reversed from that shown in Fig. 3, so that the inner edge 27 thereof becomes the outer edge and is then toward the outer supporting plate and flush with the outer end of the body member 4.

In Fig. 6 is illustrated one of many other forms of pressure device that may be used equally as well as the one above described, which comprises a spring 23 that is secured by screws 24 to the cap 7.

A feed stop 25 is slidably mounted in the body 4, the outer end 26 of which during its movement projects across the open space between the plates 1 and 2, as shown in Fig. 2, and stops the feeding of blanks through the chute, but when withdrawn, as shown by broken lines in Fig. 2, the blanks are free to pass by and into the holding device.

With the device, fastened as it is to a fixed plate of the chute, the cover 3 is free to be moved out of its operative position and expose the chute, whereby repairs or adjustment are facilitated, or blanks that have been damaged or clog the chute may be readily removed.

There are minor changes and alterations that can be made within my invention, aside from those herein suggested, and I would therefore have it understood, that I do not limit myself to the exact construction herein shown and described, but claim all that falls fairly within the spirit and scope of my invention as set forth in the appended claims.

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

1. In a device of the character described, the combination with a chute; of a body member connected therewith; a cap secured thereto, so as to be adjustable substantially

parallel with the direction of movement of the blanks within said chute; a supporting plate connected with said body member; and a second supporting plate secured to said cap, so as to be adjustable at substantially a right angle to the said cap.

2. In a device of the character described, the combination with a chute; of a body member connected therewith; a cap secured thereto, so as to be adjustable substantially parallel with the direction of movement of the blanks within said chute; a supporting plate connected with said body member; and a second supporting plate, having a lip thereon that curves inwardly at one end, secured to said cap, so as to be adjustable at substantially a right angle to the said cap.

3. In a device of the character described, the combination with a chute; of a body member connected therewith; a cap adjustably secured to said body member; a supporting plate also secured to said body member and projecting beyond the end thereof; a second supporting plate, having a lip thereon; and a pressure device for holding the blanks with the underside of the heads against said supporting plates, having a yielding member mounted so as to lie above the open space between said supporting plates.

4. In a device of the character described, the combination with a chute; of a body member connected therewith; a cap adjustably secured to said body member; a supporting plate also secured to said body member and projecting beyond the end thereof; a second supporting plate, having a lip thereon; and a pressure device for holding the underside of the blank heads against said supporting plates, said device comprising a plate, having a stud thereon, means for limiting the movement of said plate in one direction, and a spring for normally moving said plate in one direction.

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

RICHARD LESTER WILCOX.

Witnesses:

J. M. GALLOND,
H. M. CASEY.