

May 17, 1949.

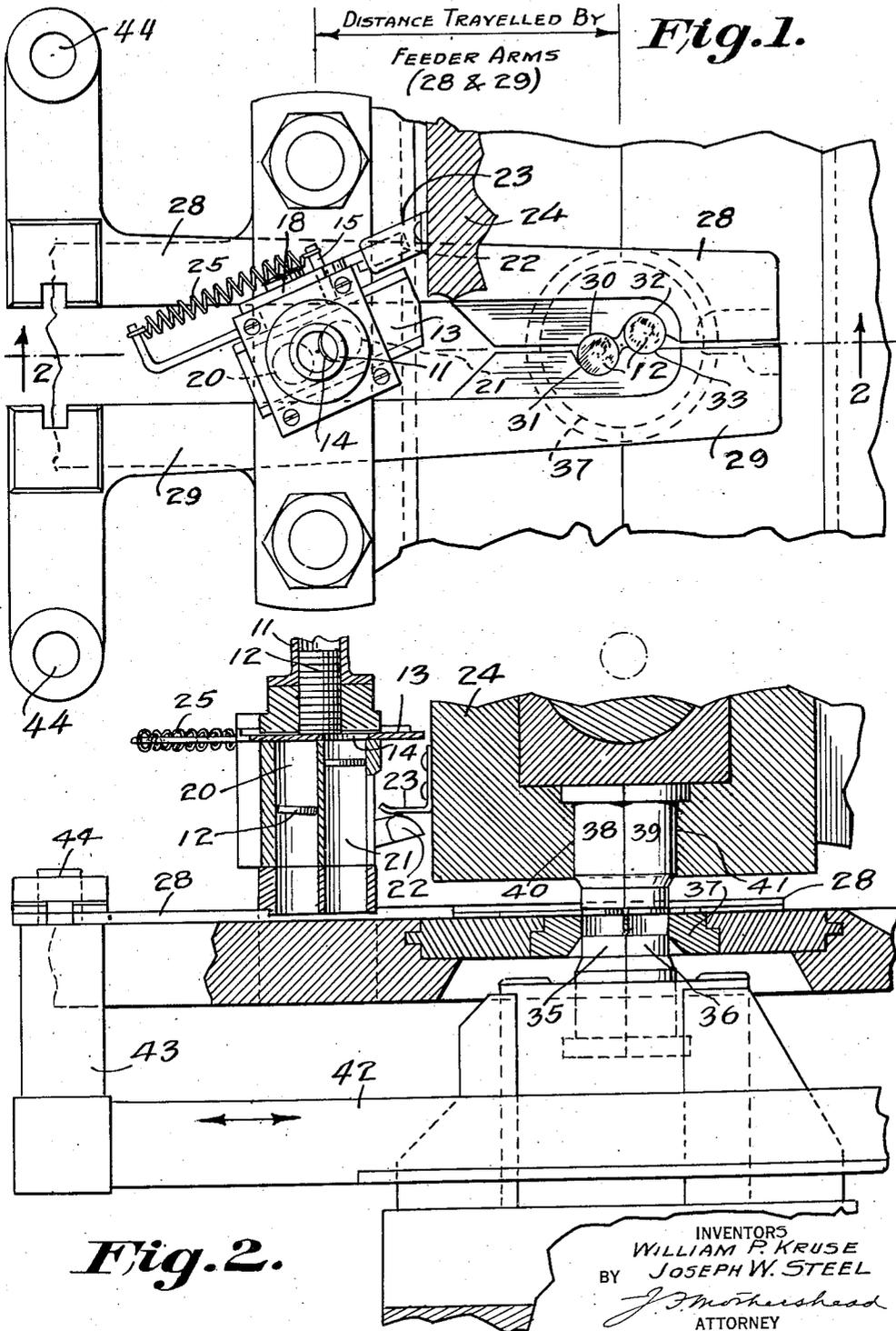
W. P. KRUSE ET AL

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CONVERSION UNIT FOR COINING PRESSES

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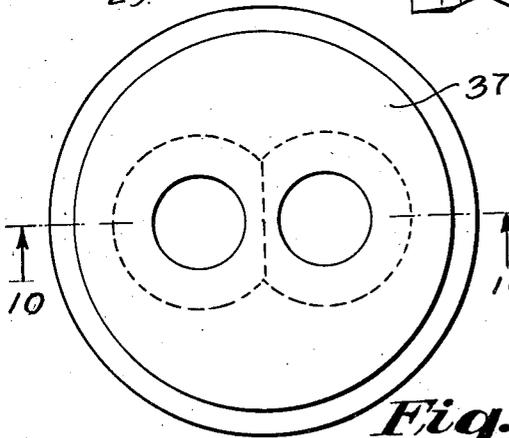
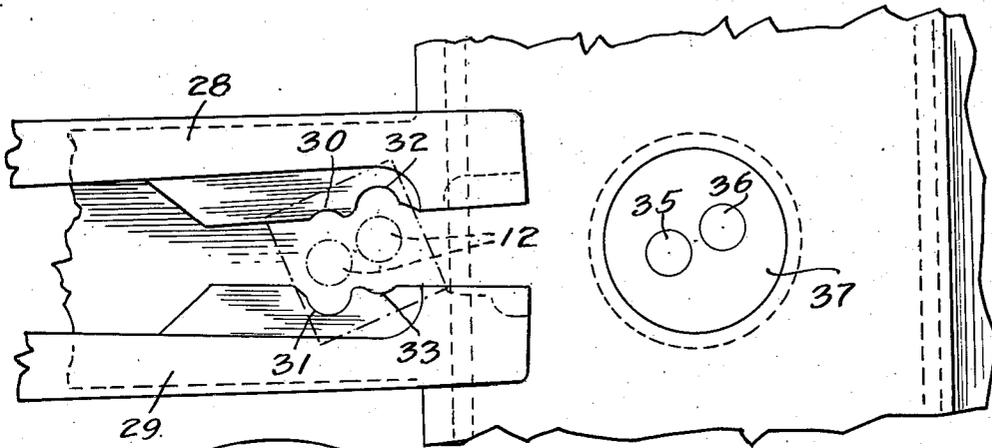
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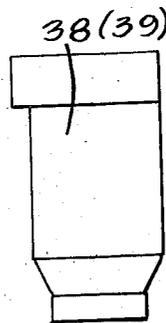
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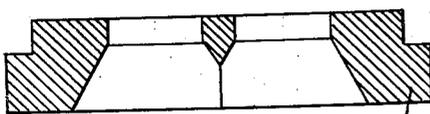
*Fig. 3.*



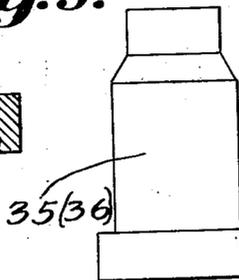
*Fig. 12.*



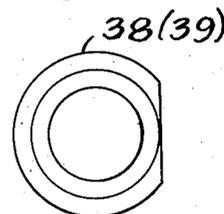
*Fig. 13.*



*Fig. 10.*



*Fig. 11.*



*Fig. 14.*

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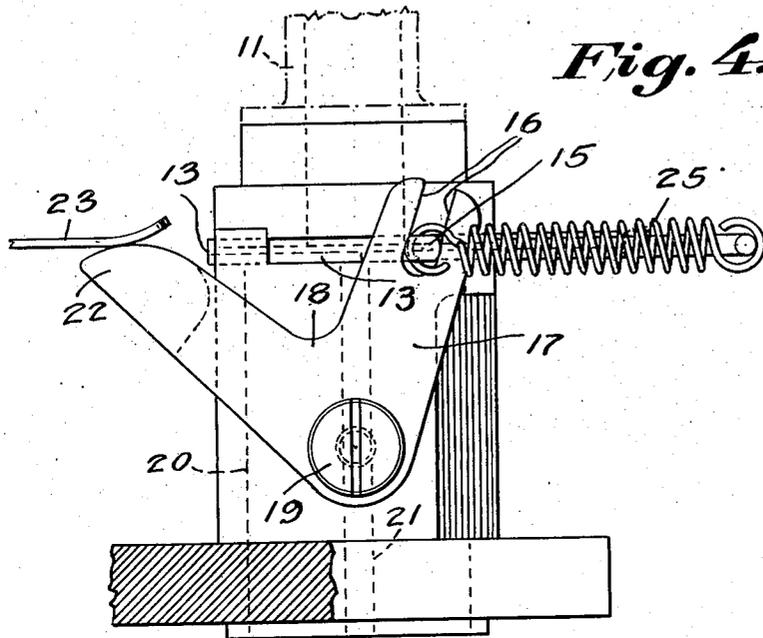
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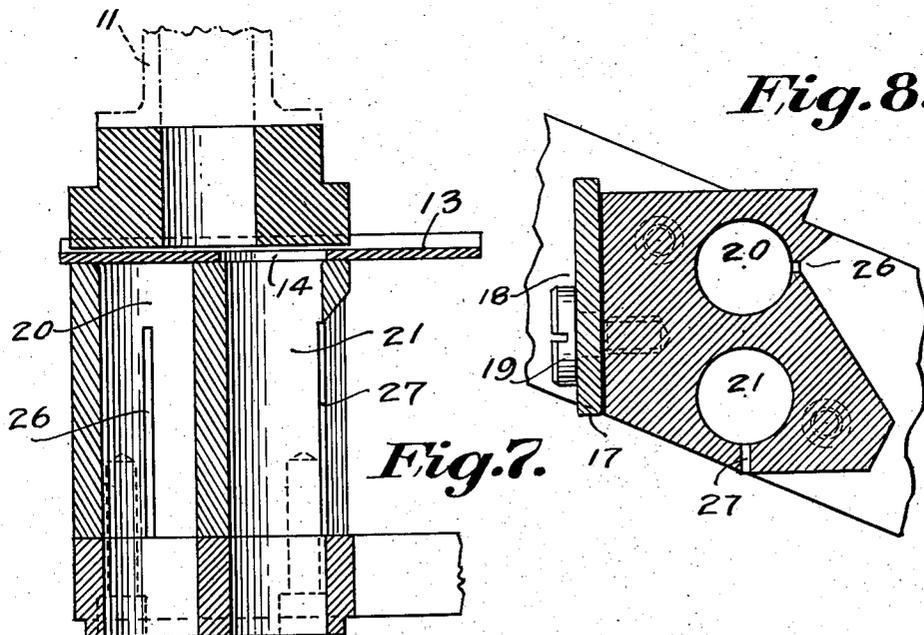
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*Fig. 4.*



*Fig. 8.*

*Fig. 7.*

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CONVERSION UNIT FOR COINING PRESSES

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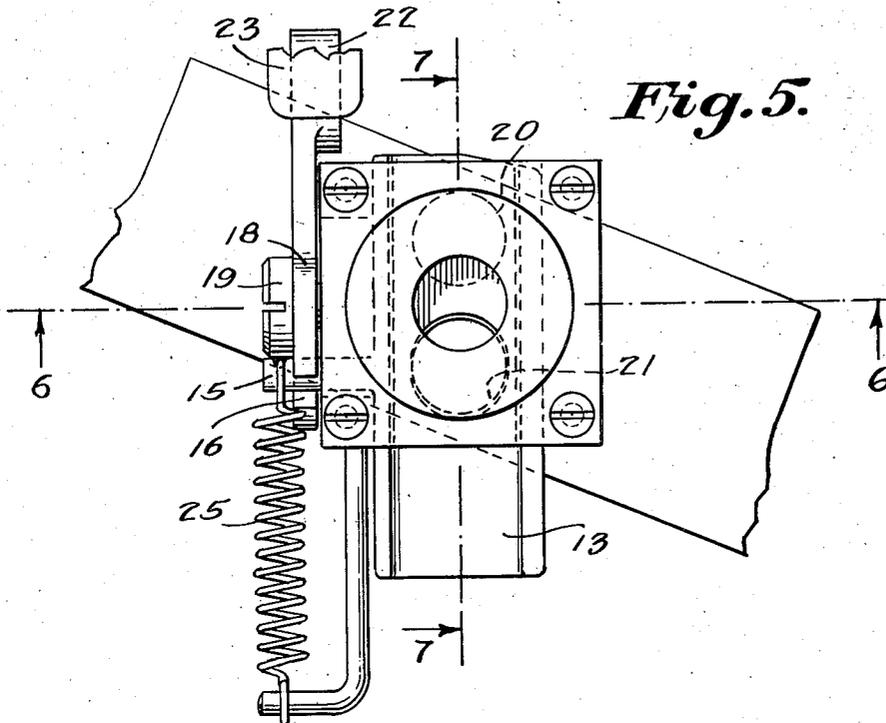


Fig. 5.

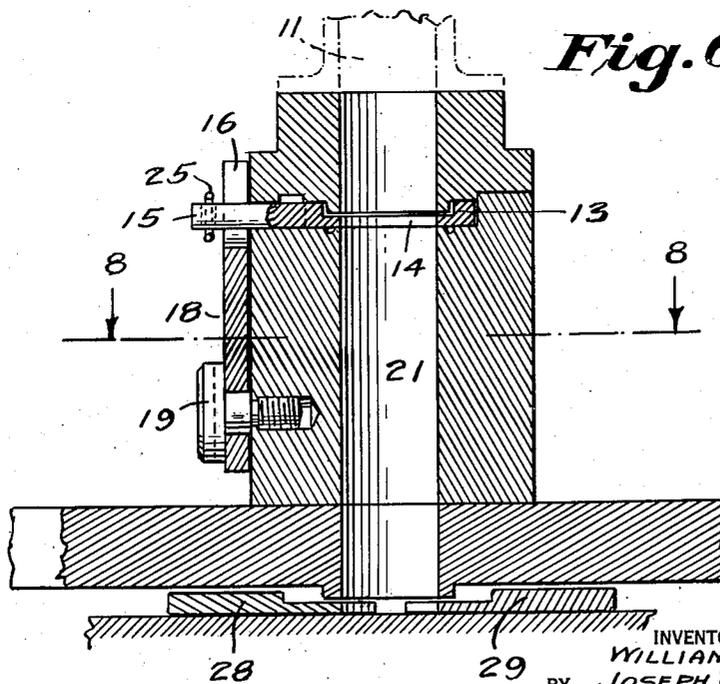


Fig. 6.

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# UNITED STATES PATENT OFFICE

2,470,102

## CONVERSION UNIT FOR COINING PRESSES

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Application March 23, 1945, Serial No. 584,482

1 Claim. (Cl. 78—99)

(Granted under the act of March 3, 1883, as  
amended April 30, 1928; 370 O. G. 757)

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The invention described herein may be manufactured and used by or for the Government of the United States for governmental purposes without the payment to us of any royalty thereon in accordance with the provisions of the act of April 30, 1928 (Ch. 460, 45 Stat. L. 467).

Our invention relates to coin stamping presses and particularly to a conversion unit by means of which presses designed for stamping a single coin for each cycle of operations may be converted into one which stamps two coins for each cycle of operations, thereby increasing the output of each press one hundred percent.

In the accompanying drawings:

Figure 1 is a plan view of our unit attached to a fragment of a press with the feeding arms holding a pair of blanks in position for stamping.

Figure 2 is a vertical section on the line 2—2 of Figure 1.

Figure 3 is a fragmentary plan view similar to Fig. 1 of the "planchet" or blank feeding arms, the latter being in approximate receiving position.

Figure 4 is a fragmentary elevation showing our means for feeding blanks from a single tubular magazine into twin magazines.

Figure 5 is a fragmentary plan view of a tubular magazine and our mechanism for feeding a blank into each twin magazine alternatively.

Figure 6 is a vertical section on the line 6—6 of Figure 5.

Figure 7 is a vertical section on the line 7—7 of Figure 5.

Figure 8 is a horizontal section on the line 8—8 of Figure 6.

Figure 9 is a plan view of a collar which holds our twin dies in proper alignment.

Figure 10 is a vertical section on the line 10—10 of Figure 9.

Figure 11 is an elevation of one of our lower dies.

Figure 12 is a plan view of the die illustrated in Figure 11.

Figure 13 is an elevation of one of our upper dies.

Figure 14 is a bottom plan view of the die illustrated in Figure 13.

In these drawings:

A single tubular magazine 11 receives blanks or "planchets" 12 from any suitable hopper (not shown). The blanks 12 fall by gravity through the magazine 11 (Fig. 2) to a shutter 13 which is provided with a blank-receiving recess 14. The shutter 13 is provided with a laterally extending lug 15 (Fig. 4) which is engaged in a terminal slot 16 in one arm 17 of a bell crank 18 on a pivot 19

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which extends laterally from the wall of two spaced tubular magazines 20, 21, directly under the magazine 11 and shutter 13 (Figs. 7 and 8). A second bell crank arm 22 is engaged by a spring detent 23 attached to a vertically reciprocated element 24 (Figs. 1 and 2) of a coin stamping press, whereby the shutter 13 is moved in one direction for each cycle of operation of the press, while a tension spring 25 attached to the lug 15 provides a means for returning the shutter 13 to its initial position. As the shutter 13 is reciprocated a blank drops into the recess 14 each time the recess passes under the magazine 11 and is then deposited in a magazine 20 or 21, each of which is provided with a sight opening 26 or 27 (Fig. 8).

Beneath the downwardly open magazines 20, 21 are two feeder arms 28 and 29 (Figs. 1-3) which are cut out at 30, 31, 32 and 33 to provide blank-receiving recesses which align with the magazines 20 and 21, respectively, when in receiving position (Fig. 3).

The feeder arms 28, 29 deposit a blank on each of two lower dies 35 and 36 (Fig. 2) which are flattened adjacent to each other and held in alignment by a guide collar 37. The two upper dies 38 and 39 are similarly held in alignment with the lower dies in recesses 40 and 41 in the vertically reciprocated member 24.

It will be observed that a line joining the centers of the dies 35 and 36 forms an acute angle with the direction of travel of the feeder arms 28 and 29 (Fig. 1) and that a line joining the center lines of the magazines 20 and 21 makes the same angle with the direction of travel of the feeder arms 28 and 29. This angular arrangement reduces the distance traveled by the feeder arms 28 and 29 between the magazines and the dies (see Fig. 1). The collar 37 is designed to fit in the standard presses.

Referring to Figure 2, the mechanism for reciprocating the arms 28 and 29 is shown as slide members 42 to which are rigidly secured vertical studs 43 which provide pivotal bearings 44 for the feeder arms 28 and 29.

The mechanism described above provides a conversion unit which may be used with a standardized coin press with a minimum of alteration.

It should be understood that the present disclosure is for the purpose of illustration only, and that the invention includes all modifications and equivalents which fall within the spirit and scope of the appended claim, in which it is our intention to claim all novelty inherent in our invention as broadly as possible in view of the prior art.

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What we claim is—  
 A coining press including a single stock coin-blank magazine, a reciprocating feeding means for withdrawing a blank from said magazine successively on each forward and return stroke of said means, a pair of spaced receiving magazines into each of which said feeding means deposits a single blank on each of said strokes, blank transfer means movable to one position on which said receiving magazines simultaneously deliver a pair of blanks, a pair of lower coining dies, a plunger, a pair of upper dies on said plunger, means moving said blank transfer means to another position for delivering said pair of blanks onto said lower coining dies on each cycle of operation for simultaneous coining of said blanks, a bell crank connected to said reciprocating feeding means for moving said feeding means forward to transfer a blank into one of said magazines and spring means for returning said feeding means for depositing a blank into the other of said receiving magazines and means on said

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plunger for engaging and operating said bell crank on the down stroke of said plunger whereby the movement of the bell crank deposits one blank on the down stroke of said plunger and said spring operates to deposit another blank on the upstroke of said plunger.

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