G. B. KEPLINGER.

PRESS.

APPLICATION FILED SEPT. 13, 1902.

NO MODEL.

2 SHEETS-SHEET 1.

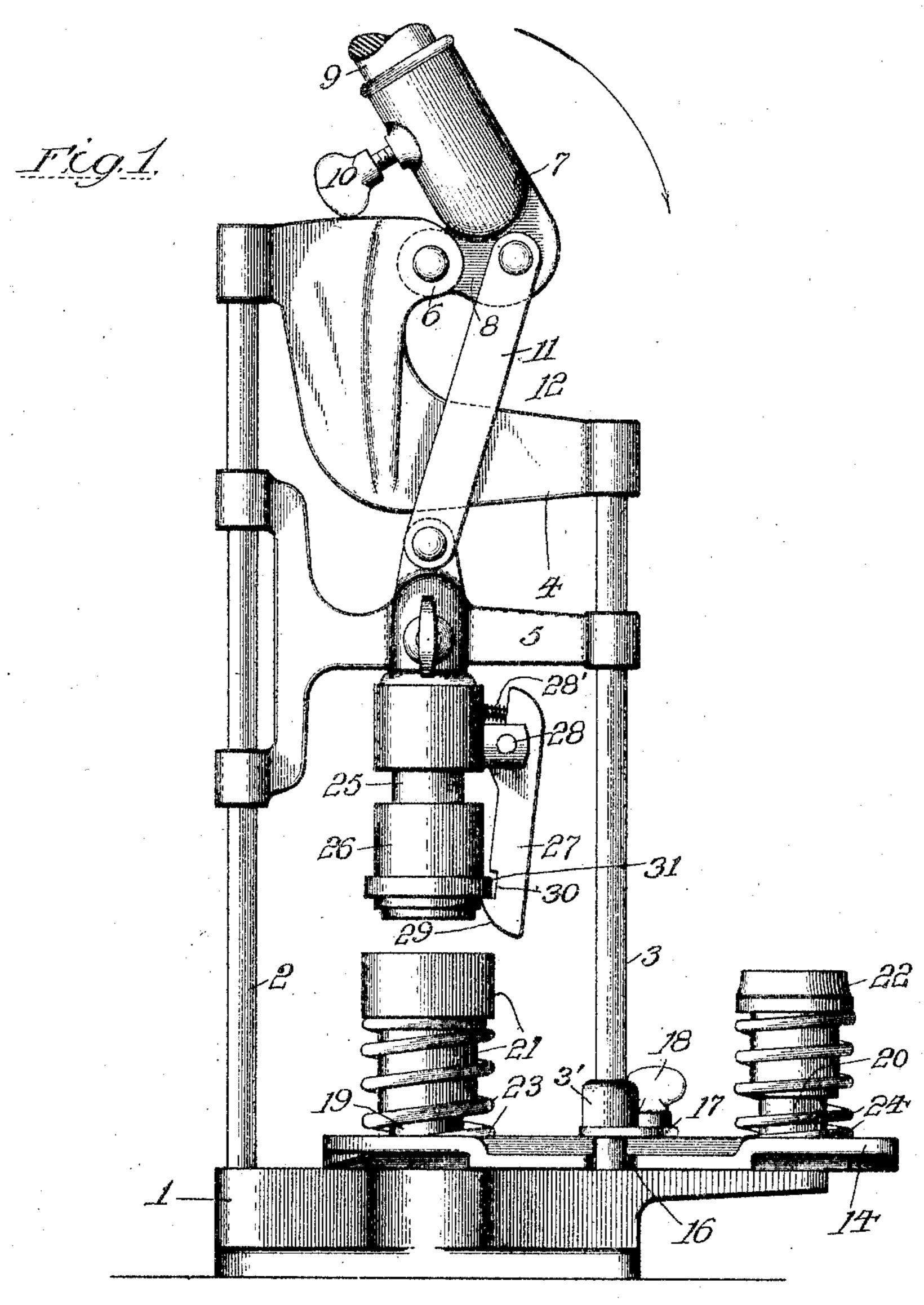


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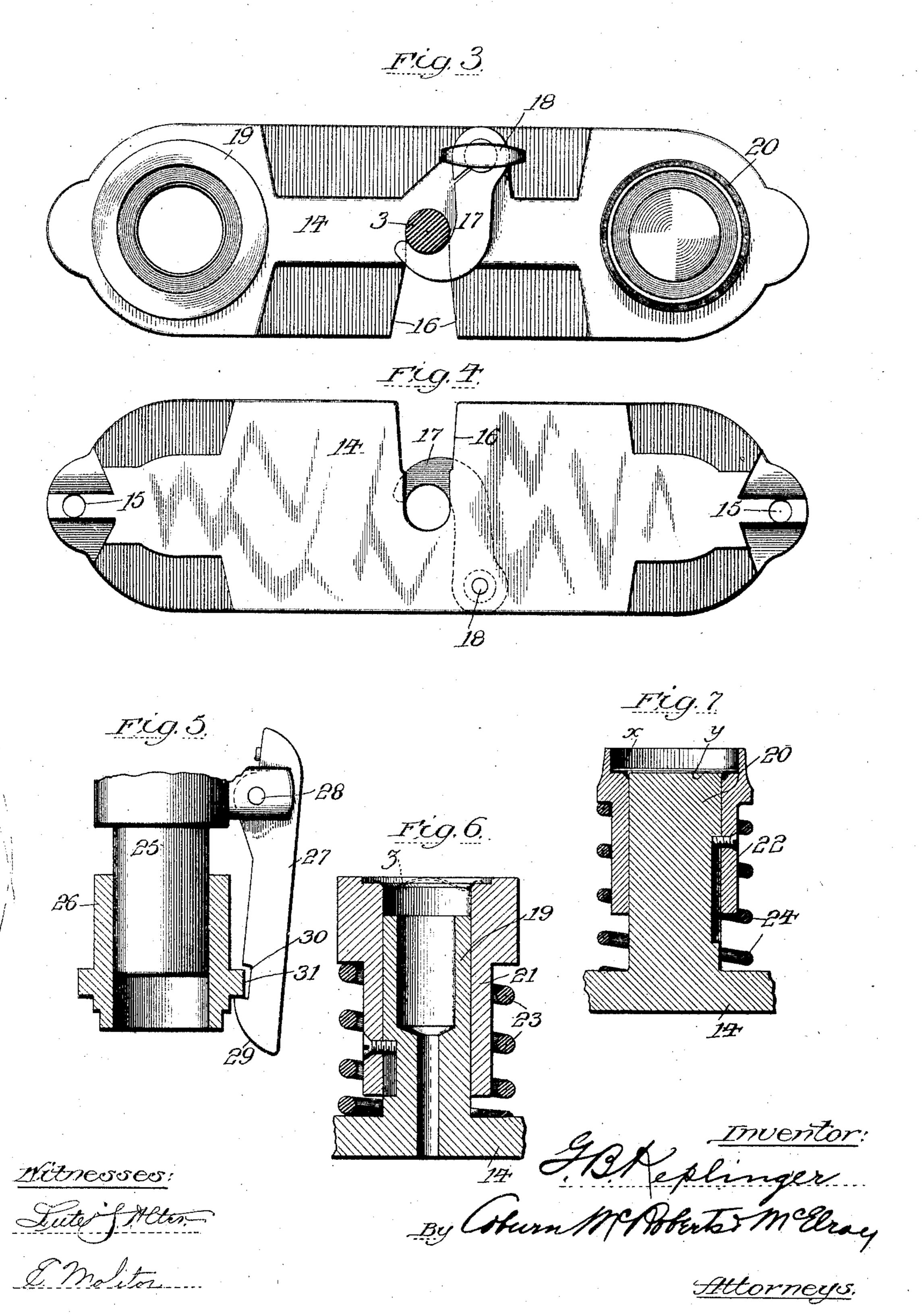
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2 SHEETS-SHEET 2.



United States Patent Office.

GEORGE B. KEPLINGER, OF CHICAGO, ILLINOIS.

PRESS.

SPECIFICATION forming part of Letters Patent No. 776,597, dated December 6, 1904.

Application filed September 13, 1902. Serial No. 123,285. (No model.)

To all whom it may concern:

Be it known that I, George B. Keplinger, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Presses, of which the following is a specification.

My invention relates to presses, and especially to that class of presses generally known as "button-presses" and designed for use in making medallions, campaign-buttons, photo-

jewelry, pocket-mirrors, &c.

The main object of my invention

The main object of my invention is to provide a press of this type having means for readily and easily interchanging the dies and

having a revolving dial-plate.

In the accompanying drawings, forming a part of this specification, Figure 1 is a side elevation of a form of press embodying my invention. Fig. 2 is a detail top plan view of the base with the posts of the frame in section and the dial-plate removed. Fig. 3 is a top plan view of the dial-plate. Fig. 4 is a bottom plan view of the dial-plate. Fig. 5 is a sectional view of one of the dies of the dial-plate, and Fig. 7 is a sectional view of the other die of the dial-plate.

In the drawings the reference-numeral 1 in-30 dicates a base of suitable size and shape having a projecting ledge at one end and adapted to be secured to a work table or bench in any suitable manner. The base is provided with a pair of uprights or posts 2 and 3, compris-35 ing a frame united at the top by a cross-piece 4 and upon which the plunger-carrier 5 reciprocates. The cross-piece 4 is provided with a pair of inturned ears 6, between which a swinging lever 7 is pivoted by means of a lateral 40 lug 8. The lever 7 is provided with a handle 9, which preferably is removable by means of a set-screw 10. The lever is connected to the carrier 5 by means of link connections 11, whereby when the handle is moved in the di-45 rection of the arrow of Fig. 1 the carrier will be lowered. The offset lug of the lever 7 provides an arrangement of parts constituting a toggle-lever to reciprocate the carrier, the handle moving in the direction of the arrow

50 in Fig. 1 to depress the plunger. The base is

provided with a spring-pressed pin 13, which is beveled in one direction, whereby the dialplate 14 may pass over the pin when swung in one direction of its movement and will be locked or stopped in the opposite direction. 55 For this purpose the revolving dial-plate is provided in its under face with recesses 15, with which the stop 13 registers when the plate is in proper position to bring one of its dies into alinement with the plunger. It is 60 understood that there is a recess coacting with the stop for each die employed. The plate is beveled, as at 12, at each recess to cooperate with the bevel of the pin. The dial-plate is provided with a plurality of dies and is adapt- 55 ed to be revolved to bring the dies successively in operative relation to the plunger. As shown in the drawings, the plate is of sufficient size to revolve about one of the uprights and bring the dies at its ends to the line of the plunger. For 70 purpose of interchanging the dies the plate is provided with a readily-detachable connection to the upright. The plate is provided with a laterally-opening slot 16, which straddles one of the uprights, so that it may be slipped on 75 and off the base, and it is locked in operative revolving position by means of a curved finger 17, which is pivoted to the top of the plate and is operated by a thumb-piece 18, taking under an enlargement 3' on the post 3. The 80 plate is provided at each end with a suitable die. In the formshown each die is composed of a post 19 and 20, respectively, and sliding sleeves 21 and 22, respectively. The lost motion of these sleeves is taken up by spiral 35 springs 23 and 24, which hold the sleeves in position, as shown in the drawings. The plunger 25 is provided with a sliding collar 26, which is removably held upon the plunger 25 by means of a catch, consisting of a le- 90 ver 27, pivoted at 28 upon the plunger and held in operative relation to the collar by means of a spring 28'. The lever is provided at its lower end with a beveled edge 29, and above the beveled portion it has a recess 30, 95 that engages a rim 31 on the collar.

It is apparent that a plurality of dies may be carried by the dial-plate and that they are presented successively in alinement with the plunger, which makes a direct straight-line 100

stroke, so that the parts or bearings are in perfect register. The dies on the dial-plate may be employed each for a complete operation, or they may be arranged so that a part 5 of the operation is carried out upon one of them and completed upon another, and they may be of any desired form and shape, according to the character of the work in hand. In the form of apparatus illustrated I have 10 shown dies for making a rimless button, as a campaign-badge or photo-button. In using the device for this purpose the shell and print are assembled as represented at x and y in Fig. 7 and the dial-plate is rotated to bring them in this position below the plunger, which is then depressed. By this operation they are united, and their edges are flanged by the collar 26 traveling down over the upper end of the post 20, and the shell and print remain 20 in the sleeve of the plunger when it rises. While this operation is progressing, a collet or back z is placed in the other die of the dialplate, which is then turned to register the second die with the plunger. The descent of 25 the plunger now causes the flanges of the shell and print to be turned in about the collet or back to assemble the several parts in a completed state. The beveled end of the catch 27 engages the sleeve 21, which is larger 30 than the other sleeve, and releases the connections between the plunger and its collar to allow the plunger to make the latter part of its stroke independently of the collar. When the plunger again rises, the spring 28 causes 35 the catch 27 to reëngage the sleeve 22.

It is obvious that the plunger may be of any form and may be operated by any suitable means. The dial-plate may be pivoted in any suitable manner, and any form of de-40 tachable connection may be employed.

Having described my invention, I claim—

1. In a press, a base, a plunger, a post, a detachable dial-plate revolubly mounted on the post and provided with a plurality of dies mov-45 able successively into alinement with the plunger, and a catch for holding the dial-plate in engagement with the post but permitting the plate to turn freely.

2. In a press, a base, a post on the base, a 50 plunger, a detachable revolubly-mounted dialplate having an open slot to receive the post and provided with a plurality of dies movable successively into alinement with the plunger, and a catch on the plate to engage the post.

3. In a press, a base, a post on the base, a plunger, a detachable revolubly-mounted dial-

plate having an open slot to receive the post and provided with a plurality of dies movable successively into alinement with the plunger, and a curved finger pivoted on the plate and 60 adapted to engage the post.

4. In a press, a base, a pair of uprights on the base, a plunger-carrier reciprocating on the uprights, a revolving dial-plate, and a manually-operated catch for detachably connect- 65 ing the dial-plate to one of the uprights.

5. In a press, a base, a pair of uprights on the base, a plunger-carrier reciprocating on the uprights, a dial-plate having an open slot to receive one of the uprights, and a curved 7° finger pivoted on the plate and adapted to engage the upright in the slot.

6. In a press, a base, a pair of uprights on the base, a plunger-carrier reciprocating on the uprights, a dial-plate having an open slot 75 to receive one of the uprights, a curved finger pivoted on the plate and adapted to engage the upright in the slot, and a beveled stop on the base to engage the plate.

7. In a press, a base, a pair of posts on the 80 base, a cross-piece for the posts, a plungercarrier traveling on the posts, a toggle-lever between the cross-piece and carrier, means to operate the lever, a revolving dial-plate detachably connected to one of the uprights, 85 and means for holding the dial-plate against movement.

8. In a press, a base, a pair of posts on the base, a cross-piece at the tops of the posts, a plunger-carrier sliding on the posts, a lever 90 having a lateral lug engaging a pivot on the cross-piece, a link connection from the lever to the carrier, and a removable handle on the lever.

9. In a press, a base, a pair of posts mounted 95 on the base, a plunger sliding on the posts, a collar on the plunger, a beveled spring-pressed catch on the plunger engaging the collar, a dial-plate having an open slot to receive one of the posts, a curved finger on the plate to 100 engage the post in the slot, a plurality of dies on the plate, each die consisting of a post and a spring-pressed sleeve, one of the sleeves engaging the bevel of the catch when the plunger is depressed to unlatch the collar.

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

GEORGE B. KEPLINGER.

Witnesses:

GEORGE R. HARBAUGH, R. K. Gustafson.