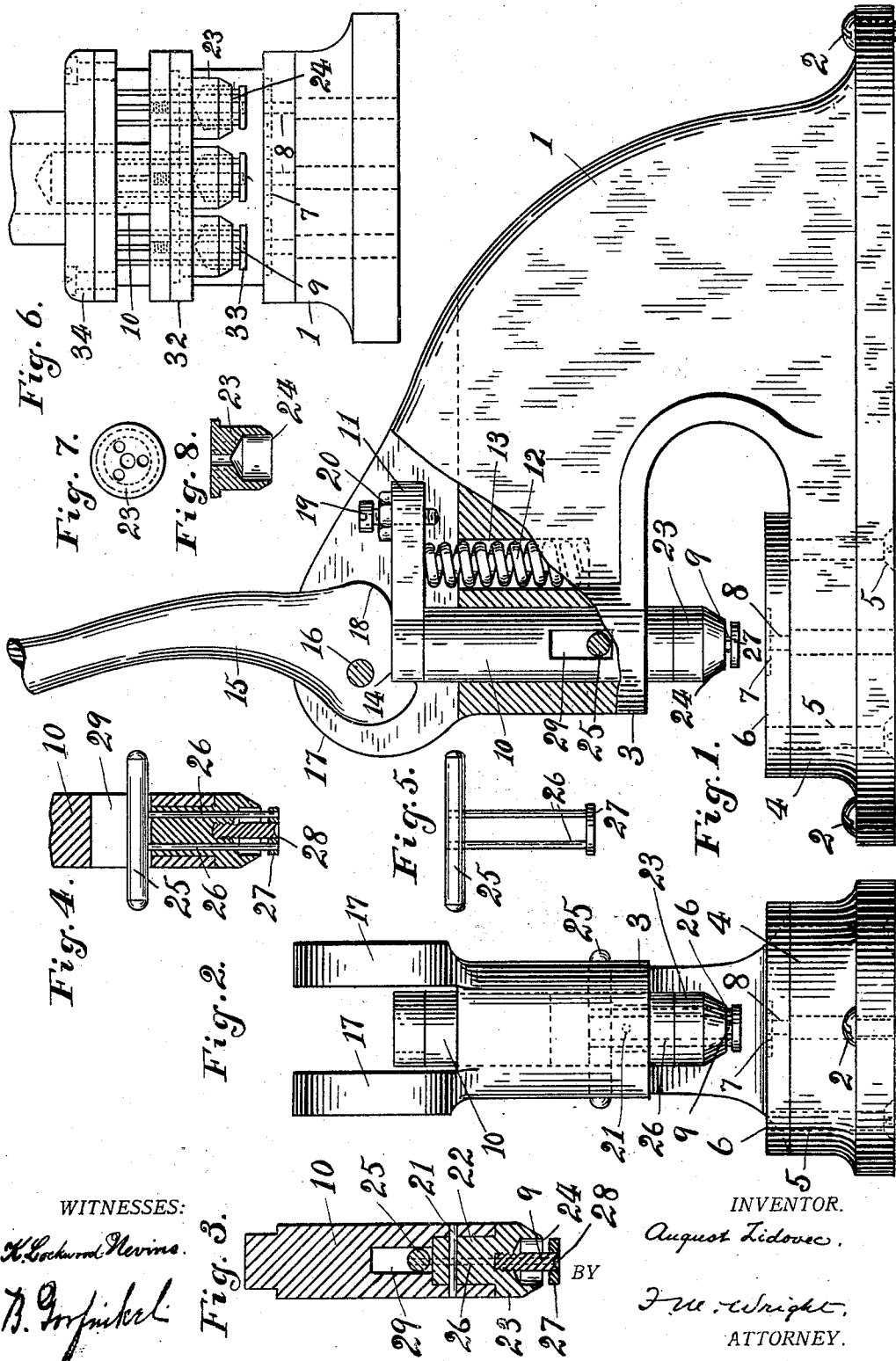


No. 842,603.

PATENTED JAN. 29, 1907.

A. ZIDOVEC.  
STAMPING PRESS.  
APPLICATION FILED FEB. 20, 1906.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

AUGUST ZIDOVEC, OF SAN FRANCISCO, CALIFORNIA.

## STAMPING-PRESS.

No. 842,603.

Specification of Letters Patent.

Patented Jan. 29, 1907.

Application filed February 20, 1906. Serial No. 302,032.

*To all whom it may concern:*

Be it known that I, AUGUST ZIDOVEC, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Stamping-Presses, of which the following is a specification.

This invention relates to presses for cutting out washers, the object of the invention being to provide an apparatus for this purpose which shall be simple in construction, so that it can be sold at a low price, and which cannot easily get out of order, thus enabling any person who uses a large number of washers to conveniently and cheaply make his own washers.

A further object of the invention is to provide an apparatus by which various sizes of washers or of the apertures in the washers can be formed.

In the accompanying drawings, Figure 1 is a broken side view of the press. Fig. 2 is an end view thereof, the handle being removed. Fig. 3 is a vertical section of the punch-head. Fig. 4 is a section thereof at right angles to Fig. 3. Fig. 5 is a front view of the stripper. Fig. 6 is a broken end view of a modification in which three cutters are used at one time at each operation of the press, thus cutting three washers at a time. Fig. 7 is a plan view, and Fig. 8 a section of the cutter used in said modification.

Referring to the drawings, 1 represents the body of the press, secured by screws 2 to any desired base. Said body is of the form commonly used in seal-presses or the like, having the upper and lower jaws 3 4, there being secured upon the lower jaw by screws 5 a circular die-plate 6. Said die-plate has formed therein an annular recess 7 opposite to the circular edge of the cutter and filled with any suitable soft metal which will not impair by impact the sharpness of the cutting edge. It also has a central aperture 8 to receive the punch 9, which forms the hole in the washer.

In the upper jaw 3 slides the head 10 of the punch, having secured to the top thereof by rivets or formed in one piece, if desired, a rearward extension 11, against which presses upward a coiled spring 12 in a socket 13 in the body of the press. Said spring presses the punch-head against the angular end 14 of the handle 15 of the press, fulcrumed at 16 between the walls 17 of the body, said handle having a rounded corner 18, acting on the top

of the punch-head as a cam when the handle is brought down against the pressure of the spring and causing the punch to descend. This descent is limited by the abutment 60 against the body of the press between the two walls 17 thereof of a screw 19 in the extension 11, which can be adjusted by screwing through the extension and there locked by a nut 20, thus causing a variation in the limit of movement of the punch-head. 65

In the lower end of the punch-head is formed a circular socket in which is secured, by means of a cross-pin 21, the stem 22 of the cutter 23, said cutter being formed with a circular cutting edge 24. Secured transversely in the upper jaw 3 is a cross-bar 25, into which are driven the vertical stripper-rods 26, secured at their lower ends to a stripper-disk 27, centrally apertured, as shown at 28. The punch-head is formed with a slot 29, through which the cross-bar passes, said slot permitting the punch-head to move vertically, while the cross-bar remains stationary. For a similar reason the cutter is formed with vertical guideways for the stripper-rods 26, so that when the punch-head is depressed the cutter slides vertically on said rods. The stripper-disk is of proper size to permit the cutting edge 24 to pass over the edge of the same. 85

The operation is therefore as follows: The material from which the washer is to be formed having been laid upon the die-plate, the handle is depressed, forcing the cam 18 down against the spring, the cutter edge passing around the stripper-disk, so that said latter disk is received within the recess in the cutter. At the same time the punch 9 is descending in advance of the cutting edge and is the first to touch the material and descends therethrough into the hole 8, provided for that purpose in the die-plate. Immediately thereafter the cutting edge descends upon the material and cuts out the circular washer. Upon the return of the punch-head if the washer is carried up by adhesion to the punch or by being received within the cavity of the cutter it is stripped therefrom when it arrives at the stripper-disk. 100

It will readily be seen that various sizes of washers can be cut by removing the cutter and punch and replacing them by others of different size. It will also be seen that this press is simple in construction, not liable to get out of order, and permitting persons 110

using a large number of washers to make their own washers.

In the modification shown in Figs. 6, 7, and 8 three cutters are used, which are secured to the block 32, carried by the punch-head, three strippers 33 being also used and secured to the upper jaw 34.

I claim—

1. A press of the character described, comprising a lower jaw, a die-plate thereon, an upper jaw, a punch-head sliding vertically therein, a punch carried thereby, means for reciprocating the punch-head, a stripper-rod extending parallel with and in proximity to the punch, and a cross-bar engaging the upper end of the stripper-rod, the punch-head and the upper jaw being transversely apertured to receive the cross-bar, the aperture through the punch-head being of greater vertical dimension than through the upper jaw, substantially as described.

2. A press of the character described, comprising a lower jaw, a die-plate thereon, an upper jaw, a punch-head sliding vertically therein, a punch carried thereby, means for reciprocating the punch-head, stripper-rods extending parallel with and in proximity to the punch, and a cross-bar engaging the upper ends of the stripper-rods, the punch-head and the upper jaw being transversely apertured to receive the cross-bar, the aperture through the punch-head being of greater vertical dimension than through the upper jaw, substantially as described.

3. A press of the character described, comprising a lower jaw, a die-plate thereon, an upper jaw, a punch-head sliding vertically therein, a cutter and a punch carried thereby, means for reciprocating the punch-head, a stripper-rod extending parallel with and in

proximity to the punch, and a cross-bar engaging the upper end of the stripper-rod, the punch-head and upper jaw being transversely apertured to receive the cross-bar, the aperture through the punch-head being of greater vertical dimension than through the upper jaw, substantially as described.

4. A press comprising a lower jaw, a die-plate thereon having an annular recess and soft metal therein, an upper jaw, a punch-head sliding therein, a spring pressing said punch-head upward, a handle pivoted between walls of the press having a rounded corner engaging the top of the punch-head, a stripper-disk, a cross-bar, stripper-rods secured to said stripper-disk and cross-bar, the punch sliding in said stripper-rods and slotted to pass over the cross-bar securing the stripper-disk to the upper jaw, substantially as described.

5. A press comprising a body having upper and lower jaws, the latter having a die-plate and a central recess with a soft-metal filling, a punch-head sliding vertically in the upper jaw, a cross-bar secured to the upper jaw, stripper-rods secured to and depending from said cross-bar, a stripper-disk secured to the lower ends of said stripper-rods and having a central aperture, a cutter secured to said punch-head, and a punch secured in the center of said punch-head, the punch-head being slotted transversely to pass over the cross-bar, substantially as described.

In witness whereof I have hereunto set my hand in the presence of two subscribing witnesses.

AUGUST ZIDOVEC.

Witnesses:

ANNIE PETERSON,  
BESSIE GORFINKEL.