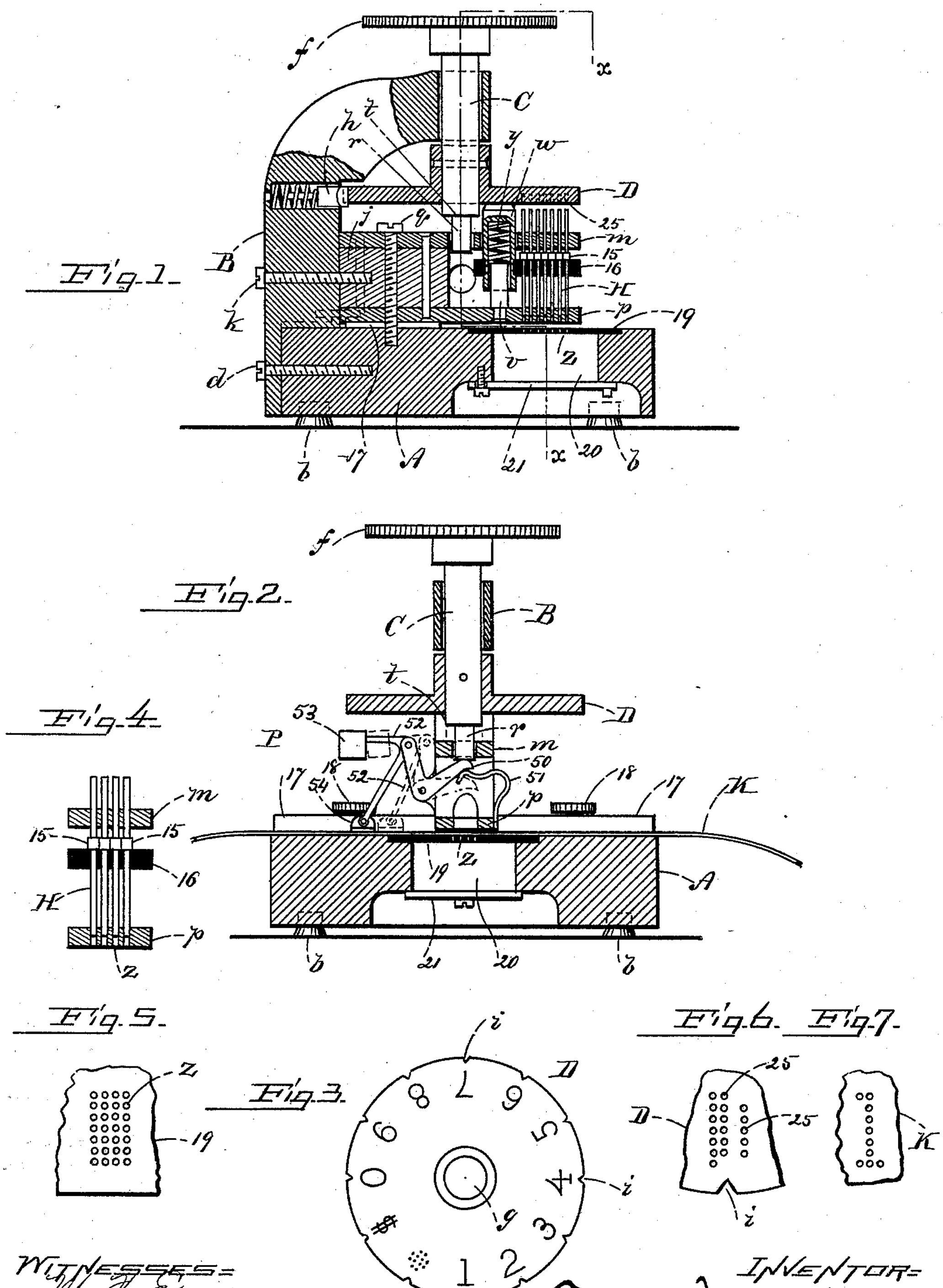
(No Model.)

F. M. CLARK.

CHECK PUNCH.

No. 422,728. Patented Mar. 4, 1890.



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CHECK-PUNCH.

SPECIFICATION forming part of Letters Patent No. 422,728, dated March 4, 1890.

Application filed November 7, 1889. Serial No. 329,523. (No model.)

To all whom it may concern:

Be it known that I, FRANK M. CLARK, of Tilton, in the county of Belknap, State of New Hampshire, have invented certain new and useful Improvements in Check-Punches, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical longitudinal section of my improved check-punch; Fig. 2, a vertical transverse section taken on line *x x* in Fig. 1; Fig. 3, a plan view of the indicator-disk removed; Fig. 4, a sectional elevation of the cutting-dies; Fig. 5, a sectional plan view of the bed-die; Fig. 6, an under side plan view of a portion of the indicator-disk, showing indentations therein arranged to form the numeral 1; and Fig. 7, a plan showing the numeral as punched in the check.

Like letters and figures of reference indicate corresponding parts in the different figures of the drawings.

My invention relates to a device for perforating the body of a bank-check with numerals indicative of the amount for which the check is drawn; and it consists in certain novel features hereinafter fully set forth and claimed, the object being to produce a simpler, cheaper, and more effective device of this character than is now in ordinary use.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanations.

In the drawings, A represents the body of the punch, which consists of a disk or bed-plate supported on rubber cushions *b*. A vertically-arranged curved standard B is secured to the rear of the base A by a screw-bolt *d*, its top projecting outward over the vertical center of said base. A plunger C is fitted to slide vertically and rotate in the outer end of the arm B, and is provided on its upper end with a milled actuating-disk *f*.

The indicator-disk D has a central opening *g*, surrounded by a hub, by which it is secured in a horizontal position to the lower end of the plunger below the arm B. Said disk is provided in its periphery with twelve equidistant notches *i*, in which a spring-cushioned pawl *h* takes to prevent said disk from accidentally rotating while the plunger is being depressed. On the upper face of the disk opposite the notches the ten numerals are arranged consecutively, and opposite the remaining two notches the symbol indicating dollars and a device indicating a blank or period are respectively disposed. A horizontally-arranged block *j* is secured to the standard B above the base A by a screw-bolt *k*. Two parallel plates *m p* are riveted, respectively, to the upper and lower faces of said block, and a screw-bolt *q* passes vertically through said plates and block into the base A. The plate *p* is parallel with the upper face of the base A, but not in contact therewith. The lower end of the plunger is reduced at *r* and slides in a suitable opening in the plate *m*, the shoulder thus formed being adapted to engage said plate and act as a stop for preventing the plunger from being depressed too far. A vertical stud *v* is secured on the plate *p*, and a cap *w* is fitted to slide vertically thereon. The cap rests on a coiled spring *y*, disposed on the stud, and projects upward through an eccentric opening in the plate *m* into engagement with the lower face of the indicator-disk, serving as an elastic cushion for returning the plunger when depressed. In the outer ends of the plates *m p* a series of twenty-eight holes *z* are formed, arranged in a rectangle, as shown in Fig. 5.

A series of twenty-eight pins H are fitted to slide vertically in the holes *z* of the plates *m p*, said pins forming the cutting-die, which is actuated by contact with the disk D when the plunger is depressed. The pins pass through suitable openings in a horizontal plate 16, secured to the spring-cap *w*, and are each provided with a shoulder 15, engaging the upper face of said plate, whereby they are returned after having been depressed by the indicator-disk. A horizontally-adjustable guide-plate 17 for the check is secured to the face of the body A by thumb-screws 18 at each side of the standard B. A horizontally-arranged plate 19 is secured in the base A across the top of an opening 20 in said base,

said plate having pin-holes *z* in alignment with those of the plates *m p* and forming the bed-die of the punch. A pivoted lid 21 closes the bottom of the opening 20, which forms a chamber for receiving the pieces of paper punched from the check by the pins.

The inner face of the disk is provided with openings 25 below each numeral for receiving the tops of a determined number of the pins H and render them inoperative. The tops of the remainder of the group of pins come into direct contact with the face of the disk when depressed, and are driven thereby downward through the check into the pin-holes in the plate 19. The perforations thus made in the check form a line indicating the numeral on the disk which is above the pins when the disk is actuated.

The check K in the use of my improvement is inserted below the plate *p* until it meets the guides 17. The disk D is then rotated until the numeral thereon with which it is desired to perforate the check is over the pins H, as shown in Fig. 7. The numeral 1 is taken for illustration. A sufficient number of perforations 25 are formed in the disk below said numeral to receive the upper ends of all the group of pins H, excepting such as are required to form the numeral 1, as shown in Fig. 6. The plunger being depressed, these pins are driven thereby through the check into the corresponding holes *z* in the bed-die 19.

A feed mechanism P for the check consists of a bell-crank lever 50, pivoted to the block *j*, one arm thereof projecting into the path of the plunger. A spring 51 holds said arm in engagement with the lower end of said plunger. A similar lever 52 is pivoted centrally to the outer arm of the lever 50, and is provided on its upper arm with a counter-balance 53, its opposite arm being provided with a pivoted shoe 54, having a corrugated or flexible face adapted to engage the face of the check. As the plunger is depressed the lever 50 is actuated and the companion lever 52 drawn thereby into the position shown by dotted lines in Fig. 2. The plunger being returned by the spring-cap *w*, the spring 51 forces said levers outward and downward, and the shoe 54, being in contact with the check, clamps it against the base A, causing it to slide thereon a determined distance to take the numeral already formed therein from under the pins, so that a succeeding numeral of the number desired may be punched. When the plunger is depressed, a lifting action is exerted on the counterbalanced lever and the shoe slides over the check without clamping and moving it.

Having thus explained my invention, what I claim is—

1. The combination of a bed-plate or body provided with a bed-die, a standard attached thereto, a block secured to said standard above said bed-die, fixed plates secured to said block, each of said plates being provided with a group of perforations in alignment with the perforations in the other plate, and the upper plate having a central aperture and an eccentric aperture, a spring-cushioned cap on said stud extending through said eccentric aperture, a movable plate attached to said cap and provided with a group of holes in alignment with the holes in said fixed plates, a number of pins disposed in the holes of the plates, each of said pins being provided with a shoulder above said movable plate, a plunger guided in said standard, provided with a reduced lower end which enters the central opening of the upper fixed plate, an indicator-disk on said plunger provided with groups of perforations in its lower face for engaging said pins, said indicator-disk being engaged by said spring-cushioned cap for raising it, and a check-pawl engaging said disk.

2. In a check-punch, the combination of a bed provided with a bed-die, a standard attached to said bed, a plunger guided in said standard and terminating above said bed-die, perforating devices actuated by said plunger, a bell-crank lever pivoted to said standard above the bed-die and having one arm extended under the lower end of said plunger, a plate-spring attached to said standard and having its upper free end engaging said arm, a counterbalance-lever pivoted to the upper arm of said bell-crank lever, and a feed-shoe hinged to the lower end of said counterbalanced lever.

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