(No Model.)

J. C. ROBINSON.

CHECK PUNCH.

No. 528,280. Patented Oct. 30, 1894.

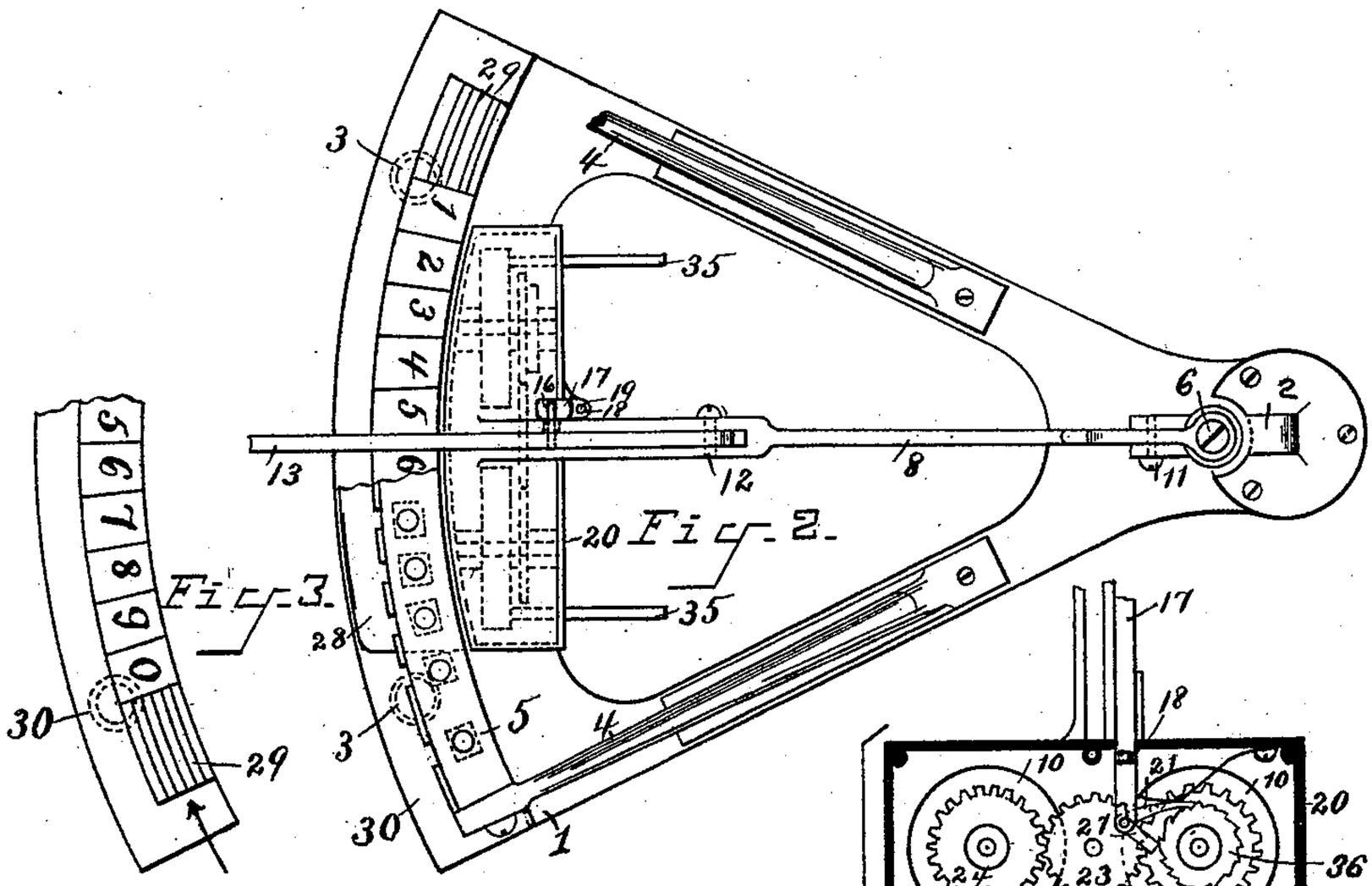

Fig. 2.

Fig. 3.

Fig. 4.

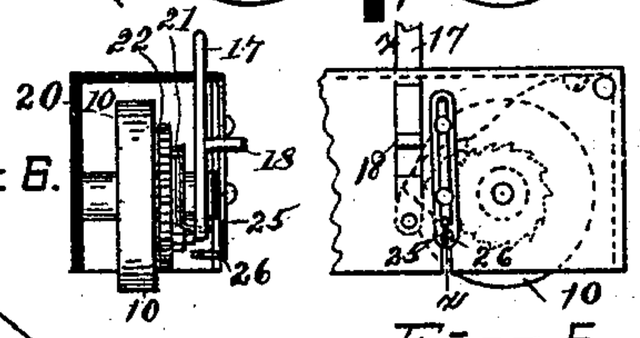

Fig. 6.

Fig. 5.

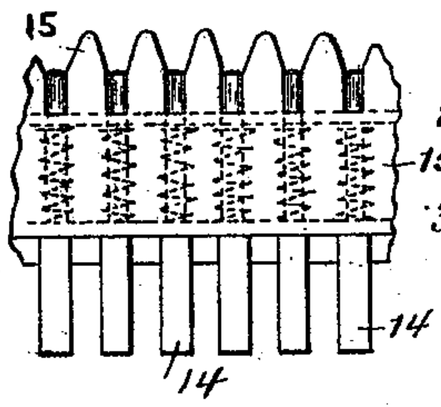

Fig. 7.

Fig. 1.

WITNESSES:

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JOHN CLARK ROBINSON, OF BROOKLYN, NEW YORK.

CHECK-PUNCH.

SPECIFICATION forming part of Letters Patent No. 528,280, dated October 30, 1894.

Application filed May 29, 1893. Serial No. 475,815. (No model.)

To all whom it may concern:

Be it known that I, JOHN CLARK ROBINSON, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented a certain new and useful Improved Check-Punch, of which the following is a specification.

My invention relates to machines for indelibly impressing, marking or cutting checks, drafts, or other monetary instruments with figures representing their value, or other desired letters, figures, marks or characters, for the purpose of defeating any attempt at fraudulent alteration of such instruments, and particularly to that class of machines in which the said characters are embossed, and not merely perforated.

My invention consists in the various parts and combinations hereinafter described and pointed out in the claims.

Reference is to be had to the accompanying drawings, in which like numerals and letters indicate like parts, and in which—

Figure 1, is a side elevation; Fig. 2, a plan view; Fig. 3, a detail of a portion of the lower die or matrix plate; Fig. 4, an elevation of the feed wheels and operating pawl; Figs. 5 and 6, detail views of the feeding devices the latter being a section on line *x*, *x*, of the former; Fig. 7, a view of part of the series of male dies and notched guide plate for the operating lever.

The base 1, of the machine is segment shaped, made of any suitable material, and carries at its rear end the standard 2. At its forward end are the standards 3 and 3, upon which the lower (matrix or female) die carrier 30, is supported, and about the middle of the sides are two curved standards 4, 4, which are connected by a bridge 5, carrying the upper or male dies 14.

The rear standard 2, overhangs at its top and in the overhanging portion of it is journaled the upper end of vertical shaft 6, the lower end of which is stepped into the base plate of the machine. The shaft 6, has rigidly connected to it two arms 7 and 8, directly in line one above the other and extending toward the front of the machine. The lower arm 7, carries at its end a case 31, in which are mounted the lower feed wheels 9, 9, and upon the upper arm 8, is a case 20, containing the upper feed wheels 10, 10, and their actuating devices. The paper to be embossed or perforated is supported between the feed wheels and upon the upper plate of case containing lower feed wheels and rods 35 extending rearwardly. The swinging arms afford a movable support by which the paper feeding and carrying devices may move along the series of punches together. The arm 8, is jointed at 11, to allow of lifting the upper off the lower feed wheels, and the introduction of the check or paper to be operated upon between the wheels.

Pivoted to arm 8, at 12, is an operating lever 13, by which the arms 7 and 8, may be swung from side to side to bring the lever over and the check between any desired male and female dies, and upon depressing which the male die immediately beneath is forced down and with its corresponding female die embosses or cuts the check with the figure or character carried by said dies. The lever 13, is guided so as to register with and descend accurately upon the tops of the dies 14, by means of a notched plate or comb 15, the teeth of which project vertically from the front edge of bridge 5. The shanks of the dies 14, pass through holes in upper and lower flanges of bridge 5, and the dies are returned to position, after being depressed, by springs surrounding them.

The feeding rollers are actuated as follows: The lever 13, carries a pin 16, working in a slot in arm 8, and resting upon the head of a rod or bolt 17, vertically movable through, and guided in a grooved standard 33, attached to the top of case 20. Rod 17, carries a lug 18, projecting through a guide slot in the rear wall of the case and perforated so that it may slide up and down on a vertical post 19, fixed in a flange on the bottom of the case, and surrounding this post is a spring upon which lug 18, rests. To the lower end of rod 17, is pivoted a pawl 21, which engages a ratchet wheel 36 fixed upon the shaft of one of the feed wheels 10. Rigid upon the same shaft is a cog wheel 22, which gears with a pinion 23, pivoted upon the rear wall of case 20, and this with a cog wheel 24, upon the shaft of the other feed wheel 10. Mounted upon the outside of the rear wall of case 20, and vertically adjustable by means of a slot,

and binding screws tapped into the case, is a piece 25, having a pin 26, the office of which is to engage the heel 27, of pawl 21, and so disengage the pawl from the ratchet at the proper point in the downward stroke of rod 17. The point at which this disengagement occurs is determined by the adjustment of piece 25.

At the end of the series of figure dies is a die (and matrix) indicated at 29, by which a series of parallel lines or other character may be embossed for the purpose of making an impression at each end of the line of embossed or cut figures and which will prevent their being made to indicate a different sum by addition of one or more figures.

A guide and clearing plate 28, is attached to the lower part of case 20.

Bars or rods 35, extend rearwardly for the purpose of supporting the check.

The machine is operated as follows:—The arm 8, is raised and the check introduced between the feed wheels. The lever 13, is then swung to the right or left carrying with it the arms 7 and 8 (the feeding devices and the check) until over the proper die. Upon being depressed it is guided onto the top of the die by the comb 15, and in its descent carries down with it rod 17, which by means of pawl 21 and the ratchet wheel and gearing turns both upper feed wheels in the same direction so as to feed the check held between them and the lower wheels the proper distance. Just before the embossing or cutting takes place the feed pawl is disengaged by pin 26, so that the check is held stationary while being impressed or punched. On releasing lever 13, spring 19′, throws up rod 17, and the pawl, and by means of pin 16, lever 13, also. The operation described is repeated until the desired figures or characters are impressed.

It will be noticed that in my improved check punch the feeding is done by the positive action of the lever under pressure imparted by the hand. In check punches as ordinarily constructed the feeding is done on the reverse movement of the lever by the operation of a spring which does not always act with certainty so that sometimes the paper may fail to feed and the check may be spoiled. In my device there can be no failure on this account.

The disengaging devices consisting of the pin that engages with the operating pawl insure the disconnection of the operating power from the feed wheel before the punch or die engages with the paper. This is a feature of great importance in my improved check punch and I do not desire to limit myself to any particular form of disengaging device as the invention consists broadly in operating the feed wheel on the downward movement of the actuating devices for the purpose of impressing or cutting the check and in disengaging the portion of the mechanism that operates the feed wheel before the paper or die engages with the paper, by any suitable mechanism.

The movable arm or guide R, forms a gage or stop for determining the distance to which the check shall be introduced. This arm is pivoted at its lower end friction tight and can be swung backward or forward according to the line in which it is desired to emboss or punch the check.

What I claim as my invention is—

1. The combination of a series of dies arranged in the arc of a circle, the swinging support pivoted at the rear of said dies and carrying at its opposite end an operating lever pivoted to said support, and paper carrying rolls and actuating devices therefor, substantially as described, supported on the lever end of the support over the series of dies.

2. The combination of a series of dies arranged in the arc of a circle, the swinging support pivoted at the rear of said dies and carrying at its opposite end a die actuating handle pivoted to said support, and paper carrying rolls and actuating devices therefor operated by said handle, substantially as described, supported on the handle end of the support, as and for the purpose described.

3. The combination of a series of dies arranged in an arc of a circle, a swinging support pivoted at the rear of said dies, an operating lever pivoted to said support, feed wheels carried by said support, a ratchet disk carried by one of said wheels, and a vertically actuated rod provided with a pawl for rotating said ratchet disk.

4. In a check punching apparatus, the combination with the dies and the operating handle therefor, of the feed wheels for the paper, a ratchet disk, a pawl operated by said handle for operating said disk, and a stop for disconnecting the pawl from the ratchet disk before the dies strike the paper.

5. In a check punching apparatus, the combination with the dies and the operating handle therefor, of the feed wheels for the paper, actuating devices therefor, substantially as described, operated by said handle on its downward movement, and a trip pin or projection in the path of said actuating devices for disengaging the same from the feed wheels before the dies strike the paper.

6. In a numbering and perforating machine, the combination of the arcuate series of dies and punches, the paper carrier, a swinging support therefor pivoted concentrically with respect to said arcuate series, and having its forward end moved directly in rear thereof, and a handle pivoted on said swinging support projecting forward and overhanging said punches.

7. In a check punch the combination with a segmental row of punches and corresponding dies, of a connected check support and feed roller carried by a suitable support mounted behind the row of punches, a single selecting and actuating lever connected with said support to move with the same, and mech-

anism for operating the feed roller from the selecting and actuating lever.

8. In a check punch the combination with a row of punches, of an upper clearing plate and feed roll carried together on a movable or swinging support adapted to be moved in a vertical plane, and mounted in turn on a movable or swinging support moved in a horizontal plane, and an actuating handle carried on said swinging support at the end thereof contiguous to the punches.

Signed at New York, in the county of New York and State of New York, this 26th day of May, A. D. 1893.

JOHN CLARK ROBINSON.

Witnesses:

AUSTIN J. ROBERTS,

WILLIAM J. JAMES.