(No Model.) 2 Sheets—Sheet 1.

G. L. BANKS.

CHECK PUNCH.

No. 449,993. Patented Apr. 7, 1891.

Fig. 1.

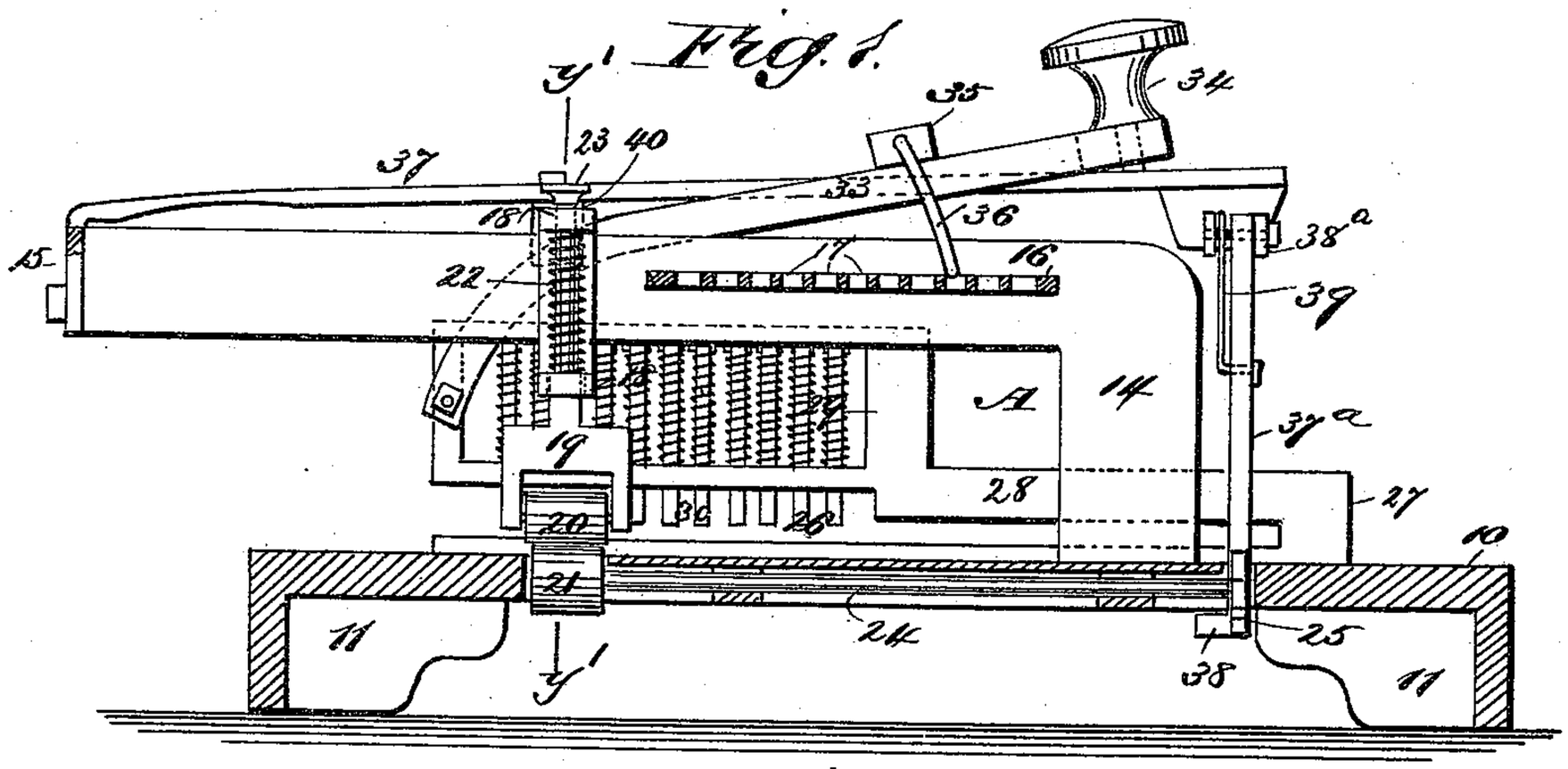


Fig. 2.

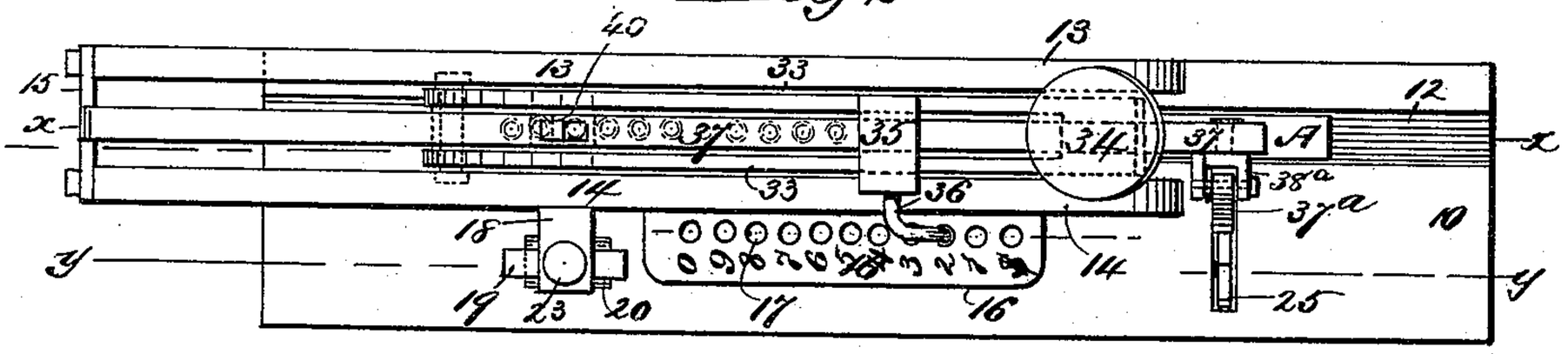
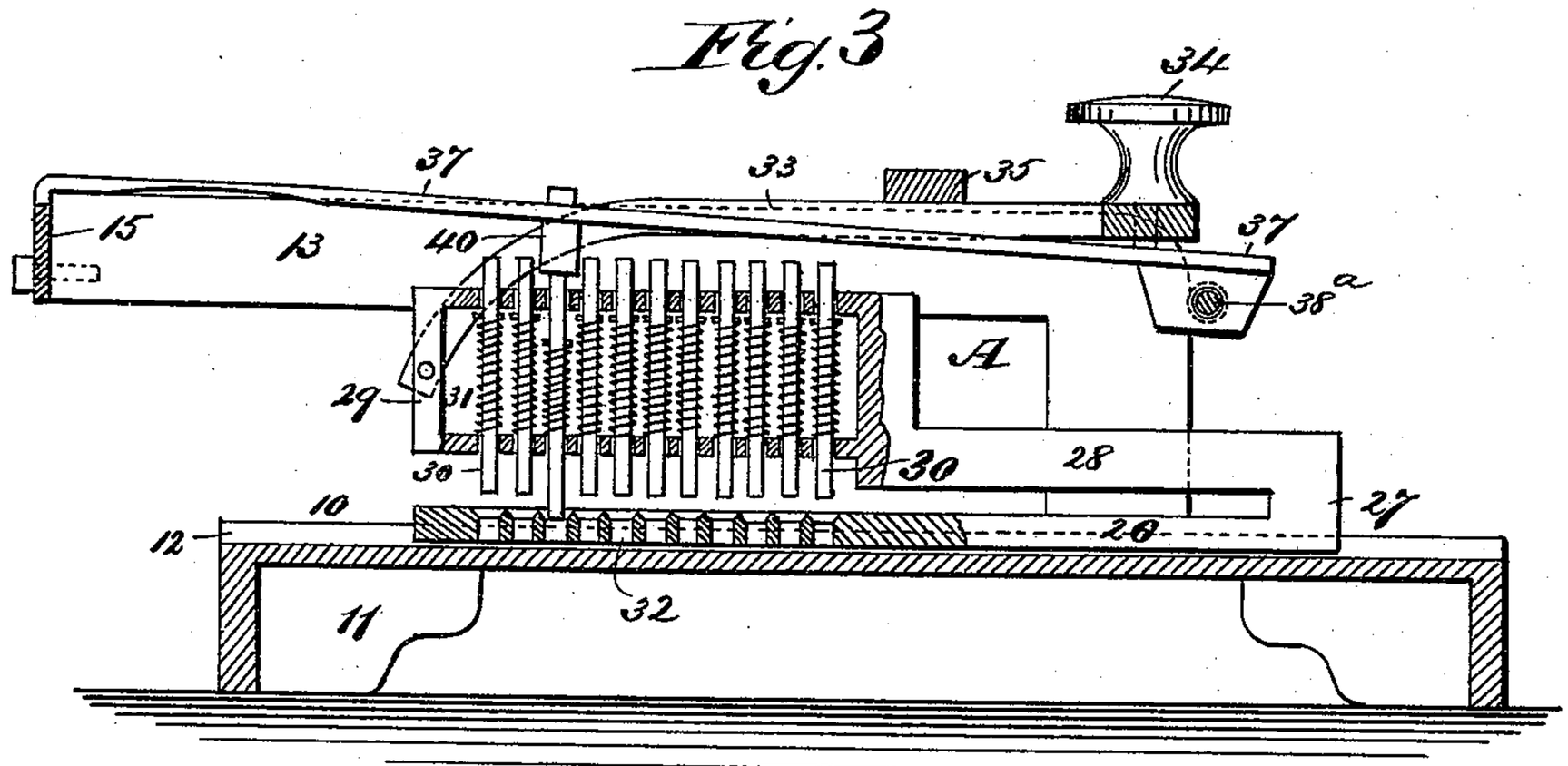


Fig. 3.



WITNESSES:

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C. Sedgwick

INVENTOR:

G. L. Banks

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(No Model.) 2 Sheets—Sheet 2.

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Fig. 4

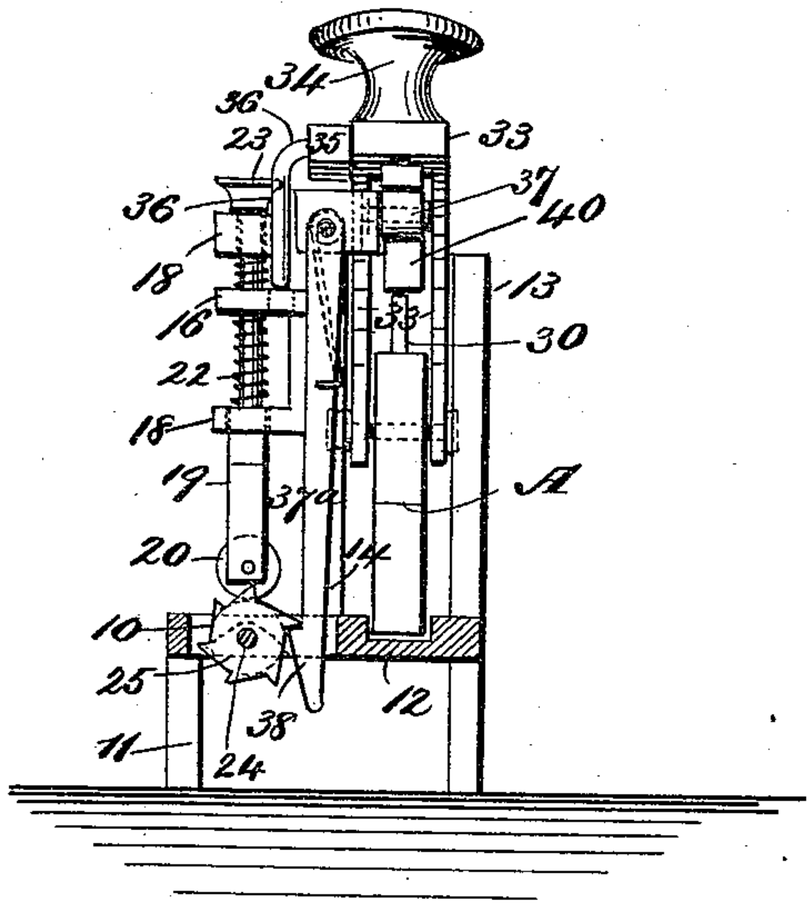
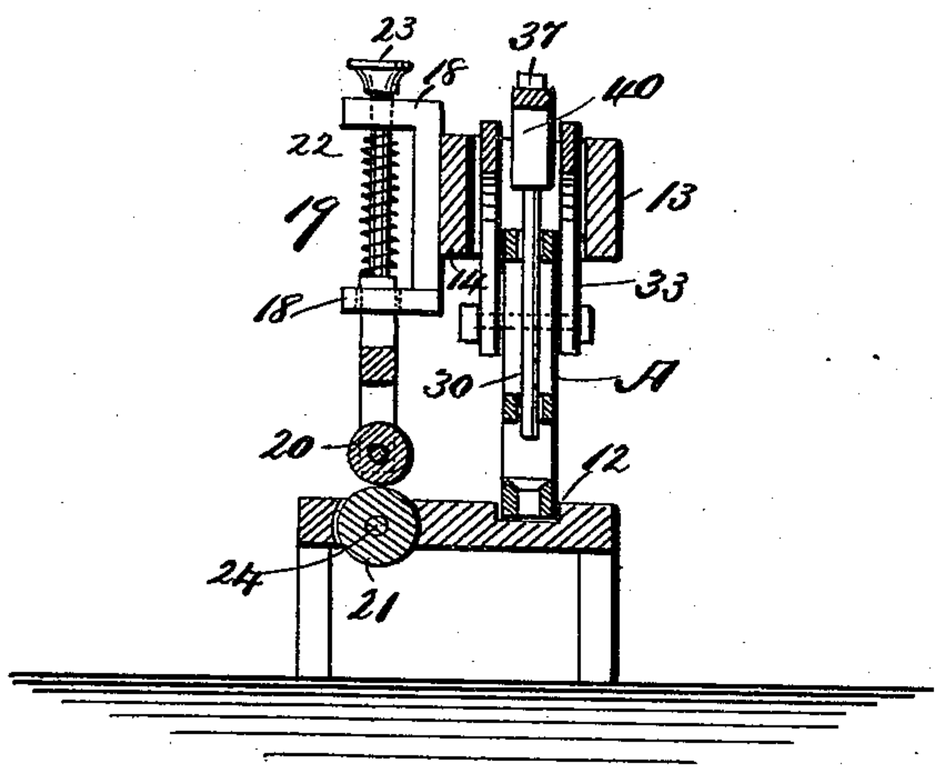


Fig. 5



WITNESSES:

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INVENTOR:

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UNITED STATES PATENT OFFICE.

GEORGE L. BANKS, OF FALL RIVER, ASSIGNOR OF THREE-FOURTHS TO WILLIAM E. CASE, JOHN Q. SMITH, BENJAMIN R. WAY, LUTHER T. WAY, ISAAC HUDSON, AND CHARLES FARWELL, ALL OF FREDONIA, KANSAS.

CHECK-PUNCH.

SPECIFICATION forming part of Letters Patent No. 449,993, dated April 7, 1891.

Application filed June 23, 1890. Serial No. 356,361. (No model.)

To all whom it may concern:

Be it known that I, GEORGE L. BANKS, of Fall River, in the county of Greenwood and State of Kansas, have invented a new and useful Improvement in Check-Punches, of which the following is a full, clear and exact description.

My invention relates to an improvement in check-punches, and has for its object to provide a device of simple and durable construction and capable of being conveniently manipulated to perforate a check with figures representing the amount of its face value.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the device, partly in section on the line *y y* in Fig. 2. Fig. 2 is a plan view of the device. Fig. 3 is a longitudinal section taken on the line *x x* in Fig. 2. Fig. 4 is a front end view of the device, a portion of the base being in transverse section; and Fig. 5 is a transverse section practically on line *y' y'* in Fig. 1.

The base 10 is provided at its ends with suitable legs 11, and in the upper face of the base, near one longitudinal side, a channel 12 is produced. To the upper surface of the base, nearer the front than the rear end, angle or L shaped arms 13 and 14 are secured, the said arms being arranged one at each side of the groove 12, and the lower ends of the vertical members only of the arms are secured to the base, the rear ends of the horizontal members of the arms being connected by a suitably-shaped plate 15, as is best shown in Fig. 2.

To the outer face of the horizontal member of the arm 14, near the junction of said member with the vertical member, a horizontal indicating-plate 16 is secured, which plate, if found desirable in practice, may form an integral portion of the arm.

The indicating-plate 16 is preferably provided with eleven longitudinally-arranged apertures 17; but a greater or less number of apertures may be employed if found desirable. Opposite each aperture a character or numeral is engraved, embossed, or otherwise formed upon the upper face of the plate, and when the plate is provided with eleven apertures the dollar-mark is arranged opposite one of the apertures, preferably that located at the forward end, and the numbers from 1 to 9 appear in proper order opposite the following apertures, and a cipher appears opposite the aperture at the rear end of the indicating-plate, as is best illustrated in Fig. 2.

Ears 18 are also formed upon the horizontal member of the arm 14, preferably near the rear end of the indicating-plate, and in the said ears a bracket-rod 19 is held to slide vertically, the lower end of which rod is bifurcated, and between the members of the said bifurcated end a friction-roller 20 is journaled, the longitudinal axis of the roller being parallel with the longitudinal axis of the base.

The roller 20 normally engages with the peripheral surface of a parallel roller 21, journaled in a suitable aperture in the base, as illustrated in Fig. 5. The two rollers are held in normal contact by a spring 22, which is coiled around the bracket-rod between a shoulder on the rod and the upper ear 18. The bracket-rod is further provided, preferably at its upper end, with a knob 23, whereby the rod may be conveniently drawn upward against the tension of the spring, disengaging thereby the friction-rollers 20 and 21.

The friction-roller 21 is not journaled directly to the walls of the opening in the base 10, in which it turns, but upon one end of a shaft 24, which shaft is journaled beneath the base and has attached to its forward end a ratchet-wheel 25, which is capable of revolving in the opening produced in the base to receive it, as is best shown in Figs. 1 and 2.

A gage-frame A is held to slide in the channel 12 of the base, and the said frame consists of a lower bar 26, which is adapted to enter the said channel, provided at its forward end with a vertical extension 27, to which by an

integral arm 28 a rectangular skeleton section 29 is attached or formed integral therewith, as best shown in Fig. 3. In the upper and lower horizontal bars of the rectangular section 29 of the gage-frame a series of vertically-aligning apertures is produced, and in each of the vertically-aligning apertures a punch 30 is held to slide. Each punch is controlled by a spring 31, coiled around it and held thereto at its upper end and having a bearing at its lower end against the lower bar of the said rectangular section.

The number of apertures in the rectangular section of the gage-frame corresponds to the number of apertures upon the indicating-plate, and the punches are provided at their lower ends with numbers or characters corresponding in sequence to the numbers and characters upon the indicating-plate.

The lower or base bar 26 of the gage-frame is provided with a series of vertical openings 32, which openings correspond in number with the openings or apertures in the section of the gage-frame above the bar and the apertures in the indicating-plate. The apertures in the base-bar of the gage-frame are, however, preferably made flaring at the upper face of the bar.

To the rear end of the punch-carrying section 29 of the gage-frame the lower ends of a bifurcated lever 33 are pivoted. This lever consists of two spaced bars curved at their rear ends from the gage-frame upwardly and connected at their forward ends, and at the forward connected ends of the lever a knob 34 is attached. The lever is of such length that its forward end will be located, practically, over the vertical members of the base-arms 13 and 14.

The members of the lever 33 at a point near the knob 34 are connected, preferably, by a cross-bar 35, and from one side of the lever a finger 36 is outwardly and downwardly extended, adapted to enter any one of the apertures in the indicating-plate that the operator may desire.

The rear end of a spring-bar 37 is securely fastened at or near the center of the plate 15, connecting the arms of the base, and the said spring-bar is made to extend forward between the members of the lever 33 beneath the bar 35, the forward end of said lever being beyond the front end of the arms. At one side of the front end of the spring-bar the upper extremity of a dog 37^a is pivoted in a fork 38^a, pivoted in the bar, the lower extremity of which dog is provided with a head 38, adapted to engage with the teeth of the ratchet-wheel 25, and the dog is normally held in contact with the ratchet-wheel through the medium of a spring 39, attached to the bar 37 and having a bearing against the dog between the base of the device and the said bar, as is illustrated best in Fig. 1. The bar 37 is further provided, preferably at a point opposite the bracket-rod 19, with a pressure-block 40, the said block being made to extend downward from the lower surface of the bar and adapted for engagement with the punches 30 when the device is operated.

In operation the friction-roller 20 is lifted, and the check is inserted between the said roller and the roller 21 beneath it. The friction-roller 20 is then permitted to engage with the check. The lever 33, attached to the gage-frame A, is then carried in the direction of the front until the finger 36 enters the aperture alongside of which the character "$" is produced, and when the finger enters the said aperture the punch bearing the character "$" will be brought immediately beneath the pressure-block 40 of the spring-bar 37, which pressure-block is immediately above the line of travel of the check. By pressing down upon the knob 34 of the lever the spring-bar 37 is depressed and its attached block 40 forces the punch down through the paper into the aperture 32 of the gage-frame immediately below it, thereby perforating or puncturing the dollar-mark upon the check. At the time that the spring-bar 37 is pressed downward the head of the dog 37^a is disengaged from the ratchet-wheel 25; but upon releasing the lever 33 the spring-bar returns to its normal position, elevating the punch and likewise the dog 37^a, whereupon the head of the said dog, engaging with the ratchet-wheel, turns the wheel one notch, revolving the shaft 24 and turning the friction-roller 21. This action causes the check to be automatically moved forward a sufficient distance to receive the first number of the amount to be perforated or punctured therein, and the said number will, when the finger 36 is made to enter the proper aperture in the indicating-plate, be perforated immediately opposite the character referred to. Thus any number of figures may be punched in the check, as each time that the finger 36 is made to enter an aperture in the indicating-plate and the lever 33 is pressed downward the downward action of the lever will cause the punch bearing the number corresponding to that upon the indicating-plate to punch the check, and the upward movement of the lever will carry the check farther inward.

It will be observed that the device is exceedingly simple and economical in construction and that the check is automatically fed forward in proper form to regularly receive the characters or numbers desired to be punched therein.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with the base having a longitudinally-extending vertically-yielding bar provided with a pressure-block, of a longitudinally-sliding frame provided with vertically-movable punches, and an overhanging lever pivoted to the sliding frame to slide it and having a cross bar or arm crossing and movable along the upper side of the yielding bar and adapted to depress the same and bring

the block into contact with any desired punch, substantially as described.

2. The combination, with the base having an overhanging longitudinally-extending arm provided along one side with an apertured indicating-plate and a vertically-yielding bar secured at one end of the frame-arm and provided with a pressure-block, of a longitudinally-sliding frame on the base alongside of said overhanging arm and having a longitudinally-extending series of vertically-movable punches adapted to be successively brought under the block for operation thereby, a lever mounted on the sliding frame and having a pin to enter said indicating-apertures, and a cross piece or arm movable along and crossing the upper side of the yielding bar, substantially as described.

3. In a machine of the character described, the combination, with a base provided with an extension, an indicating-plate attached to the base-extension and having a series of apertures produced therein, and a gage-frame held to slide upon the base and apertured to correspond to the apertures of the indicating-plate, of punches held to slide in the apertures of the frame, a spring-supported pressure-block adapted for engagement with the punches, a lever pivoted to the frame and adapted to coact with the spring-pressed pressure-block, and a finger projected from the lever, adapted for engagement with the indicating-plate, substantially as shown and described, and for the purpose specified.

4. In a device of the character described, the combination, with a base provided with an extension, an apertured-indicating-plate attached to the extension of the base, a gage-frame held to slide in the base and apertured to correspond to the apertures in the indicating-plate, and spring-pressed punches held to slide in the apertures of the frame, of a lever pivoted to the frame, a finger attached to the lever and adapted to enter the apertures of the indicating-plate, a spring-bar secured to the extension of the base and engaging with the under face of the lever, and a pressure-block secured to the spring-bar, substantially as and for the purpose specified.

5. In a device of the character described, the combination, with a base provided with an extension, an apertured indicating-plate attached to the extension of the base, a gage-frame held to slide in the base and apertured to correspond to the apertures in the indicating-plate, and spring-pressed punches held to slide in the apertures of the frame, of a lever pivoted to the frame, a finger attached to the lever and adapted to enter the apertures of the indicating-plate, a spring-bar secured to the extension of the frame and engaging with the under face of the lever, a pressure-block secured to the spring-bar, a feed mechanism, and a ratchet-connection between the feed mechanism and the spring-bar, substantially as specified.

6. In a device of the character described, the combination, with a base provided with an extension, an apertured indicating-plate secured to the extension of the base, a gage-frame held to slide upon the base, having apertures corresponding to the apertures of the indicating-plate, spring-pressed punches held to slide in the apertures of the frame, and a spring-controlled friction-roller, the bearings whereof are held to slide upon the base-extension, of a shaft journaled beneath the base, a friction-roller attached to the shaft and adapted for engagement with the upper roller and a ratchet-wheel also attached to the shaft, a bifurcated lever pivoted to the gage-frame and provided with an attached finger adapted to enter the apertures of the indicating-plate, a spring-bar secured at one end to the base-extension and engaging with the lever, a pressure-block secured to the spring-bar between its ends, and a dog pivoted to the front end of the spring-bar and adapted for engagement with the said ratchet-wheel, as and for the purpose specified.

GEORGE L. BANKS.

Witnesses:
T. B. JOHNSON,
S. T. EVEY.