(No Model.) 3 Sheets—Sheet 1.

C. W. WEISS & C. KRUSE.

AUTOMATIC CHECK MACHINE.

No. 313,699. Patented Mar. 10, 1885.

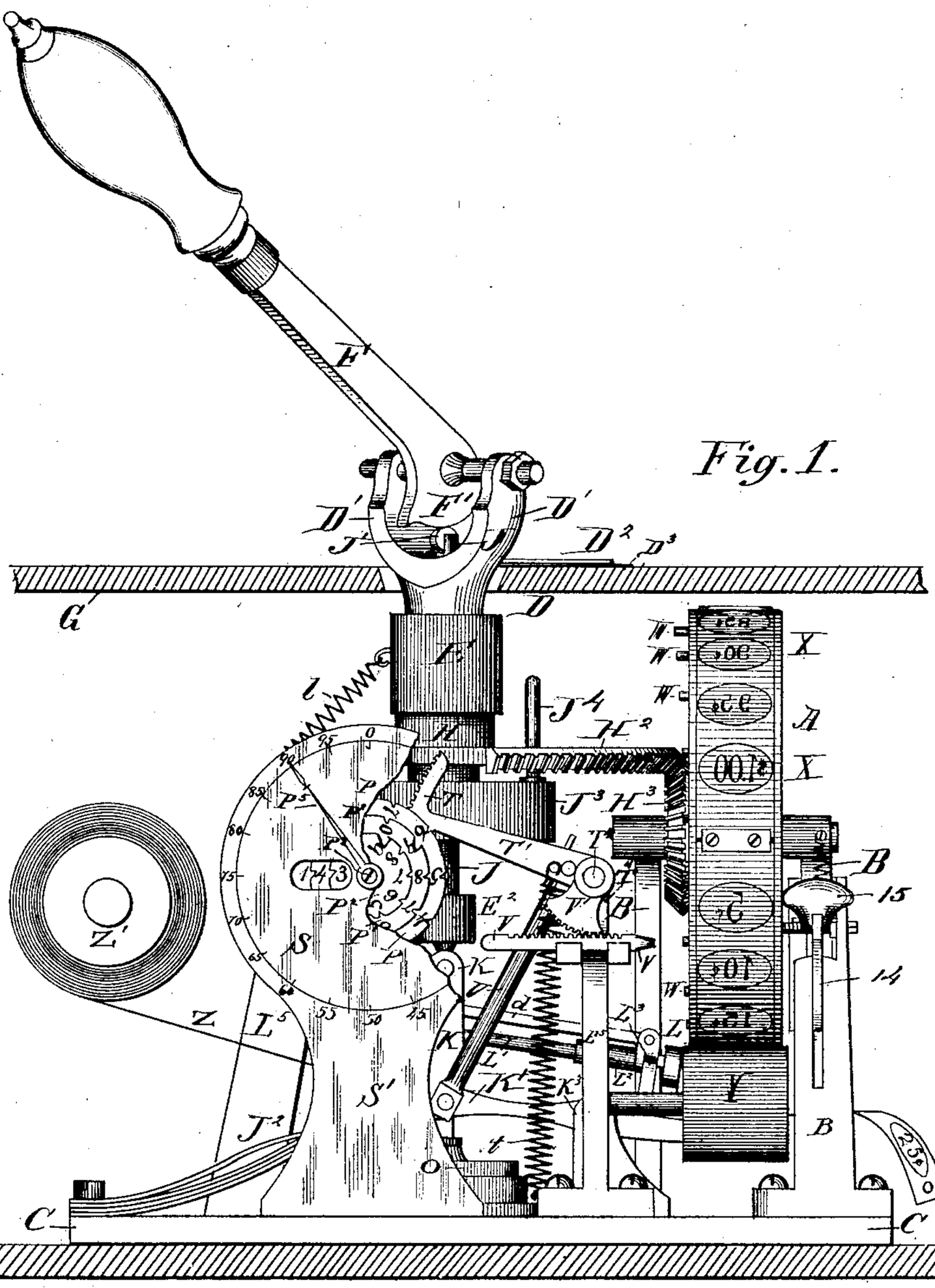

Fig. 1.

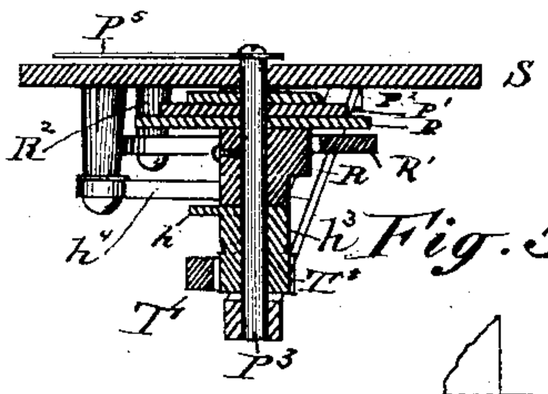

Fig. 5.

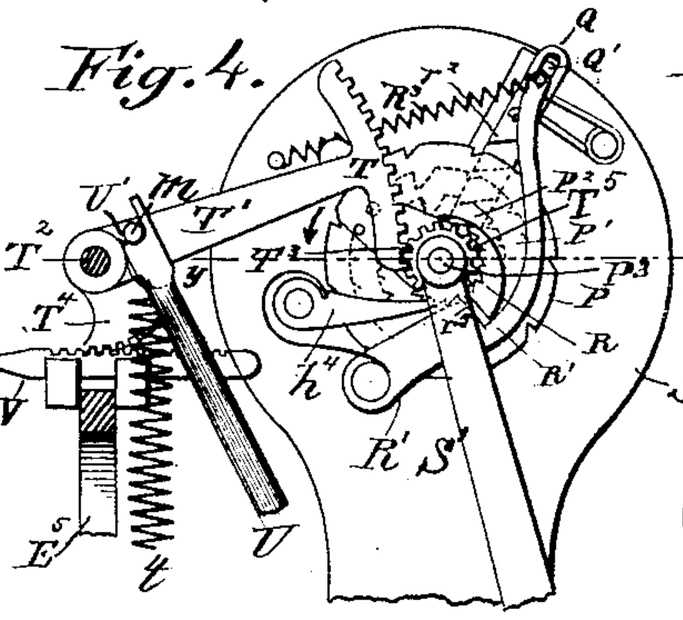

Fig. 4.

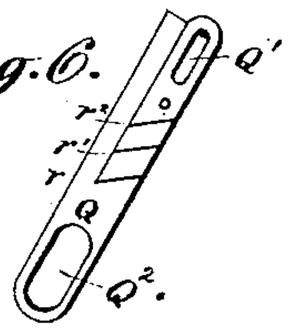

Fig. 6.

Witnesses.

A. W. Steigen.

A. B. Moore.

Inventors.

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(No Model.) 3 Sheets—Sheet 2.

C. W. WEISS & C. KRUSE.

AUTOMATIC CHECK MACHINE.

No. 313,699. Patented Mar. 10, 1885.

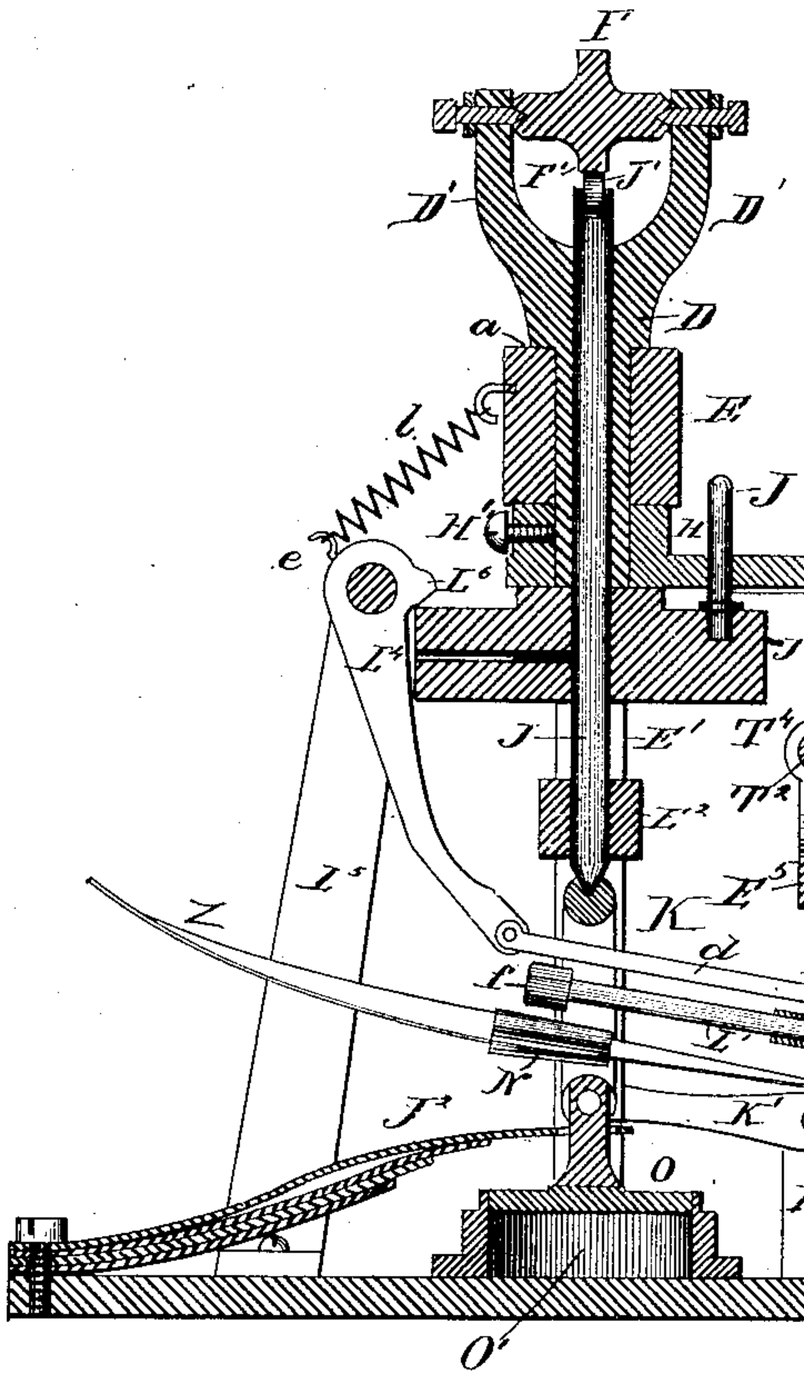

Fig. 3.

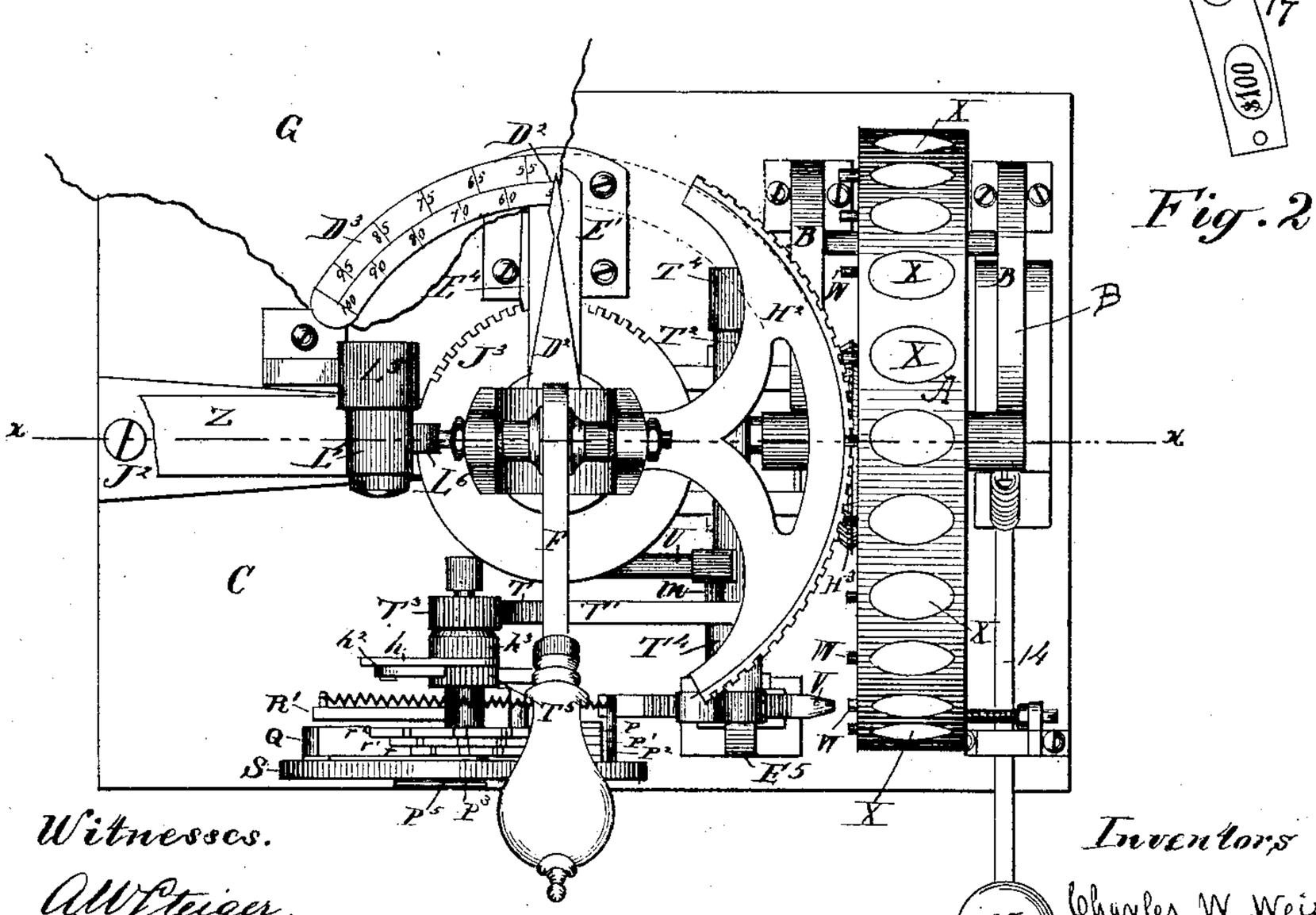

Fig. 2.

Witnesses.

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(No Model.) 3 Sheets—Sheet 3.

C. W. WEISS & C. KRUSE.

AUTOMATIC CHECK MACHINE.

No. 313,699. Patented Mar. 10, 1885.

Fig. 7.

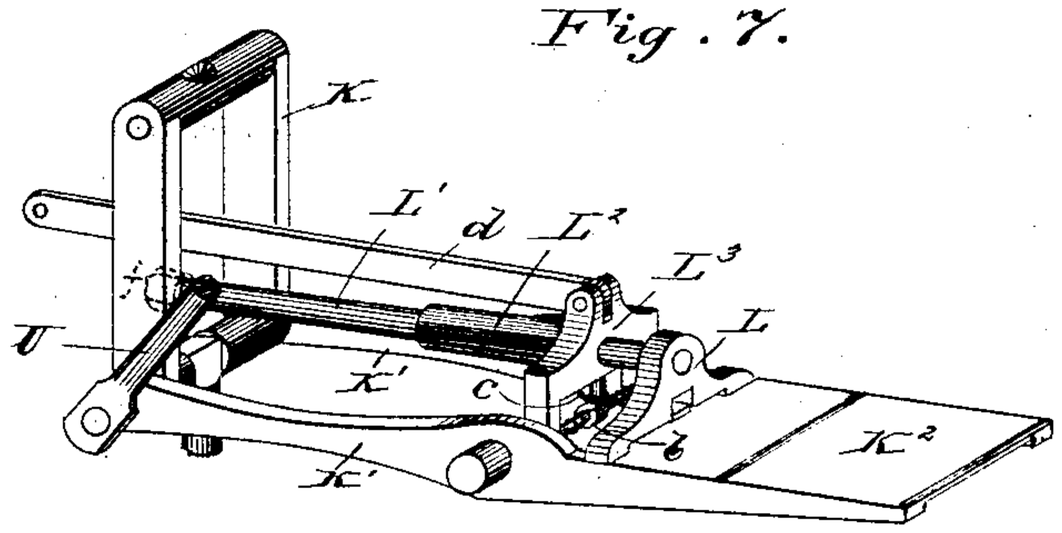
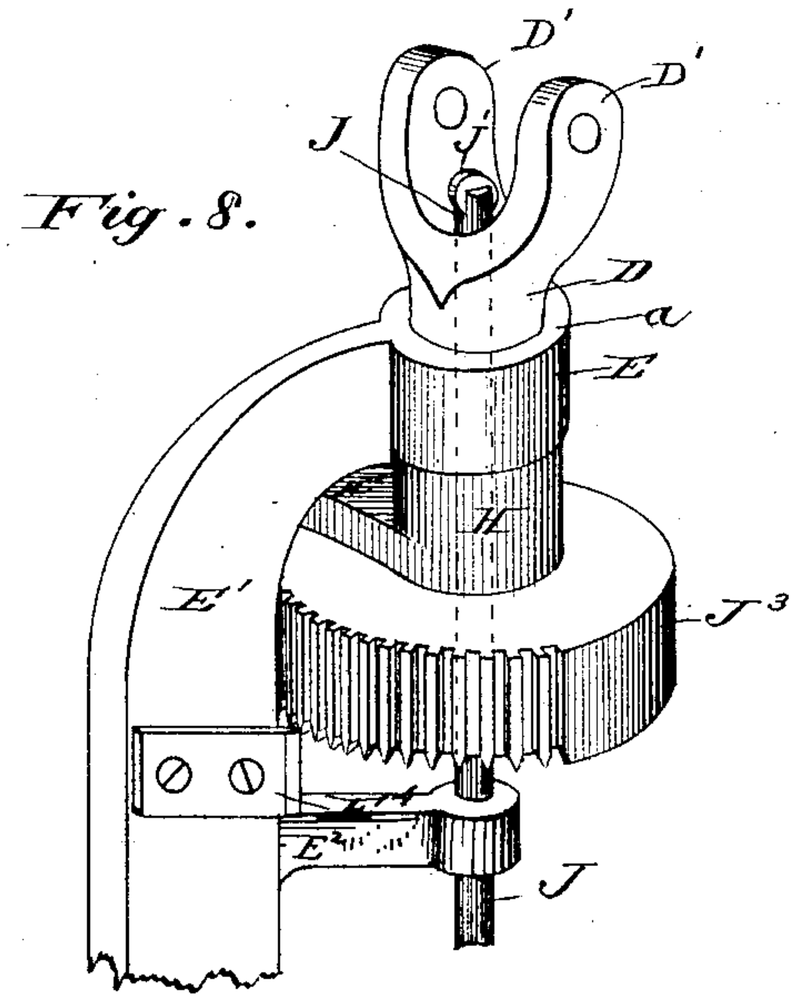


Fig. 8.



Witnesses.

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N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

CHARLES W. WEISS AND CHARLES KRUSE, OF NEW YORK, N. Y.

AUTOMATIC CHECK-MACHINE.

SPECIFICATION forming part of Letters Patent No. 313,699, dated March 10, 1885.

Application filed September 24, 1883. (No model.)

To all whom it may concern:

Be it known that we, CHARLES W. WEISS and CHARLES KRUSE, both of the city, county, and State of New York, have invented a new and useful Improvement in Automatic Check-Machines; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

Our invention relates to machines for automatically producing and delivering checks of different denominations. Its object is to facilitate the automatic issue of the checks, and to provide accurate means for indicating at all times the total sum of the value of the checks delivered from the machine, and prevent frauds in the use thereof.

In the accompanying drawings, Figure 1 is a side elevation of our check issuing and counting machine, with a portion of the registering-dial broken away, the case of the machine being in section; Fig. 2, a top view of the machine with the case removed, excepting only the portion thereof carrying the indicating-scale; Fig. 3, a vertical section in line *x x* of Fig. 2; Fig. 4, a detached view in elevation of the rear side of the registering dial-plate, illustrating the adding mechanism; Fig. 5, a section of the same in line *y y* of Fig. 4; Fig. 6, a detached view in perspective of the pawl-plate which actuates the adding-disks. Fig. 7 is a perspective view on an enlarged scale of the paper-feeding mechanism; Fig. 8, a detached view in perspective of the upper portion of the curved standard supporting the main tubular shaft, illustrating the notched disk upon said rod.

A represents a type check-wheel for producing the checks, mounted between pedestals B B, upon whose upper ends it is journaled to rotate with a reciprocating movement, these pedestals being secured to the base-plate C of the machine upon one side, and so curved forward as to bring the axis of the wheel in line with the center of the base-plate.

D represents a vertical tubular shaft mounted in a collar, E, upon the top of a support, E′, (see Fig. 8,) which, projecting upward from one side of the base-plate C, is curved forward to bring the shaft over the center of the bed-plate. The tubular vertical shaft D is supported by means of a shoulder, *a*, thereon, (see Fig. 3,) adapted to rest upon the upper edge of the collar E, and it is made to rotate with a reciprocating movement by means of a lever, F, (see Fig. 1,) pivoted between the jaws D′ D′ of a fork upon the upper end of the shaft D. An index-pointer, D^2, projects horizontally from the upper end of the shaft, in a right line with the lever F, over a semicircular plate, D^3, (see Fig. 2,) fitted in the top of the case G, in which the machine is inclosed. This plate D^3 is divided into a scale whose units are units of the values indicated upon the checks printed or delivered from the machine.

To the lower end of the tubular shaft D a sleeve, H, is secured (see Fig. 3) by a set-screw, H′, and from this sleeve a segmental bevel-toothed rack, H^2, (see Fig. 2,) projects at a right angle with the shaft, to vibrate therewith in a horizontal plane and engage a miter-wheel, H^3, formed or secured upon the adjacent face of the check-wheel A concentric with its axis. The movement of the lever F is thus communicated to the type-wheel A, causing it to rotate back and forth upon its axis in unison with the movement of the index-pointer D^2 to and fro over the face of the scale D^3.

A rod, J, is fitted to reciprocate within the tubular shaft D, its upper end being fitted with a friction-roller, J′, to bear up against a cam-surface, F′, formed on the under side of the lever F, beneath its axis. (See Fig. 1.) The lower end of the rod J passes through a bearing in a bracket, E^2, Figs. 3 and 8, projecting horizontally from the support E′, and is stepped in a socket, 10, (see Fig. 7,) in the upper cross-bar of a vertical frame, K, Figs. 3 and 7, whose lower bar is pivoted at each end to and between the two arms K′ K′ of an oscillating platen-carrier, said arms being pivoted at about mid-length between two uprights, K^3 K^3, projecting from the base-plate C of the machine. The outer ends of these arms pass under the type-wheel A, and are united by a transverse plate, K^2, Fig. 3, serving as a platen to be carried by the movement of the arms al-

ternately up against the type-wheel and away therefrom.

The frame K and rod J, carried thereby, together with the inner ends of the arms K′ K′, are all upheld by means of a strong spring, J^2, (see Figs. 1 and 3,) adapted to bear up against the lower bar of the frame.

A disk, J^3, Figs. 1, 2, 3, and 8, encircling the rod J, is made fast thereto to bear against the lower end of the tubular shaft D when the rod J is in its elevated position. A pin, J^4, projecting upward from this disk, passes freely through an aperture in the segmental rack H^2, Figs. 1 and 3, so that the disk and rod are made to oscillate in unison with said rack, the shaft D, and the pointer D^2, without interfering with the free independent longitudinal movement of the rod J when depressed by the cam F′ on the lever F or elevated by the action of the spring J^2. The periphery of this disk J^3 upon the side adjacent to the support E′ is notched, (see Figs. 2 and 8,) each notch corresponding with one of the divisions of the scale D^3, and a pin or plate, E^4, is made to project from the support E′ to engage said notches when the disk is depressed, the effect thereof being to lock the disk J^3 and prevent its rotary movement without interfering with its vertical play. The locking of the disk J^3 prevents in turn a rotary movement of the lever F, to which it is connected, and consequently of the check-wheel A, geared thereto, until the disk is elevated by the upward movement of the rod J clear of the pin or plate E^4.

The registry of the pin or plate E^4 with the notches is facilitated and secured by beveling the lower edges of the partition-pieces between the notches, as also the top of the pin or plate. (See Fig. 8.)

The paper-feeding device in our machine consists of a cross-bar, L, Figs. 1, 3, and 7, extending from arm to arm K′ K′ of the platen-carrier, inside of the check-wheel A and platen K^2, and from the middle of which a rod, L′, projects rigidly parallel with, above, and midway between the arms K′ K′, and out through and slightly beyond the frame K, which supports the rod J. Upon this rod L′ is fitted a reciprocating sleeve, L^2, which carries on its inner end a slotted yoke, L^3, the width of whose opening corresponds with that of the strip of paper to be printed. A cam-plate, *b*, Fig. 7, is pivoted centrally upon the lower bar of the yoke, and is so disposed as to close up against a central lug on the upper side of the opening in the yoke when the sleeve and yoke move toward the platen. The insertion of the strip of paper between the cam and lug is facilitated by means of a metallic guide-strip, *c*, fitted to form an incline from the top of the yoke to the lower face of the lug, as shown in Fig. 3.

The yoke L^3 is made to travel back and forth upon the rod L′ by means of a bent lever, L^4, (see Fig. 3,) pivoted at its upper end to the upper end of a standard, L^5, Figs. 2 and 3, upon the level of the upper face of the disk J^3, so that a toe, L^6, projecting from the pivoted end of the lever, may bear upon the edge of said disk. The free end of the lever L^4 is connected by a pivoted link, *d*, Fig. 3, to the yoke L^3 above its sleeve L^2. A spiral spring, *l*, Fig. 3, extends from a pin, *e*, at the pivoted end of the lever L^4 to an eye on the side of the collar E, and its tension operates to keep the toe L^6 of the lever in contact with the disk J^3, and, as the disk descends, to throw out the free end of the lever, and thereby draw out the sleeve L^2, with the yoke L^3, carried thereby. The outward rearward movement of the sleeve and yoke is arrested by a nut or head, *f*, on the end of the rod L′. (See Fig. 3.)

A flattened guide-tube, N, Fig. 3, adapted to the width of the strip of paper to be led through the machine, is secured within the frame K, under the end of the rod L′, so that the strip of paper Z, led from a reel, Z′, Fig. 1, into and through the guide-plate N, may be carried thence through the opening in the reciprocating yoke L^3, under its cam *b*, (see Fig. 7,) and out over the platen K^2, between it and the periphery of the type-wheel A. As the yoke moves rearward toward the guide tube N its cam *b* will glide easily over the paper without engaging it, the paper being kept stationary by its friction with the guide-tube N; but when the movement of the yoke is reversed the cam will automatically close upon and bite the paper, and thus carry it forward with the yoke.

The adding mechanism, by means whereof the sum of the units represented by the checks printed or issued from the machine is automatically registered, may be of any approved description adapted to be operated by the reciprocation of a toothed segment, T, or its equivalent. As illustrated in the drawings, said adding mechanism consists of a series of disks, P P′ P^2, rotating loosely upon a shaft, P^3, (see Figs. 1, 4, and 5,) in the rear of and against a circular dial or face-plate, S, mounted upon a vertical standard, S′, supported by the base-plate C of the machine, and upon whose edge the units are marked, and over which an index-hand, P^5, fixed to the axial shaft P^3, revolves. (See Fig. 1.) Each disk is enough larger in diameter than that in front of it to leave a margin exposed, upon which the figures to be indicated are marked, so that the figures on all three disks P P′ P^2 may be seen at once on looking toward the face of the smaller disk, P^2, and are brought to view simultaneously through a slot cut in the dial S. (See Fig. 1.) The periphery of each disk is cut to form ten ratchet-notches at equal distances apart, (see Figs. 1 and 4,) the tenth notch being deeper than the others, and these notches are engaged by offsets r r' r^2 upon a pawl-plate, Q, (see Figs. 4 and 6,) which is fitted against the inner side of the dial-plate S, to oscillate upon the axial shaft P^3 as its pivot. The inner end of this plate is slotted at Q^2 (see

Fig. 6) to embrace the shaft, so as to rotate thereon, and yet be free to move radially to and from the same. Its offsets or pawls r r' r^2, which engage the notches on the disks P, P', and P^2 when the plate is swung forward, are so adjusted with reference to the different diameters of the disks as that the second disk, P', will not be engaged thereby unless the first offset, r, has dropped into the tenth notch of the first disk, P^2, and the plate has thus been allowed to approach by so much nearer its axis, so that a movement of the second disk, P', occurs once only at each complete revolution of the first. In like manner the offset or pawl engaging the third disk, P, cannot come into contact with the periphery of said disk to engage its notches until the tenth notch on both the first and second disks are brought into line, so that the offsets r r' may drop simultaneously into said tenth notches, and thus allow the plate to move inwardly far enough to bring the third offset, r^2, into engagement with the notches of the third disk, P, and this can only occur once in every complete revolution of the second disk, involving ten revolutions of the first disk. The notches are so inclined as that the pawls engage the same in the forward movement of the pawl-plate only, and slide freely away therefrom on its reverse movement in manner as in ordinary pawl-and-ratchet devices. Each forward movement of the pawl-plate Q carries the disk or disks engaged thereby forward one-tenth of a revolution, and so soon as this is accomplished the plate is free to swing back so as to bring its pawl into engagement with the next ratchet-notch. The notches upon each disk are indicated by figures upon the face of the disk at the margin thereof, (see Fig. 1,) and the slot in the dial-plate S through which they become visible is so placed as that the figures on the inner disk, P^2, shall appear at the right hand of the series; hence the numbers brought in view through the slot will, when read in regular order, indicate the tens, hundreds, and thousands, respectively, of the units indicated upon the dial S.

The pawl-plate Q is swung back far enough to engage each notch successively on the disks by means of a cam, R, (see Fig. 4,) secured to the axial shaft P^3. This cam bears against a curved lever, R', Fig. 4, pivoted at its lower end to a boss, R^2, upon the rear face of the dial-standard S', and which, extending thence under the cam in contact therewith, reaches up to the outer end of the pawl-plate Q, which it engages by means of a pin projecting therefrom into a slot, Q', cut in the outer end of the plate. (See Figs. 4 and 6.) The cam R is made to describe a spiral curve about the axis, so as to enlarge gradually therefrom, as shown in Fig. 4, until, having reached the initial point, it drops suddenly off. The edge of the lever R' in contact with the cam is cut away to form an offset of a depth corresponding to the depth of the offset on the cam, so that when the two offsets are brought into register (see Fig. 4) the lever is permitted to drop toward the axis a distance equal to the sum of the depth of the two offsets, having been by the revolution of the cam forced out therefrom to this distance. This reciprocating movement of the lever R' to and from the axial shaft at each revolution thereof operates to produce the reciprocating rotary movement of the pawl-plate Q about said shaft required to cause it to carry forward the disks one-tenth of a revolution at each stroke. The lever R' is kept in contact with the cam, and when it drops is made to push the pawl-plate Q forward by means of a spiral spring, R^3, secured at one end to the outer end of the lever or pawl, and at the other to the inner side of the dial-plate, as shown in Fig. 4.

The rotation of the axial shaft P^3 and index-hand P^5, carried thereby, (see Fig. 5,) is produced by means of a segmental rack, T, Figs. 1, 2, and 4, upon the end of an arm, T', projecting from a rock-shaft, T^2, (see Fig. 2,) journaled in suitable uprights, T^4 T^4, in line parallel with the face of the check-wheel. The rack T gears into a pinion, T^3, revolving loosely in one direction upon the shaft P^3, (see Figs. 2, 4, and 5,) but which when revolved in the opposite direction is made to engage and rotate said shaft by means of a pawl, h^2, pivoted to an arm, h, which projects from a collar, h^3, (see Fig. 2,) made fast to or integral with the pinion T^3, said pawl being left free to engage a ratchet-pinion, T^5, secured upon the shaft, its constant contact with the ratchet being secured by a spring. (Not shown in the drawings.) A second spring-actuated pawl, h^4, pivoted to a standard projecting from the inner side of the face of the dial-plate S, also engages the ratchet-pinion T^5, so as to allow it to turn in one direction only, and prevent a reverse movement of the axial shaft and index-pointer carried thereby. The segmental rack T is so proportioned in length as that in moving from end to end over the pinion T^3 it will produce one complete revolution of said pinion, and the pawl carried by said pinion T^3 is so adjusted with reference to the ratchet-pinion T^5 as that in the rotation of the pinion produced by the upward movement of the segmental rack the pawl engaged by the pinion shall slip loosely over the ratchet, while in the counter-revolution of the pinion produced by a downward movement of the segmental rack the pawl will engage the ratchet-pinion and thus produce a corresponding rotation of the axial shaft.

The downward movement of the segmental rack T is effected automatically by means of a strong spiral spring, t, (see Figs. 1 and 4,) attached at one end to the arm T' of the rack, and at the other to the bed-plate C of the machine. Its upward movement is produced by the superior power of the spring J^2, actuating the frame K, (see Figs. 1 and 3,) which is brought to bear upon the rack by means of a

rod, U, Figs. 1 and 4, pivoted at its lower end to one of the arms K′ of said frame. The upper end of the rod U, Fig. 4, is provided with a shoulder, U′, which bears against a pin, *m*, projecting from the side of the arm of the segmental rack, (see Figs. 2 and 4,) so that when the rod J and the arm K′ are forced up by the spring J^2 the tension of the spring *t* will be overcome, and the segmental rack T will be forced up with the arm K′ through the agency of said interposed rod U.

The upward movement of the rod J, and consequently of the arm K′, is arrested before the lower end of the segmental rack is carried beyond the ratchet-pinion T^3. When the rod J is forced downward, carrying with it the arm K′ and its attached rod U, the segmental rack T, now relieved from the upward pressure of said rod, is left free to drop under the tension thereon of the spring *t*. This downward movement of the segmental rack, by means of which the revolution of the axial shaft P^3 and counting mechanism is produced, is limited as required by means of a reciprocating toothed bar, V, (see Figs. 1, 2, and 4.) moving horizontally at right angles to the rock-shaft T^2 in suitable ways formed upon a pedestal, E^5, in position to be engaged by a segmental rack, V′, secured to and dependent from the end of said rock-shaft. The toothed bar V thus geared to the rock-shaft is so proportioned in length as to permit its outer end to come into contact with the face of the type-wheel, or of a recess therein, or a projection thereon, at the moment when the downward movement of the segmental rack T has produced a single complete revolution of the shaft P^3, and it is drawn back from the type-wheel as the segmental rack moves upward.

A number of pins, W W W, corresponding to the number of dies or type-plates X X secured on the periphery of the type-wheel A, are fixed to its inner side or face at equal distances apart, the relative position of the pins and dies being so adjusted as that when one of the dies X is over the platen one of the pins W shall be directly in line with the end of the toothed slide-bar V, so as to be struck by the bar when it moves inward toward the wheel. The length of these pins W W is also so proportioned as that the first pin shall arrest the bar V in its said inward movement so soon as the segmental rack T has caused the shaft P^3 to rotate just far enough to carry the index-hand P^5 forward over as many divisions of the dial as will correspond to the number indicated by the first of the series of dies. The second pin will allow the bar to move out far enough to carry the hand forward a distance covering a number of divisions corresponding to the number indicated by the second die, and so on until the last or tenth pin will because of its shortness allow a full revolution of the hand.

It will be noted that when the downward movement of the segmental rack T is arrested by the engagement of the end of the toothed bar V with one of the pins W on the check-wheel the rod U, pivoted to the arm K, is permitted to continue its movement by reason of its non-attachment to the arm T′ of the rack, its proper relation thereto being, however, maintained continuously to the end of its stroke by the contact of the face of its recess above the offset U with the pin *m*. (See Fig. 4.) It will also be observed that in the stead of pins W W projecting from the wheel, depressions or recesses may be formed as an equivalent therefor, and that a continuous inclined surface or series of inclined surfaces may be substituted for a series of pins or of depressions to engage the end of the slide-bar V. It is also evident that instead of employing a toothed slide-bar V, geared to the rock-shaft T^2, as a stop for the segmental rack T, a radial arm projecting from and vibrating with the rock-shaft, and adapted to strike against suitable surfaces on the wheel, may be made to serve the same end.

The possibility of jar in the machine resulting from the upward thrust of the spring J^2 when the handle F is relieved from pressure, or from a violent downward pressure upon said handle in operating the machine, is prevented by combining with the lower cross-bar of the frame K, against which the spring J bears, a plunger, O, Fig. 3, fitting and moving closely in a cylinder, O′, so that the air compressed by the sudden downward movement of the piston and the exhaust produced by its sudden upward movement shall operate as a check or cushion to said movement and render the same noiseless.

The type X X, placed upon the periphery of the check-wheel A, are inked at each revolution thereof by means of a suitable inking-roller, Y, Fig. 1, so mounted as to come into contact with the type in the rotation of the wheel before they reach the paper strip upon the impression-platen. As the strip of paper Z, after being printed, passes out from under the wheel, it is led under a knife, 12, (see Fig. 3,) mounted to reciprocate vertically over the strip to sever the same when brought down thereon, this knife being operated by means of a spring-actuated lever, 14, terminating in a knob or handle, 15, at the front of the machine. (See Fig. 2.) The lever 14, carrying the knife, likewise actuates simultaneously two punches, 16 16, mounted to reciprocate vertically with the knife on each side thereof, and adapted to punch a hole in the edge of each piece severed by the knife, so that a hole is punched in the outer end of the strip remaining in the machine as well as in the end of the check severed therefrom. Hence when it becomes necessary to issue two or more checks in one piece the outer ends of the check-strip will alone be punched, as illustrated at 17 in Fig. 3.

We contemplate the use of embossing or printing dies or types, or other known devices

for marking the ends of the checks, as an equivalent in this connection for the perforating-punches 16 16, for producing an impression upon the end of the checks as issued, as any two definite marks applied immediately before the delivery of the finished check to the contiguous edges of the check about to issue and of the blank remaining for the next check will subserve the same end as the two perforations punched therein, as described.

In the machine illustrated in Figs. 1 and 2 of the drawings the dial S is divided into hundredths to indicate cents, so that the figures on the disks will denote dollars. The dies *x x* upon the type-wheel are of the denomination of five cents and multiples thereof up to one dollar. The index-scale D^3 is likewise divided into twenty points, the intervals representing five units.

In operating the machine the lever-handle F is turned to the right or to the left until the pointer D points to the figures upon the scale D^3 indicating the value of the check which it is desired to issue—say twenty-five cents. The rotation of the shaft D produced by this movement will, by means of the gearing H^2 and H^3, turn the wheel A until the die thereon corresponding to twenty-five will be brought into position over the platen K^2, and the special stop W (of the series W W W) whose length is proportioned to correspond with said die will be brought into line with the slide-bar V. If, now, the handle or lever F be depressed, its downward movement, operating by means of its cam F′ upon the rod J, will cause it to force down the frame K against the spring J^2, and, bearing down the arms K′ K′, will force the platen K^2 and the strip of paper lying thereon up against the die, so as to imprint thereon "25 cents." Simultaneously the lever L^4, (see Fig. 3,) released by the descent of the disk J^3, and actuated by the tension of the spring *l*, will draw back the sliding yoke L^2 upon the rod L′, the cam in the yoke sliding freely during said movement over the strip of paper led under it. The descent of the rod U, connected to one of the arms K′, will at the same time permit the segment-rack T to be drawn down by the tension thereon of the spring *t* until its movement is arrested by the contact with the stop W on the wheel A of the sliding bar V, actuated by the segment-rack V′, carried by the rock-shaft which carries the segment-rack T. This movement of the segment-rack T will operate by means of its gearing with the shaft P^3 to turn the index-hand P^5 forward over the dial S a distance equal to twenty-five units or cents. So soon as the lever F is released from downward pressure the spring J^2 will operate to throw it up, and with it the arms K′ K′, thereby withdrawing the platen from the paper, and by means of the rod U pushing up the segment-rack T to its first position. At the same time the disk J^3, bearing upward against the toe or pin L^6 of the lever L^4, will force the lower end of said lever inward, carrying back the yoke L^3. As the yoke moves back, its cam *b* (see Fig. 7) will engage the strip of paper and feed it toward the check-wheel, so that the imprinted check will be carried thereby out from the wheel and a blank brought under it. A movement of the cutting-lever 14 will now sever the printed check, punching or otherwise marking simultaneously both its rear end and the forward end of the blank remaining under the wheel. As the index-hand P^5 and the mechanism connected therewith do not move backward, it follows that the next movement of the lever F, if it be left in the same position as before, will carry the hand forward twenty-five points more, or to 50, if the first movement began with 0, and thus each successive move of the lever F will cause the hand to move forward from the number last indicated as many points as shall correspond to the denomination of the check last issued, and will cause the disks to register the sum of said denomination, added to that of the checks previously issued, the numbers beyond 100 cents up to 1,000 being registered by the movement of the disks or wheels P, P′, and P^2, obtained automatically, as hereinbefore described, and indicated by the figures on said wheels exhibited through the slot in the face of the dial.

When it is necessary to issue a check for a greater amount than indicated by the largest denomination on the type-wheel, two checks may be issued in one piece, the absence of the perforations or distinction-marks between the two (see at 17, Fig. 3) serving to prevent the fraudulent delivery of one of them only at the cashier's desk, as no check need be accepted by him unless marked or perforated at both ends. The issue of the two checks in one without intermediate marks or perforations is automatically accomplished by reason of the arrangement of the marking devices, whereby they are brought into play only when the checks are severed, and by which they are made to mark simultaneously both the outgoing check and the blank remaining in the machine.

It is evident that the indicating devices serving as a guide to mark or determine the position of the type-wheel A may be connected with and operated by the wheel itself or any part of the moving mechanism by which said wheel is actuated; also, that instead of using as an indicating device a pointer actuated by said mechanism to move over a fixed scale, a scale carried or actuated by the moving mechanism may be employed to traverse past a fixed mark or pointer for this purpose.

We have made the device by which the movement of the segmental rack T, actuating the adding device, is so controlled as that the movement of the latter shall be proportioned to the denominations of the checks issued, the subject of a separate application, and

We claim herein as new and desire to secure by Letters Patent—

1. In a check-printing machine, a rotating

tubular shaft, D, a rod, J, reciprocating within said shaft, upheld by a spring, J^2, and depressed by a lever pivoted to the rotating shaft D, a toothed segment, H^2, secured to the shaft D, and a pin, J^4, secured mediately to the rod V and playing through the segment H^2, so as to communicate its movement to the rod J without interfering with the independent longitudinal movement of said rod, all combined with each other and with a reciprocally-rotating type-wheel, A, geared by a beveled pinion, H^3, to the segment H^2, and a reciprocating platen adapted to move to and from the periphery of the wheel and to be actuated mediately by the movement of said rod J, all substantially in the manner and for the purpose herein set forth.

2. The combination, with the rod J and a disk, J^3, carried thereby, a sleeve, L^2, sliding to and from the platen K^2 upon a rod, L', fixed to a cross-bar upon the oscillating arms K' K', which support at one end said platen, and are pivoted at the other to a frame supporting the rod J, a slotted yoke, L^3, carried by said sleeve, and a cam, *b*, within said yoke, of the spring-actuated lever L^4, pivoted at one end to a fixed support in line with the disk J^3, and at the other to a link, *d*, connecting it with said sleeve, and fitted with a toe, L^6, to engage said disk, substantially in the manner and for the purpose herein set forth.

3. The rock-shaft T^2 and segment-rack T, carried thereby, in combination with a reciprocating rod, J, spring J^2, frame K, arm K', rod U, and spring *t*, and with a pinion geared to the segment-rack, which, rotating loosely in one direction upon the spindle or shaft P^3 of a registering device, is adapted, when reversed, to engage the same by means of an intervening pawl and ratchet-wheel, substantially in the manner and for the purpose herein set forth.

4. In a check-machine, the combination, with a type-wheel, an impression-plate, and a shaft operating by its reciprocation and rotation to actuate the type-wheel and impression-plate, of the paper-feeding mechanism, consisting of the guide-tube N, adapted to prevent a retrograde movement of the paper, and the reciprocating yoke L^3, adapted to automatically engage and push forward the paper and return loosely thereon, and to be operated by a lever, L^4, actuated by the reciprocating movement of the operating-shaft, substantially in the manner and for the purpose herein set forth.

5. In a check-machine, the combination, with its check printing and delivering mechanism, of independent punching or imprinting devices adapted to mark, preparatory to the issue of the printed check, the contiguous edges of said printed check and of the blank remaining for the next check, substantially in the manner and for the purpose herein set forth.

6. In a check-machine, the combination, with a cutting-knife adapted to sever the check printed in the machine from the blank yet to be printed, of devices moving in unison with the knife, one on either side thereof, adapted to mark simultaneously with the severance of the printed check from the blank check the contiguous edges of the check and blank on each side of the line of severance, substantially in the manner and for the purpose herein set forth.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

CHAS. W. WEISS.
CHAS. KRUSE.

Witnesses:
A. B. MOORE,
A. W. STEIGER.