(No Model.) 2 Sheets—Sheet 1.

J. C. LOWDON.

CHECK PUNCH.

No. 362,755. Patented May 10, 1887.

FIG. 1.

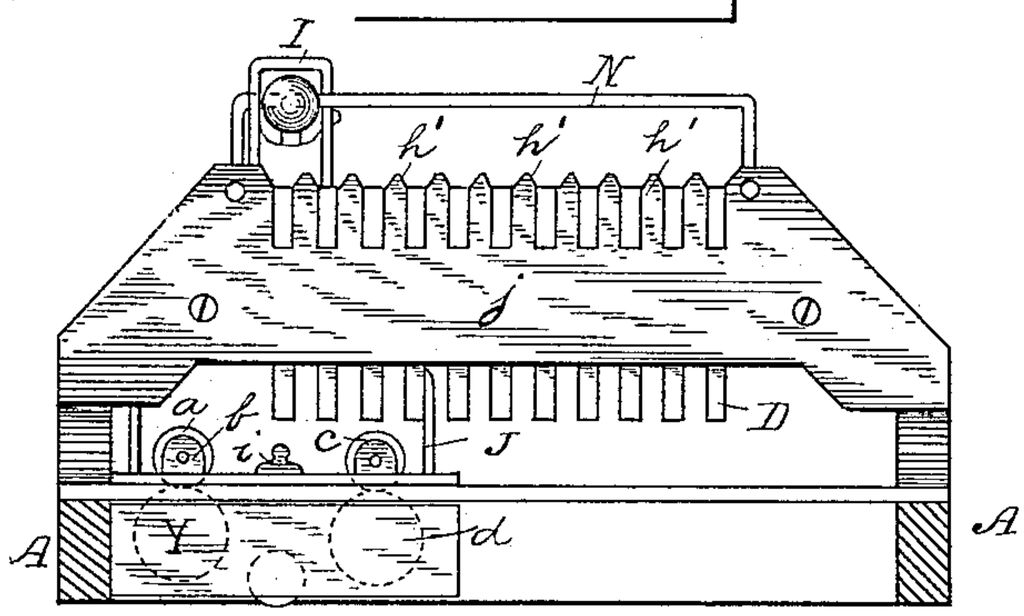


FIG. 2.

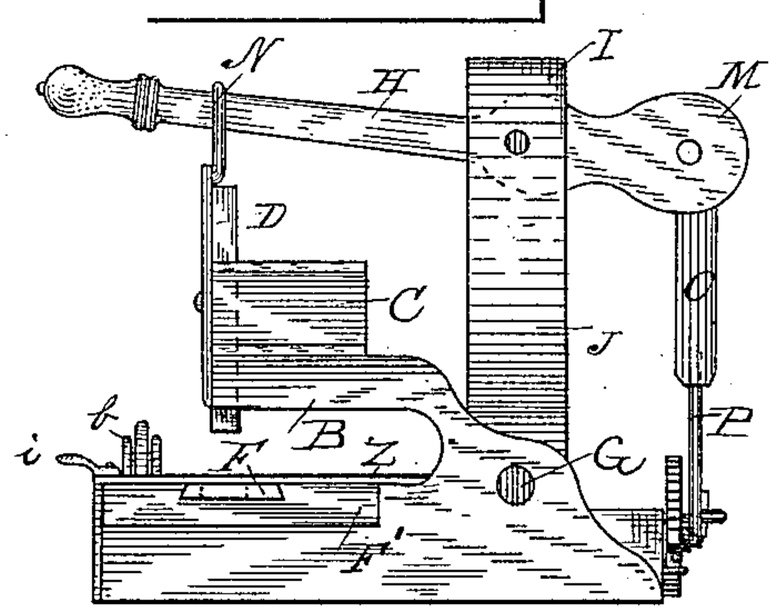


FIG. 3.

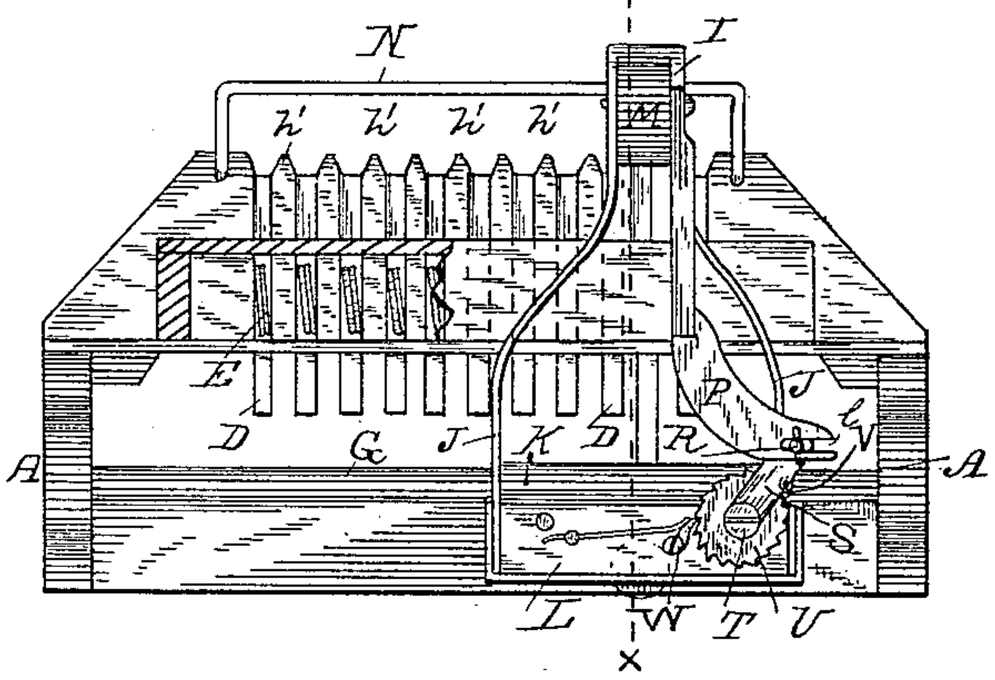
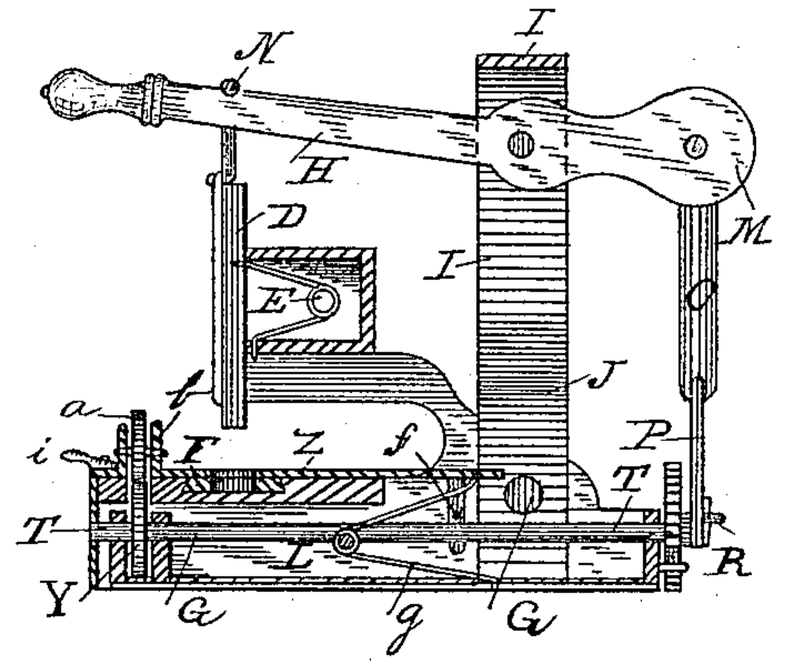


FIG. 4.



WITNESSES,
Jos. H. Blackwood
Robt. F. McMillan

INVENTOR,
per Jos. John C. Lowdon
per J. C. Lowdon
his Attorney

(No Model.) 2 Sheets—Sheet 2.

J. C. LOWDON.

CHECK PUNCH.

No. 362,755. Patented May 10, 1887.

FIG. 5.

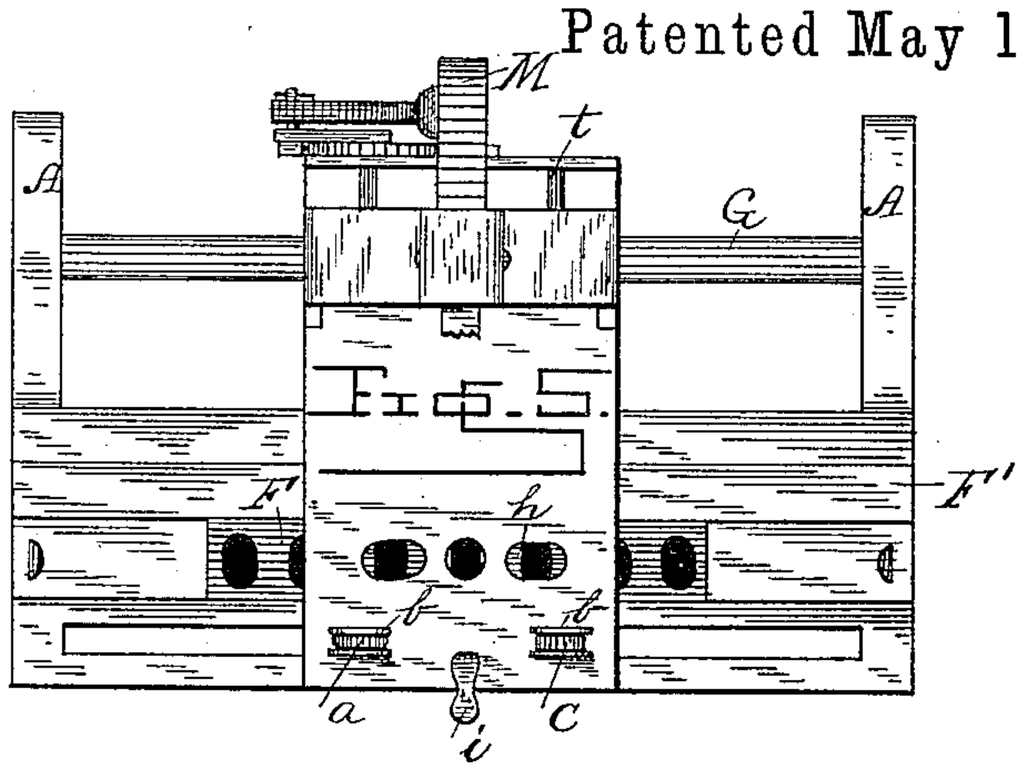


FIG. 6.

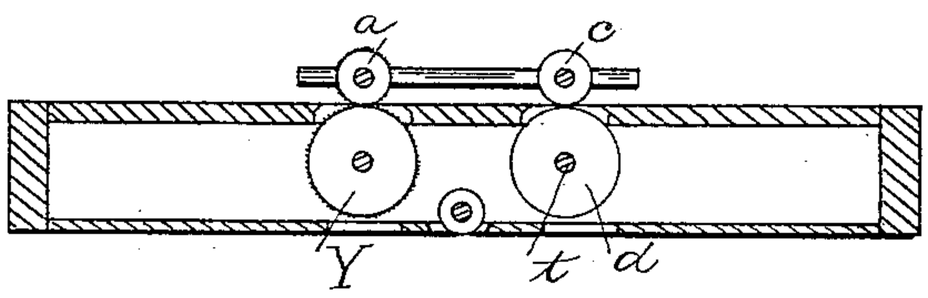


FIG. 7.

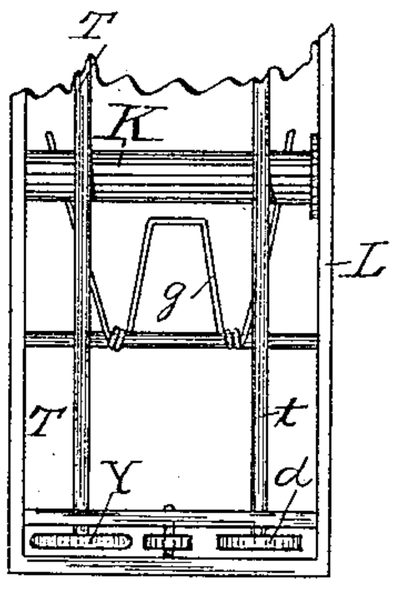


FIG. 8.

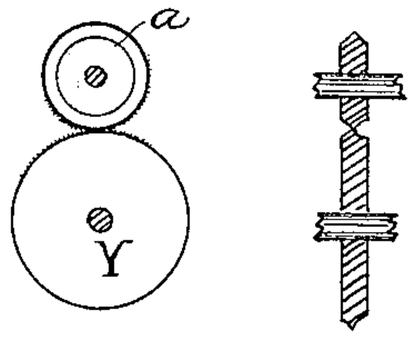
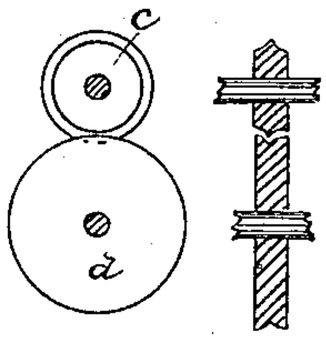


FIG. 9.



WITNESSES;
Jos. H. Blackwood
Robt. F. McMillan

INVENTOR;
John C. Lowdon
per J. C. Hepdon
his Attorney

UNITED STATES PATENT OFFICE.

JOHN C. LOWDON, OF KANSAS CITY, MISSOURI.

CHECK-PUNCH.

SPECIFICATION forming part of Letters Patent No. 362,755, dated May 10, 1887.

Application filed January 26, 1886. Serial No. 189,566. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. LOWDON, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented a certain new and useful Improvement in Paper-Perforating Machines; and I do declare the following to be a full, clear, and exact description of the invention, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to an improvement in punches for marking bank-checks by cutting out numbers to correspond with the amount of the check, or for marking any similar written instrument; and it is especially devised as an improvement upon those devices having a sliding rack carrying a series of plungers for punching out numbers, in combination with a lever for operating said plungers, and a device for carrying and automatically feeding the paper through the machine.

Figure 1 is a front elevation; Fig. 2, a side elevation; Fig. 3, a back elevation; Fig. 4, a side elevation in cross section through X X, Fig. 3; Fig. 5, a plan view, with the rack containing the overhanging punches removed; Fig. 6, a detail side view illustrating the paper-feeding rollers; Fig. 7, a detail plan view of the paper carrying and feeding rollers, showing the spring for pressing the plate provided with the small upper feeding-roller; Fig. 8, a side and end view of the milled wheels for feeding the paper, and Fig. 9 a similar view of the guiding-rollers.

Like letters represent like parts throughout the several views.

A A represent cast end pieces of any suitable metal. They are formed with a projection, B, to which is attached a stationary frame or rack, C, provided with a series of vertically-movable punches or plungers, D, each provided with springs E. Said punches overhang a perforated plate, F, made for the purpose of receiving the dies. Said plate is dovetailed in a plate, F′, and the perforations register with the dies to allow the paper cuttings to fall through into the slide-box.

G is a horizontal bar, upon which slides the operating-lever H and the mechanism for carrying and feeding the paper. Said mechanism consists of the operating-lever H, pivoted to the top of an upright, I, provided with legs J, connected together by a tube, K, which fits over said horizontal bar G. The legs J extend down below said horizontal bar and have attached to them a metal case, L.

The lever H is provided with a weighted end, M, for the purpose of keeping the opposite end raised above the punches D, in readiness for use.

N is a yoke extending along over the top of the rack for the purpose of holding the free end of the lever close down to the tops of the punches, so that the stroke will be short.

O is a downwardly-extending rod hinged to the heavy end of the lever H, and provided with curved arm P, having a slotted end, *l*, containing a crank-pin, R, attached to the end of a link, S, hinged to the outer end of the shaft T, which carries a ratchet-wheel, U. Said link S is provided with a spring-pawl, V, attached to its inner side, and adapted to revolve the shaft T by working in the ratchet-wheel U, which is also provided with an additional pawl, W, hinged to the casing L. The opposite end of said shaft T is provided with a milled wheel, Y, which meshes into an upper smaller milled wheel, *a*, journaled in raised bearings *b* upon the top of a spring clearing-plate, Z. Said spring-plate is provided with an additional wheel, *c*, which comes in rolling contact with the periphery of a larger lower wheel, *d*. The periphery of said small wheel is provided with an annular projection fitting in a corresponding depression in the lower wheel, *d*, which is attached to the end of a shaft, *t*, journaled in the casing L, and parallel to the ratchet-shaft T.

The plate Z is hinged to the sides of the casing L by means of flanges *f* upon either side thereof.

g is a spring attached to the under side of plate Z, by which it derives its elasticity for the purpose of pressing together the feeding-wheels Y *a* and guiding-wheels *c d*. Said plate Z is provided with holes *h*, which register with the perforations in plate F.

The guide-rack C is provided with a face-plate, *j*, having a series of pointed guides, *h′*, arranged to come opposite the space intervening between the plungers D. Their pointed ends extend above the tops of the plungers,

and the beveled surface upon either side of the point serves to direct the lever to the plunger, the space between keeping the lever upon them.

Numbers are put on the machine opposite the plungers, in the usual manner, so that the operator can see to readily apply the lever to the right plunger.

To put my invention into practice the operator takes a check which he desires to perforate with numbers and, raising the spring clearing-plate Z by means of the thumb-piece *i*, places the check under it, then lets the plate back down upon the paper, which is held between the feeding and guiding wheels. The lever is then depressed, which forces the plunger D down upon the paper and punches out the desired number.

The weighted arm, with the assistance of the spring-plungers, raises the free or light arm of the lever up, and as the heavy end descends it revolves the shaft T, by means of the ratchet-wheel and pawl, and this turns the milled wheel Y to the left, thereby feeding the check the distance to the left necessary for another figure.

The wheels *c* and *d* are for the purpose of guiding and keeping the check from twisting around out of place.

The ratchet does not begin to revolve the feeding-wheels until the punch is entirely withdrawn from the paper.

To punch out more numbers the operator slides the lever and its attachments (which consist of the paper feeding and guiding mechanism) to the right or left to any desired plunger, the paper being at the same time carried along with the lever.

It will be observed that the shaft T is revolved by the downward stroke of the weighted end of the lever, but remains still when the lighter end is depressed.

I do not herein broadly claim a paper-perforating device wherein the hand-lever for operating the plungers is arranged to swing or rotate horizontally, and to operate vertically in combination with a series of stationary perforating devices and a paper carrying and feeding device; but

What I do claim as new, and desire to secure by Letters Patent, is—

1. In a paper-perforating machine, the sliding box-like case having the lower feed-wheels at its front end and at its rear end their ratchet-operating mechanism, and the standards in which is pivoted the actuating-lever, and carrying the spring perforated clearing-plate, in the front part of which the upper feed-wheels are mounted, substantially as described.

2. In a paper-perforating machine, a stationary series of spring-punches, a stationary perforated receiving-plate beneath the same, a fixed guide-rack, and a hand-lever pivoted to a standard rising from a sliding box-like case extending beneath said plate, combined with said case, having feed-wheels at its front end, and the spring clearing-plate attached to the case, extending over the receiving-plate, and having feed-wheels at its front side, substantially as described.

In testimony whereof I affix my signature in the presence of two witnesses.

JOHN C. LOWDON.

Witnesses:
JOS. WILLIS,
AUGUST. EDLUND.