(No Model.)

W. F. STARK.

CHECK PUNCH.

No. 454,574. Patented June 23, 1891.

Fig. 1.

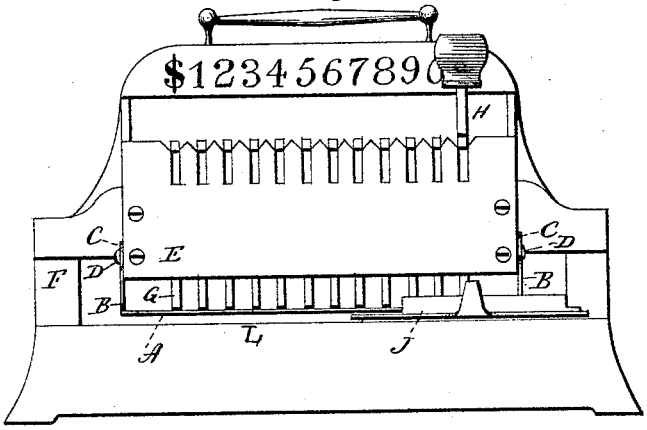


Fig. 2.

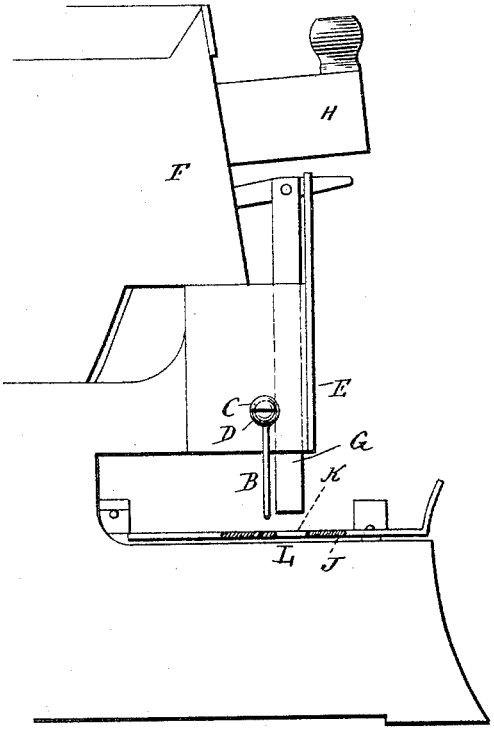


Fig. 3.

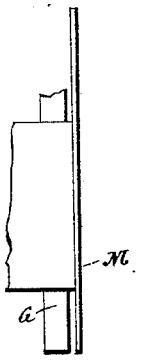
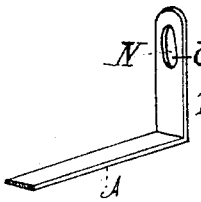


Fig. 4.



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UNITED STATES PATENT OFFICE.

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CHECK-PUNCH.

SPECIFICATION forming part of Letters Patent No. 454,574, dated June 23, 1891.

Application filed July 26, 1890. Serial No. 360,007. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. STARK, of New York, in the county of New York and State of New York, have invented a new Improvement in Fouling-Guards for Check-Punches; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a view in front elevation of one form which my improved guard may assume and one form of device to which it may be applied. Fig. 2 is an enlarged broken view of the guard. Fig. 3 is a broken view in side elevation, illustrating a modified form which the guard may assume, and Fig. 4 is a detached broken view of a sheet-metal guard constructed for vertical adjustment.

My invention relates to an improvement in that class of devices which are designed for punching commercial paper to prevent it from being "raised," the object of the present invention being to produce a compact and convenient device in which the paper is protected from being crumpled or torn.

With these ends in view my invention consists in the combination, with a frame or body, of a series of vertical punches and a horizontal die, a horizontally-movable stripping-plate located between the punches and the die, made much shorter than a check and having an opening formed in it to admit the punches to the paper, which is slipped under it, and to the die, and a fouling-guard arranged to stand in line with and a little below the punches when they are in their normally-elevated positions, the projection of the ends of the stripping-plate beyond the frame as it is moved over the die being avoided by making it short, as described, and providing the device with a fixed fouling-guard extending throughout the length of the punches.

As herein shown, the device consists of a frame or body F, a horizontal die L, mounted therein, a straight series of vertical punches G, mounted for independent vertical reciprocation in a head E, secured to the said frame, and having their lower ends normally in line, and an operating-lever H, extending forward over the upper ends of the punches and pivoted at its rear end to a carrier located within the frame, the said parts being of any approved construction. A stripping-plate J, connected with the carrier so as to move with the same and the operating-lever, is arranged horizontally between the punches and the die and adapted to have the checks slipped edgewise under its forward edge and engaged with independent feeding devices. (Not shown.) The said plate is constructed with an opening K formed in it to admit the punches to the paper and to the die, whereby the plate itself strips the paper from the punches without other aid. The plate is made much shorter than the length of a check, so that when it is moved under the punches its ends will not project beyond the frame of the device, which is thus made compact and convenient of operation in the minimum of space upon a crowded desk; but in securing these advantages by employing a short stripping-plate the ends of the checks are left free, and unless the checks are very straight they will lift up toward the punches. To prevent this and the consequent crumpling or tearing of the checks, I employ a guard arranged in line with and extending a very little below the lower ends of the punches when the same are in their normally-elevated positions.

As shown by Figs. 1 and 2 of the drawings, the guard consists of a piece of wire, made straight in its main portion A and having its ends bent at a right angle thereto to form the arms B B, terminating in eyes C C, receiving horizontal screws D D, entering the opposite ends of the said head E. In this case the straight portion A of the wire is located behind the punches and serves to prevent the ends of the check being punched from lifting up and fouling with the punches, which are then liable to tear or at least crumple them.

As shown by Fig. 3 of the drawings, the guard is formed by extending the front plate M of the head E so that its lower end will stand just below and in front of the lower ends of the punches when they are in their normally-elevated positions.

As shown by Fig. 4 of the drawings, the guard is made from a strip of sheet metal. This guard is made vertically adjustable by providing both of its arms N with a vertically-elongated slot O, whereby the guard may be raised and lowered by loosening the screws passing through the slots to hold the guard in place. By thus employing a short stripping-plate and a stationary fouling-guard I am enabled to make a compact and convenient device which will not injure the checks and which requires the exercise of very little care in its safe operation.

In view of the foregoing suggestions of modifications I would have it understood that I do not limit myself to the exact construction shown and described, but hold myself at liberty to make such changes as fairly fall within the spirit and scope of my invention.

I am aware that a stripping device having an incidental anti-fouling function has been used heretofore, and I do not therefore claim a fouling-guard, broadly.

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

In a device for punching commercial paper, the combination, with the frame or body thereof, of a series of vertical punches and a horizontal die, a horizontally-movable stripping-plate located between the punches and the die, made much shorter than a check and having an opening formed in it to admit the punches to the paper, which is slipped under it, and to the die, and a stationary fouling-guard arranged in line with and a little below the punches when they are in their normally-elevated positions, substantially as set forth, the projection of the ends of the stripping-plate beyond the frame or body as it is moved over the die being avoided by making it short, as described, and providing the device with a fixed fouling-guard extending throughout the length of the punches.

WILLIAM F. STARK.

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