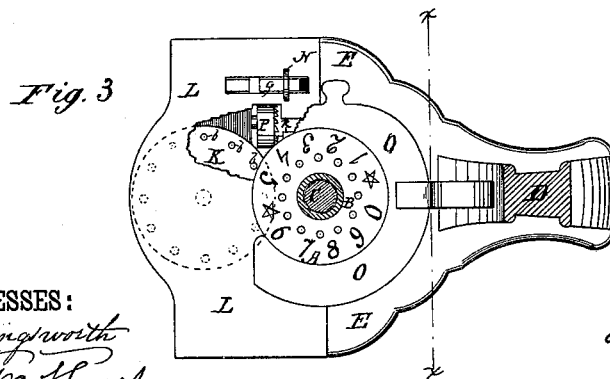
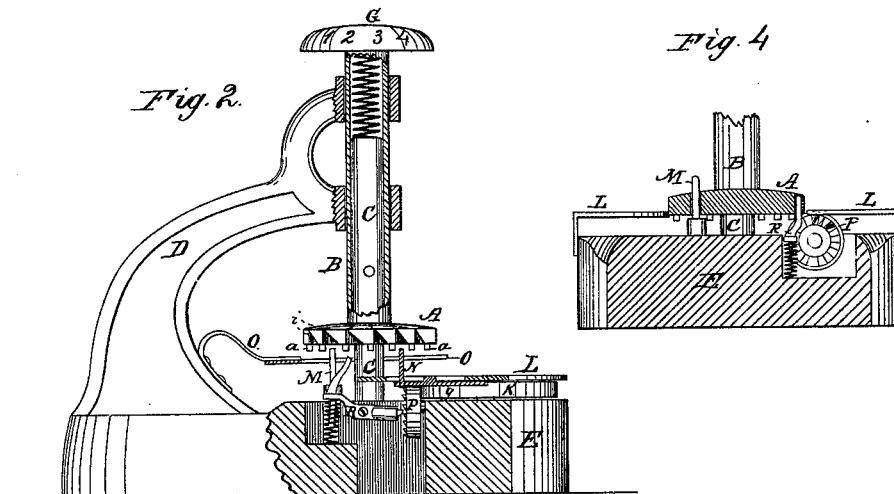
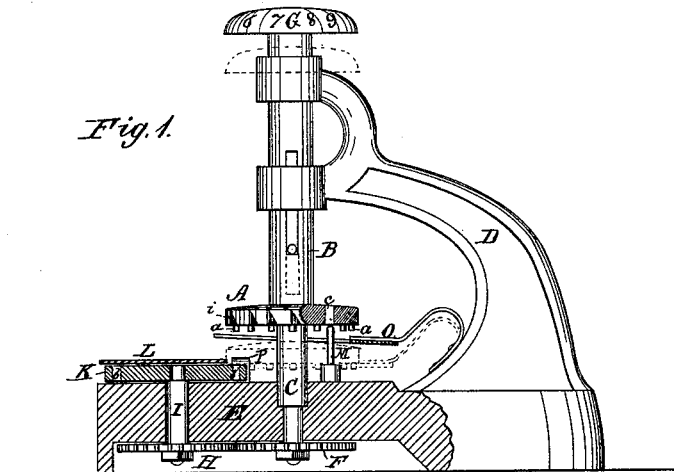


H. H. NORRINGTON.
Perforating-Stamp.

No. 220,412.

Patented Oct. 7, 1879.



WITNESSES:
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UNITED STATES PATENT OFFICE.

HENRY H. NORRINGTON, OF WEST BAY CITY, MICHIGAN.

IMPROVEMENT IN PERFORATING-STAMPS.

Specification forming part of Letters Patent No. **220,412**, dated October 7, 1879; application filed April 19, 1879.

To all whom it may concern:

Be it known that I, HENRY H. NORRINGTON, of West Bay City, in the county of Bay and State of Michigan, have invented a new and Improved Perforating-Stamp; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to an improved stamp for perforating checks, drafts, or other written orders or instruments, for the purpose of preventing fraudulent alteration of them. It is more particularly an improvement upon the perforating-stamp for which I have obtained reissued Letters Patent, dated April 8, 1879.

In the present device the wheel carrying the male dies is rigidly attached in horizontal position to a sliding sleeve or plunger; and in place of fixing the receiving-dies in a slide, I arrange them in a horizontally-rotatable wheel or disk, which is geared with the stem or rod on which the aforesaid sleeve or plunger slides vertically, so that all three rotate together. A stud fixed in the bed-plate of the stamp prevents the male-die plate or wheel from being forced down, except when one of its punches registers with a die in said rotatable disk.

The invention also includes a novel mechanism for feeding the check or other paper to be perforated, the same consisting of a ratchet-wheel which is intermittently rotated by a spring pawl-lever, whose vertical arm comes in direct contact with the male-die plate as the latter descends.

The invention also includes other minor features, as will be hereinafter explained.

In accompanying drawings, forming part of this specification, Figures 1 and 2 are side sectional views of the stamp. Fig. 3 is a plan view, with parts in section. Fig. 4 is a detail cross-section on line *x x* of Fig. 3.

The plate or wheel A, having punches or male dies *a* fixed in its under side, is rigidly attached in horizontal position to a spring-supported sleeve or tubular plunger, B, which slides on a vertical stem or shaft, C, in the guiding-head of the goose-neck D. The reduced lower end of shaft C passes through the bed-plate E, and has a spur-gear, F, attached to its extremity, as shown.

A hollow convex head, G, is affixed to the upper end of the sleeve B, and the shaft and sleeve are connected by slot and pin, so as to rotate together, while allowing the sleeve to slide freely on the stem.

The said gear F meshes with another gear, H, fixed on the shaft I, which passes through the bed-plate E, and has the die-carrying disk or wheel K keyed on its upper end. Thus the rotation of spur-gear F imparts like motion, but in the opposite direction, to the gear H and die-wheel K.

The die-wheel is so located with relation to the male-die plate A that the edge of the latter projects over the edge of the former, and by the above-described gear-connection the punches *a* will always register one at a time with the corresponding dies *b* of wheel K. Thus, when the wheel A is forced down by pressure applied manually to the sleeve-head G, a punch, *a*, will enter the die *b* beneath it, and thus perforate a check or other paper placed between them on the raised face-plate L, which conceals the die-wheel except at its inner edge.

To insure the registration of punches and dies, the descent of plate A is prevented, by stud or guide-pin M, until so adjusted that one of its punches *a* is directly over its corresponding die *b* in wheel K. Said stud is fixed vertically in the bed-plate E beneath the plate A. The latter is provided with a series of holes, *c*, arranged in a circle, and the stud M must first enter one of them before the plate A can descend far enough to allow contact of punches *a* with the check or other paper. The stud M thus acts as a safety-stop.

Two of the contiguous punches *a* have their faces cut star-shaped, or to represent stars, and the others have the contour of the nine digits and the cipher 0. The dies *b* in wheel K correspond with these in shape and position, so that whatever the adjustment of wheel A on its axis, the punch *a* which is in front will register with that die *b* in wheel K which has like shape; for instance, the punch representing the numeral 2 will register with the die 2, and so of all the other characters, (stars and numerals.)

The same characters are inscribed or other-

wise indicated on the upper side of plate A, near its periphery, and also on the conical plunger-head G, for convenience in adjusting the die-plate.

The position of the paper while being punched is determined in part by an adjustable slide, which is attached to the face-plate L. The slide consists of a screw, N, which projects above the face-plate L, and of a narrow plate, g, which lies in contact with the under side of the latter. The adjustment of the slide is limited by a transverse slot in the face-plate. The position of the slide regulates the distance between the edge of the paper and the place for punching, and its use is necessary to enable checks or drafts to be punched uniformly. For instance, some banks use draft-blanks which are wider than others, and hence the stamp must be adapted to such variation.

O is a forked spring-clip, for holding the check, draft, or other paper while being punched. Its arms partly encircle the punching-wheel A, and one of them is provided with a thumb-piece, to adapt it to be pressed down upon the paper on each side of the place where the latter is to be punched.

The device for feeding the paper while being punched is a wheel, P, having an elastic periphery to secure the requisite friction with the paper. The same is rotated intermittently by a spring pawl-lever, R, which has an angular shape, and is pivoted in the bed-plate E, and so constructed and arranged that one end engages radial notches in the side of wheel P, while the other end projects upward and comes in contact with inclined shoulders or cams i on the edge of the male-die plate or punching-wheel A each time the latter descends. Thus, when the plate A is forced down, it tilts the lever, and the latter moves the wheel P through a part of a revolution and feeds the paper a corresponding distance.

In this machine the arrangement of the male and female die plates or wheels in horizontal position and the manner of connecting and operating them secures obvious advantages in respect to compactness, strength, and durability.

What I claim is—

1. In a perforating-stamp, the combination of a vertically-sliding rotatable male-die plate or wheel, arranged horizontally, and having a series of punching-dies attached to its face,

and a rotatable plate or disk placed horizontally beneath the former, and having in its face a series of dies to receive said punches, and gears connecting the shafts of said plates and disks, as shown and described.

2. In a perforating-stamp, the combination of the horizontal male-die plate and the sliding plunger, the rotating shaft connected with said plunger so that they rotate together, while the plunger has free vertical movement, the female-die wheel, and mechanism for connecting it with the aforesaid shaft, substantially as shown and described.

3. In a perforating-stamp, the combination of the meshing gears, arranged horizontally beneath the bed-plate, the vertical shafts, the female-die wheel fixed on the shaft above said bed-plate, the sliding plunger, and male-die plate, all as shown and described, to operate as specified.

4. In a perforating-stamp, the stud or guide-pin fixed in the bed-plate, in combination with the vertically-movable male-die plate, having a series of perforations, and the receiving die-wheel, substantially as shown and described.

5. In a perforating-stamp, the combination, with the notched or toothed feed-wheel, which works in a slot of the table or bed-plate, the pivoted angular lever, and the reciprocating male-die plate, which, when forced down, strikes upon the vertical arm of said lever, as shown and described.

6. In a perforating-stamp, the combination of the angular pivoted spring-actuated pawl-lever, the feeding-wheel having teeth or notches in its side, and the male-die plate having inclined shoulders or cam-grooves in its edge, substantially as shown and described.

7. In a perforating-stamp, the adjustable slide, in combination with the slotted face-plate and the punching or male-die plate, as shown and described.

8. In a perforating-stamp, the bifurcated spring presser-plate, in combination with the male-die plate and the face-plate, as shown and described.

The above specification of my invention signed by me this 12th day of April, 1879.

HENRY H. NORRINGTON.

Witnesses:

H. M. GILLETT,
T. BECKWITH.