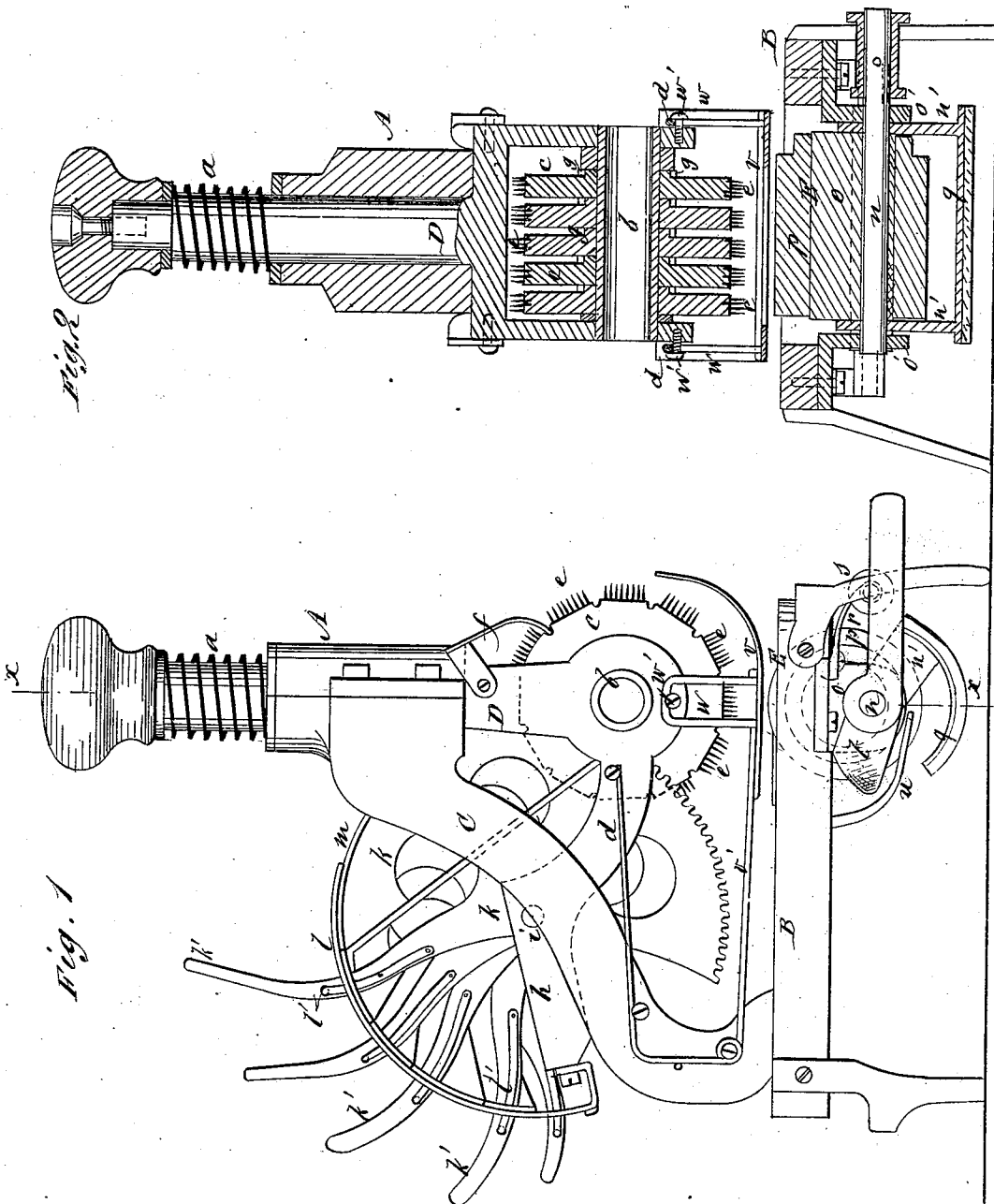


J. J. BERGER.
Perforating-Stamp.

No. 226,962.

Patented April 27, 1880.



WITNESSES:

C. Neveux
C. Sedgwick

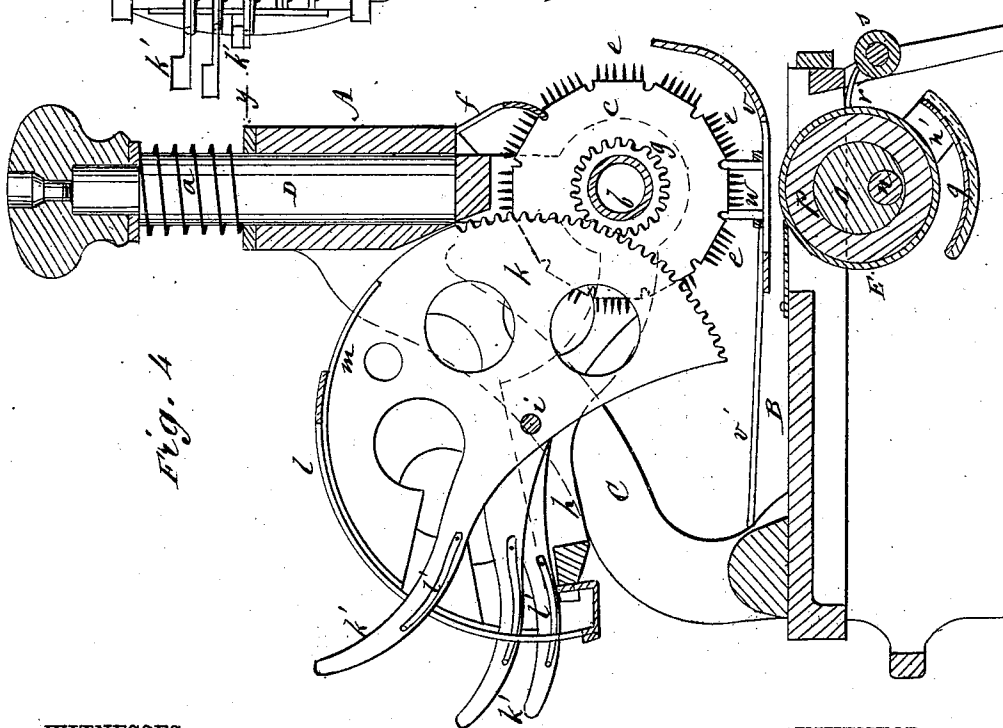
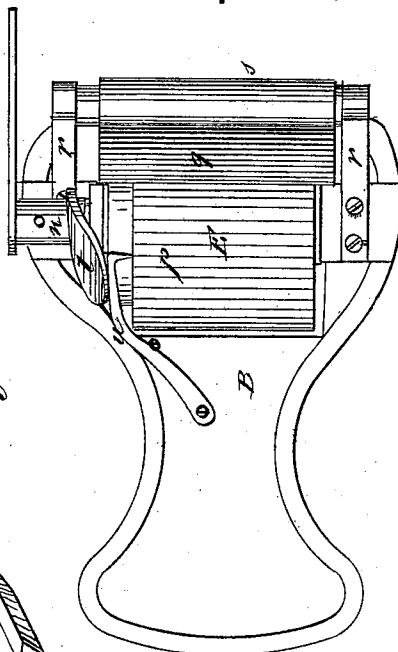
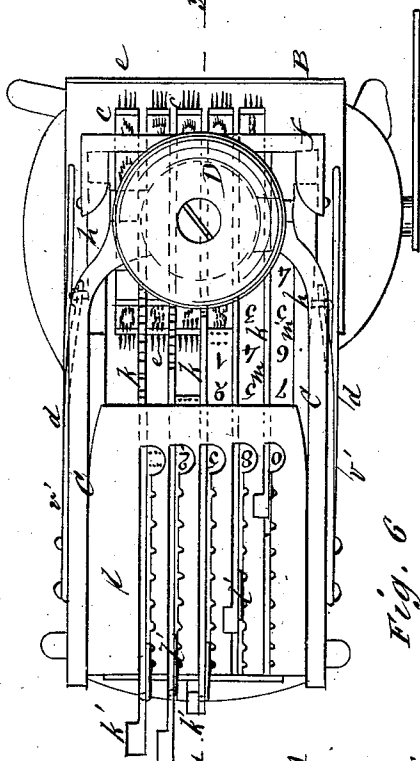
INVENTOR:

J. J. Berger
BY *Munroe*
ATTORNEYS.

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UNITED STATES PATENT OFFICE.

JOHN J. BERGER, OF BROOKLYN, NEW YORK.

PERFORATING-STAMP.

SPECIFICATION forming part of Letters Patent No. 226,962, dated April 27, 1880.

Application filed October 8, 1879.

To all whom it may concern:

Be it known that I, JOHN J. BERGER, of Brooklyn, in the county of Kings and State of New York, have invented a new Improvement in Perforating-Stamps, of which the following is a specification.

My improvements relate to hand perforating or check stamps of the class which are used to cut or perforate the paper with figures and letters as a safeguard against alterations of the check; and the object of my improvements is to perforate the check with needle-points, and at the same time ink the perforations, whereby the numbers may be clearly marked without cutting large openings in the paper.

The invention consists in certain details of construction and combination of parts whereby the object named is accomplished and the instrument rendered convenient for use, as hereinafter described and claimed.

In the accompanying drawings, forming part of this specification, Figure 1 is a side elevation of my improved stamp. Fig. 2 is a vertical section of the same on line *xx*, Fig. 1. Fig. 3 is a plan view. Fig. 4 is a vertical section on line *yy* of Fig. 3. Fig. 5 is an inverted plan view.

Similar letters of reference indicate corresponding parts.

The tubular head A of the punch is supported above the bed B by rigid arms C, and carries the plunger D, which is fitted to slide in head A, and is thrown upward by a coiled spring, *a*, and side springs, *d*.

The lower portion of plunger D is bifurcated and fitted with the cross-shaft *b*, upon which the numbering-wheels *c* are fitted to revolve freely and independently of each other.

The surface of each wheel *c* is provided with the nine digits and the cipher, (0,) with letters and other devices, as desired, which are formed by radially-projecting needle-points *e*, each number being composed of numerous points, and between the numbers of each wheel *c* are grooves or notches for receiving a stop, *f*, which is hung to swing on the plunger D, so that when any combination of numbers is set the stop *f* may be turned down into the notches to retain the wheels in place.

The stop *f* may be provided with an arm placed so as to catch over the head A when *f* is turned up for setting the wheels, and thereby prevent downward movement of the plunger.

Each wheel *c* is formed with a toothed hub, *g*, by which it is turned for setting, as next described.

The bifurcated end of the plunger D is formed with side arms, *h*, that extend backward between the rigid arms C and carry the cross-shaft *i*, on which the toothed sectors *k* are fitted to turn independently. There is a sector, *k*, for each numbering-wheel *c*, engaging with the toothed hub *g* thereof, and each sector *k* is provided with a handle, *k'*, which moves in a slot of the curved indicating-plate *l*, that is fixed upon the side arms, *h*. Each handle *k'* is fitted with a spring-detent, *l'*, for engaging with notches in the side of the slot, so as to retain the sector in position, and upon each sector is fixed a curved plate, *m*, moving on the under surface of plate *l*, and marked with numbers properly arranged for indicating, through an aperture in plate *l*, the number of wheel *c* that is in position for use.

By this construction the wheels *c* may be readily turned to bring the desired combination of numbers in position for use. The gearing is proportioned so that the movement of the sectors through an arc of ninety degrees will give a complete revolution to the wheels *c*, and it will be seen that the plunger D carries in its reciprocating movements the side arms, *h*, and attached parts.

The bed B of the instrument is formed with an aperture beneath the plunger D, in which aperture the impression-roller E is fitted upon a cross-shaft, *n*, that is sustained in the hangers *o'*. The roller E consists of a cylindrical core portion, *o*, placed eccentrically on the shaft *n*, and an outer wooden portion, *p*, which is loose upon the core *o*, and is provided with a surface of rubber or similar soft material. Upon arms *n'*, that are carried by shaft *n*, is fixed the inking-pad *q*, which consists of a curved plate covered on its outer surface with felt or other suitable material.

At the front of the machine, upon spring-arms *r*, is hung an ink-roller, *s*, which is to be inked from a trough in any desired manner,

and is positioned so that it comes in contact with the surface of pad *q* when the latter is turned up for inking the numbers. The shaft *n* is provided with a handle, whereby it may be turned, and the pad *q* thereby brought beneath the numbering-wheels *c*. The roller *E*, being eccentric to the shaft, is by the same motion lowered to give room for the pad.

The outer portion, *p*, of roller *E*, being loose, may be turned to change the impression-surface, and I provide automatic devices for accomplishing this movement every time the instrument is inked. These devices are shown in Figs. 1 and 5, and are as follows: Upon the shaft *n*, at one end of roller *E*, is a cam, *t*. Attached beneath bed *B* is a spring-finger, *u*, that extends downward at the end of roller *E* in the path of cam *t*, and is formed at its outer end with a sharp point projecting toward the impression-roller. As the shaft *n* is turned the cam *t* will move at the outside of and in contact with finger *u*, and force the point of the finger into the portion *p* of the roller at the end, which will hold the portion *p* until the core *o* has turned a short distance and moved forward far enough to free the cam *t* from finger *u*, when the elasticity of *u* will return it to its first position. On the return movement the cam *t* passes above the point of finger *u*, with no effect except to press the finger downward.

Above the impression-roller *E* is hung, by the spring-arms *v'*, the apertured plate *v*, for holding the check down while the pins *f* withdraw. The arms *v'* tend to press the plate *v* down upon bed *B*, and the plate is raised at the completion of the upward movement of the plunger by the loops *w*, rising from *v* and extending over the pins *w'*, that project from the plunger.

By this construction there is space given for insertion of a check beneath plate *v*, and the check is clamped by *v* as soon as plunger *D* begins to move down and held until the pins *e* are entirely withdrawn.

I prefer to use angular needle-points *e* for forming the numbers of angular shape in cross-section, instead of round, as shown in Fig. 6. These will perforate and cut without tearing.

The instrument described will plainly number the check without tearing, and no dies are required, as in stamps using cutters.

The number may be perforated and inked over any written portion without obliterating or rendering the writing illegible, and thus prevent any alteration of such writing.

By inking the perforations a double safeguard is provided, as an attempt to remove the ink by acids will also remove the written matter.

In addition to the numbers the wheels are to be formed with a blank space and an arbitrary device for impressing at the beginning and end of the combination.

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

1. In a perforating-stamp, a reciprocating plunger fitted with rotatable wheels having needle-points projecting radially, the setting mechanism, consisting of meshing gears on the wheels and a counter-shaft carried by the plunger, and an impression-bed fitted beneath the plunger, all combined and operating as set forth.

2. In a perforating-stamp, a reciprocating plunger fitted with rotatable wheels having needle-points projecting radially, the setting mechanism, consisting of meshing gears on the punching-wheels and a counter-shaft carried by the plunger, an impression-bed fitted beneath the plunger, and an inking-pad fitted to swing above the impression-bed, all combined for operation substantially as described and shown.

3. In a perforating-stamp, the combination, with a reciprocating plunger carrying rotatable perforating-wheel fitted with gears, of toothed sectors for setting the punching-wheels, and hung upon a counter-shaft that is carried by the plunger, substantially as described and shown.

4. In a perforating-stamp, the combination, with the reciprocating plunger carrying rotatable perforating-wheels, and the sectors *k*, for setting the perforating-wheels, of the slotted plate *l* and numbered plate *m*, substantially as and for the purposes specified.

5. In a perforating-stamp, the impression-wheel *E*, fitted eccentrically upon its shaft, and the inking-pad *q*, fitted on the shaft of the impression-roller, combined for operation as specified.

6. In a perforating-stamp, the combination, with the impression-roller *E*, having its outer portion movable, and the ink-pad carried by the shaft of the impression-roller, of the cam *t* and spring-finger *u*, for shifting the impression-surface, substantially as described.

7. In a perforating-stamp, the apertured spring-plate *v*, provided with the loops *w*, in combination with the plunger fitted with pins *w'* and the impression-bed, substantially as and for the purposes set forth.

JOHN J. BERGER.

Witnesses:

GEO. D. WALKER,
C. SEDGWICK.