(No Model.)

P. L. KOSCIALOWSKI.

MACHINE FOR PERFORATING CHARACTERS.

No. 505,404. Patented Sept. 19, 1893.

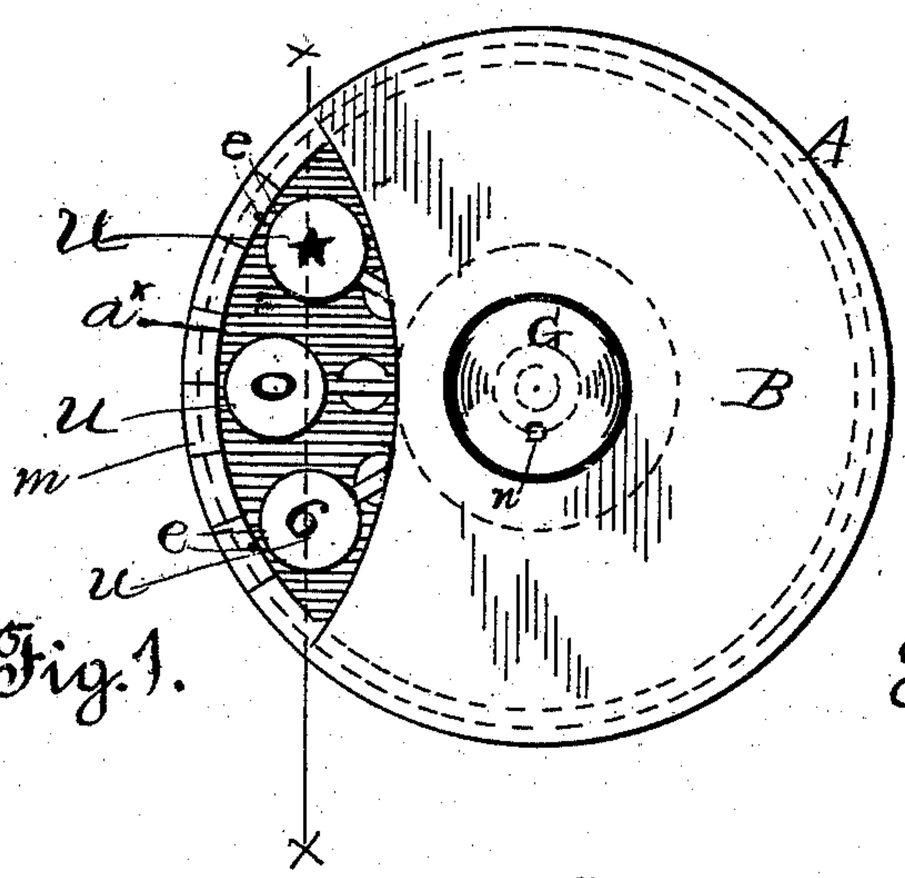


Fig. 1.

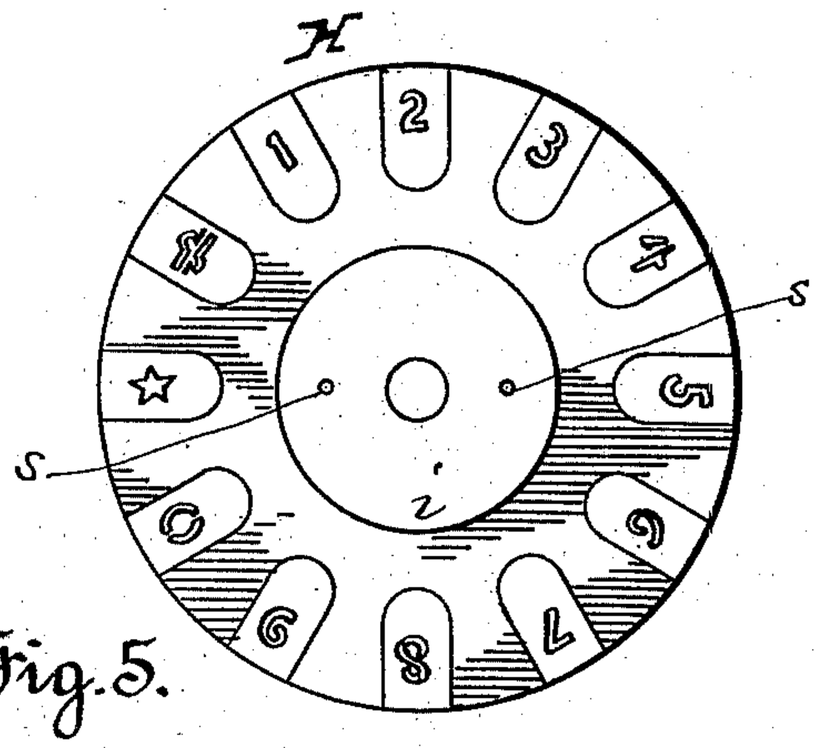


Fig. 5.

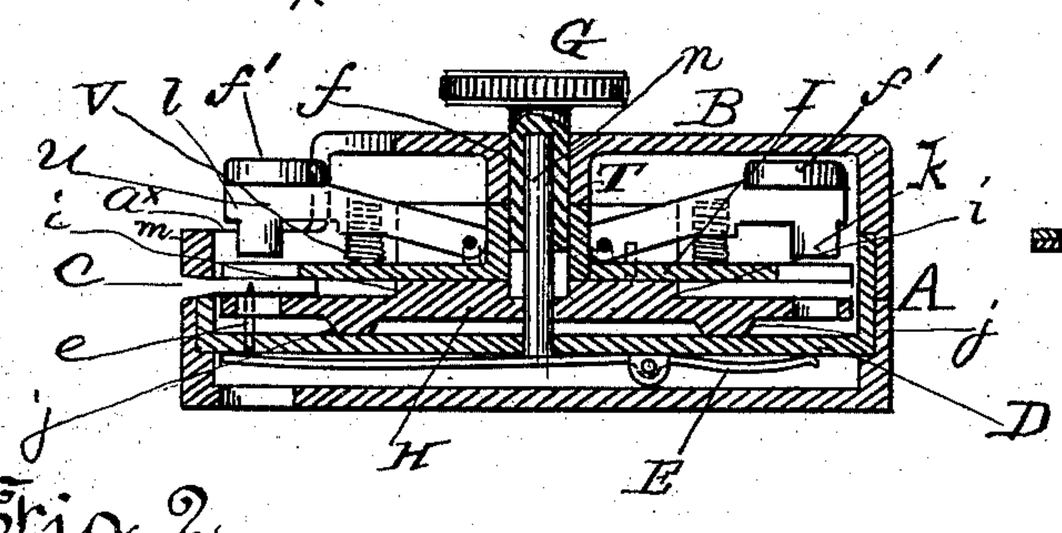


Fig. 2.

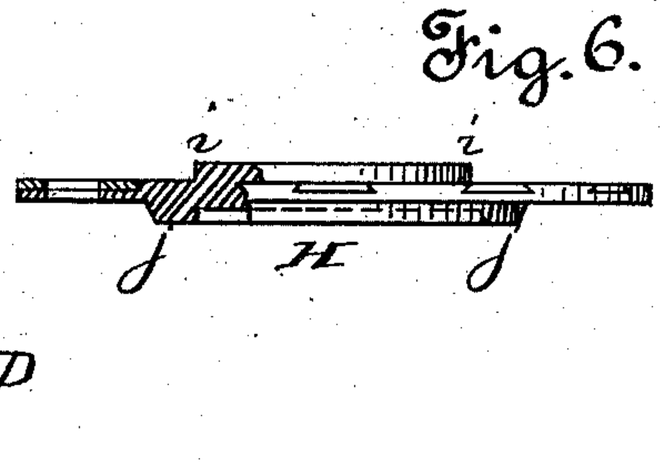


Fig. 6.

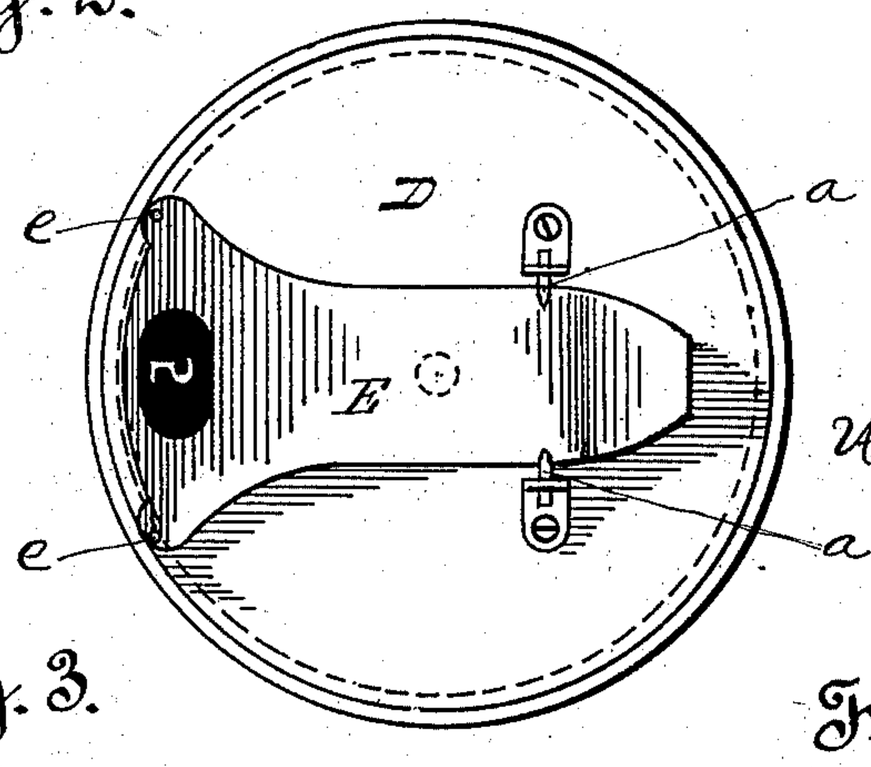


Fig. 3.

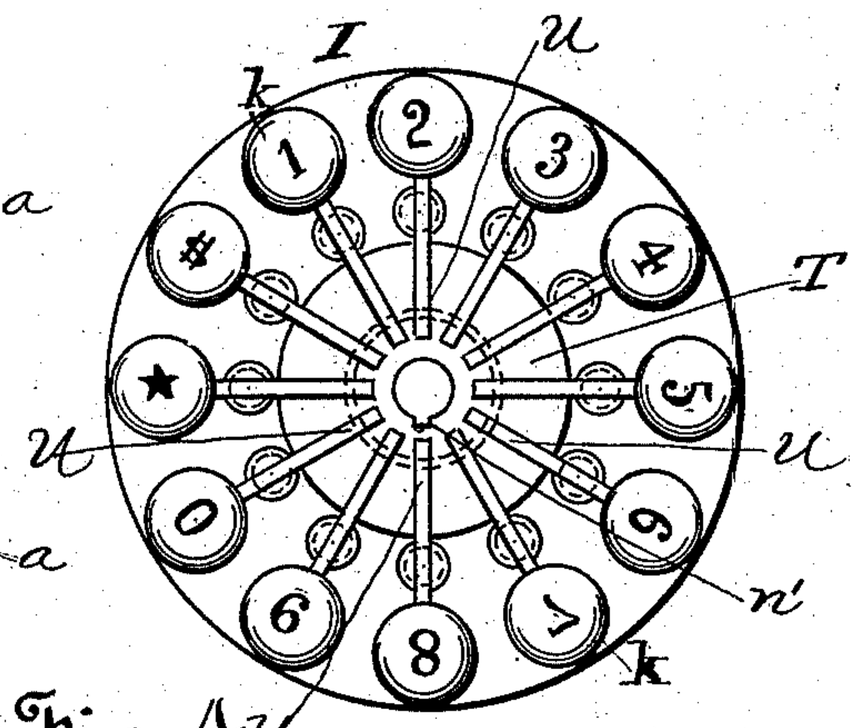
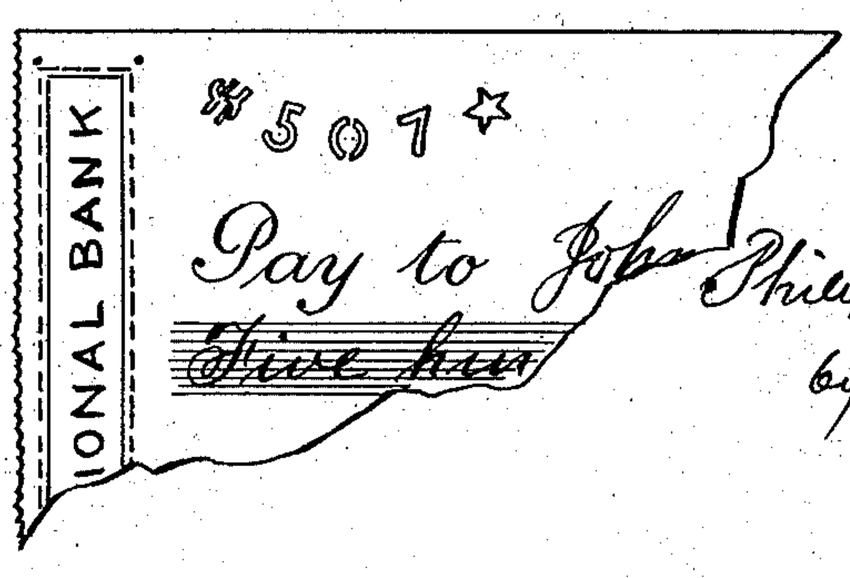


Fig. 4.

Witnesses.
Fellowes
Chas. J. Armbruster



Inventor.
Philip L. Koscialowski,
by Jno. L. Boone
his attorney

UNITED STATES PATENT OFFICE.

PHILIP L. KOSCIALOWSKI, OF SAN FRANCISCO, CALIFORNIA.

MACHINE FOR PERFORATING CHARACTERS.

SPECIFICATION forming part of Letters Patent No. 505,404, dated September 19, 1893.

Application filed April 4, 1893. Serial No. 469,014. (No model.)

To all whom it may concern:

Be it known that I, PHILIP L. KOSCIALOWSKI, a citizen of the United States, residing in the city and county of San Francisco and State of California, have invented certain new and useful Improvements in Machines for Perforating Characters; and I do hereby declare the following to be a full, clear, and exact description of said invention, such as will enable others skilled in the art to which it most nearly appertains to make, use, and practice the same.

My invention relates to an improved device or implement for punching or perforating figures or characters on the margin or other portion of a bank-check or other negotiable paper, to indicate the numerical amount or sum of money for which the instrument is drawn. It is of such form, size and construction that it can be readily carried about in the pocket or used on a desk as a paper weight, and by reason of its small size and compactness it can be made and sold at a very moderate price compared with the heavy, expensive and cumbersome devices now used for that purpose.

In the accompanying drawings, Figure 1 is a plan view of my device. Fig. 2 is a cross-section. Fig. 3 is a bottom view representing more especially the false-bottom and the spring-plate carrying the retaining pins for holding the article when being perforated. Fig. 4 is a plan view of the swivel plate that carries the punching arms and levers. Fig. 5 is a plan of the swiveling bottom or die plate; and Fig. 6 is an edge view of Fig. 5, with a portion broken away to show the cutting die.

The figures are here represented on a scale corresponding with the ordinary full size of a practical machine, although they may be made larger or smaller as desired.

Referring to the drawings, let A represent a circular case, which may be made of metal, vulcanized rubber, glass or other suitable substance. I shall usually make the top B of glass and the remainder of the case of the metal aluminum, but any other metal can be used, and it can be made in one, two or more parts. The upper portion of this case is broken away or left open as at $a^{\times}$ on one side, as shown at Figs. 1 and 2, for a purpose as will hereinafter appear and this open portion or side forms the front of the machine. Its bottom is perfectly flat, so that it will have a firm bearing or base on a flat surface or table. A horizontal slit or opening *c* is made in the front of the case just below the open portion, and this slit or opening extends back as far as the line *x. x.* (Fig. 1.), and into this slit or opening the edge of the check or paper to be stamped or perforated is inserted.

The case has a false bottom D (Fig. 2), underneath which a spring or plate E (Fig. 3) is pivoted by opposite gudgeons *a. a.* The short end of this plate is bent upward so as to press against the false bottom and form a spring lever, while the opposite or long end extends to the periphery of the case at the front. The front end of this plate is widened, and at each side of its broadened end it carries a spit or pin *e*, which extends upward through a hole in the false bottom, and passes across the slit or opening *c*, in which the check or paper is inserted to be stamped or perforated. A hole extends down through the center of the case from its top, and a corresponding hole is made through the false bottom D. A spindle *f*, which carries a milled wheel or head G at its upper end, passes down through this central hole, and its lower end rests upon the plate E between its fulcrum and its pin bearing end, so that a downward pressure upon the wheel or head G presses the spindle against the plate E and forces its long end downward, thus withdrawing the pins *a. a.* from across the slot or opening, and permitting the edge of the paper or check to be inserted into the slit or opening without obstruction. By removing the pressure from the spindle the spring power of the plate will force the pins upward through the sheet or check and hold it in place. Instead of pins pressure clamps might be used. The die-bearing disk H represented at Fig. 5, fits down over the central standard inside of the case and rests upon the false bottom D below the slit or opening in the case. It has twelve die-plates arranged in its edge equi-distant apart, each of which forms the lower die for cutting or perforating one of the figures inclusive from the figure 1 to the figure 9, and one for the figure naught (0), one for a terminating star, and one with a dollar mark, all as shown at Fig. 5. This

disk, as shown at Fig. 6, has a raised edge *i* on its upper side, and a like one *j* on its under side, so as to reduce the bearing surface and cause it to move easily and to release the die of the waste or cuttings.

I is a swiveled plate or disk carrying the punching dies and connected to, and moving with, the die-bearing disk H, by means of dowel-pins *s*, projecting upward from the disk H, and entering corresponding holes in the plate or disk I. The spindle *f* has a feather *n* on it, which enters a corresponding groove *n'* in the central opening of the plate Fig. 4, so that by turning the spindle the two die plates Figs. 4 and 5) are caused to rotate in a horizontal plane.

The upper die plate (Fig. 4) has a hub T on its upper side, in which twelve slots are made, and in each slot the inner end of a lever *u* is pivoted. The outer end of each of these levers carries a die *k* corresponding with the figure and character of the lower die plate (Fig. 5), and above each die, at the outer end of the lever, is a concave or other shaped press button. Each lever has a spiral or other spring *v* between it and the plate which keeps its outer or die-bearing end raised until it is pressed down. The front edge of the upper die is either sharpened or provided with a pointer or index *l*, and the circular raised rim *m* around the open front of the machine is provided with a scale or graduation, which serves in connection with the pointer or index to guide the operator in adjusting the levers in order to properly space the characters.

When it is desired to cut or perforate numbers in a check or other paper, the wheel or head G is pressed upon so as to force the pins of plate E below the slit or opening in the case front. The margin of the check or other paper is then inserted into the slit or opening until its edge is on a line with the line *x. x.* (Fig. 1). between the two die plates. The pressure is then released and the spring plate E forces the pins upward through the paper, thus pinning it in place. The die plates are then rotated by turning spindle *f* until the die representing the dollar character is in the proper position at the front of the case, for exposure through the opening $a^{\times}$ when by pressing upon the button head *f'* of the lever the upper die is forced down upon the lower die, cutting out or perforating the paper with the proper mark. The figures which represent the face sum of the check or other paper are then brought successively in view in the same manner, and the paper perforated or cut in the same way until the sum indicated on the face of the paper is stamped, cut or perforated in the margin of the paper. The sum is always terminated with the star. The paper to be cut or perforated, being held stationary while the dies are brought successively in view at the front of the machine and as the dies move in a circular track about the center of the instrument the figures, instead of being cut or perforated in a straight line in the check or paper as with other instruments used for this purpose, will be cut or perforated in a curved line, giving to the check or paper a distinctive appearance, and lessening the liability of the cut out figures being torn or mutilated by the handling and use of the check or paper. This I consider a very important feature of my invention.

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

1. An implement for cutting and perforating characters &c., comprising the two connected, rotatable disks or plates, one bearing the lower dies, and the other having coincident openings therein and the series of keys provided with dies standing opposite the aforesaid dies and openings, a receiving space being provided between the two disks or plates, and means for holding the article to be perforated stationary while the characters are being cut or peforated independently and intermediately of said disks or plates, whereby the perforating or cutting operation will be performed in the arc of a circle, producing a like arrangement of the perforations or characters in the article, substantially as set forth.

2. An implement for cutting or perforating characters, having connected rotatable die-carrying disks or plates, a pivoted spring-plate having at one end upwardly projecting pins or holders for the article to be acted on, passing through the false bottom and transversely through the receiving-space for the article to be acted on, and a spindle or plunger resting upon said spring-plate, and a cap or thumb-piece superposed upon said spindle or plunger, substantially as set forth.

3. An implement for cutting or perforating characters &c., comprising a casing having a viewing opening and a false-bottom therein, the two connected, rotatable plates or disks, one bearing dies and the other having coincident openings therein, and the series of keys provided with dies standing opposite the aforesaid dies and openings, a receiving space being left between said plates or disks, the spring-plates hung upon the under side of said false-bottom and having retaining pins projecting through said false-bottom and transversely through said receiving space, a spindle or plunger resting upon said spring-plate, and a cap or thumb piece having a tubular pendent portion fitted upon said spindle and into a corresponding opening or barrel in said casing, substantially as set forth.

PHILIP L. KOSCIALOWSKI.

Witnesses:
JAMES C. ADAMS,
GEO. L. MURDOCK.