E. H. HEBERN.

MACHINE FOR FORMING CODE MESSAGES.

APPLICATION FILED MAR. 11, 1912.

1,084,010.

Patented Jan. 13, 1914.

3 SHEETS—SHEET 1.

Fig. 1.

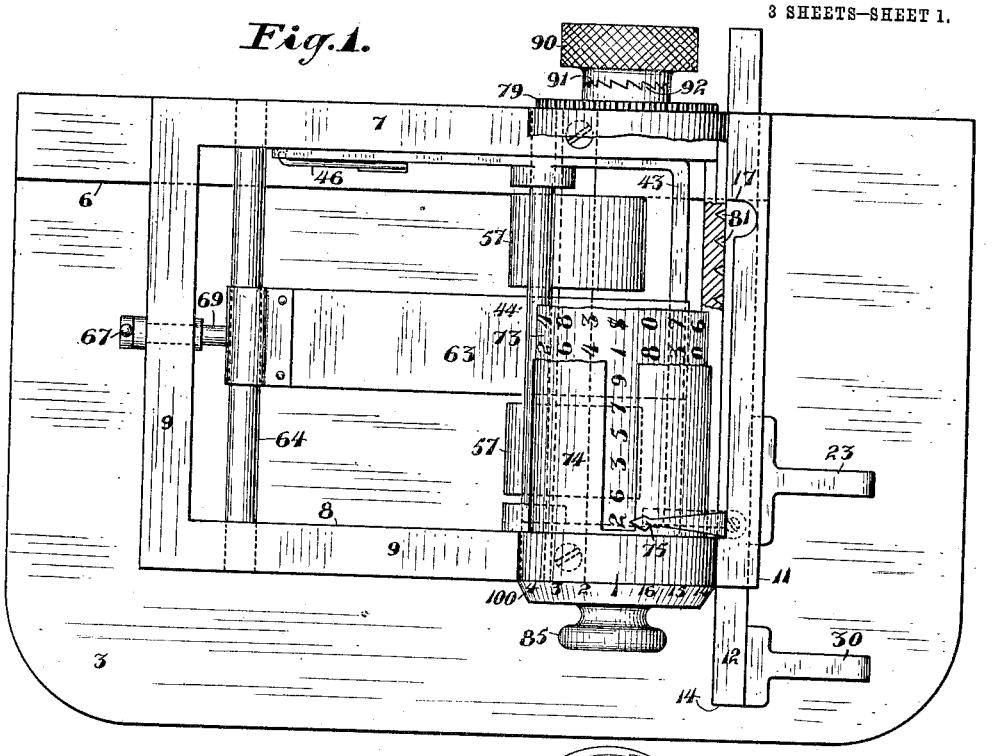
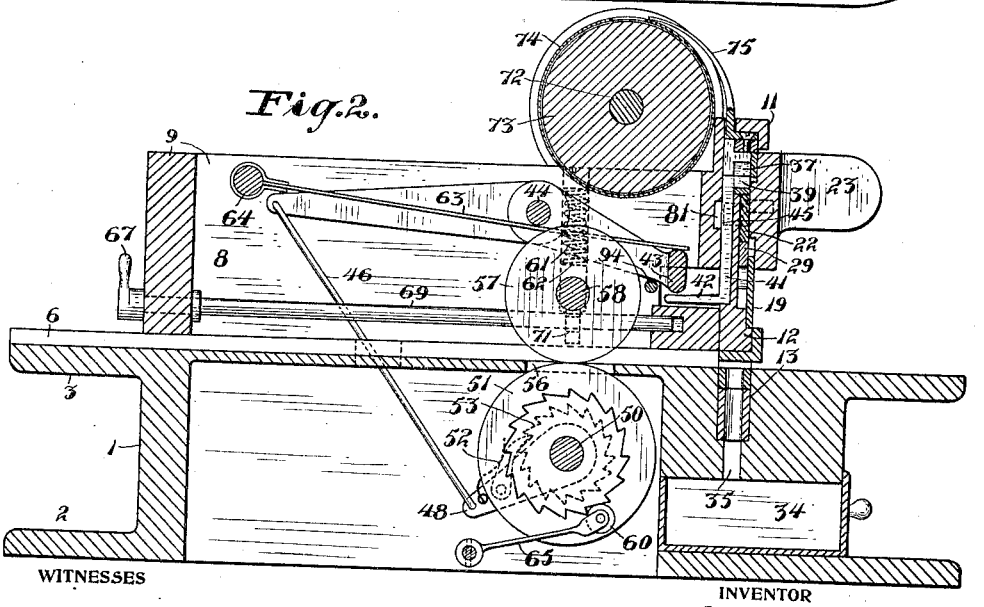


Fig. 2.



WITNESSES

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3 SHEETS—SHEET 2.

Fig. 3.

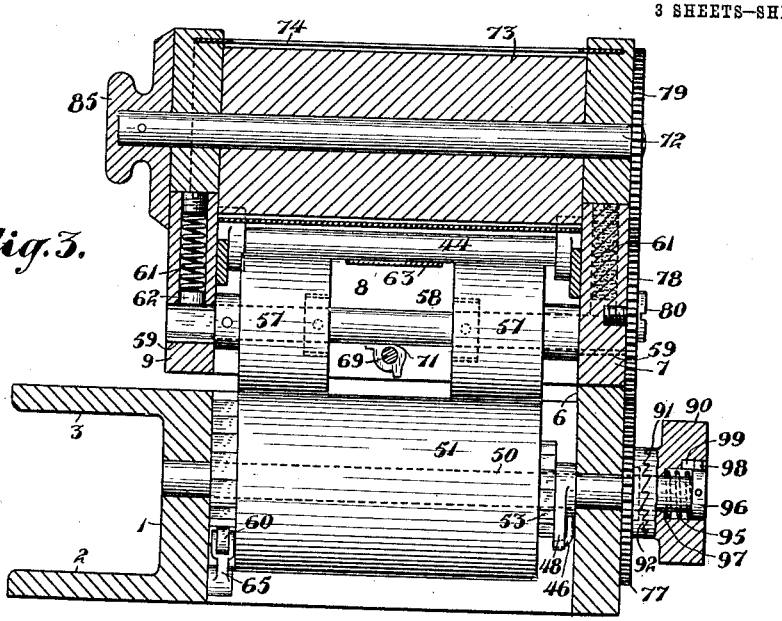
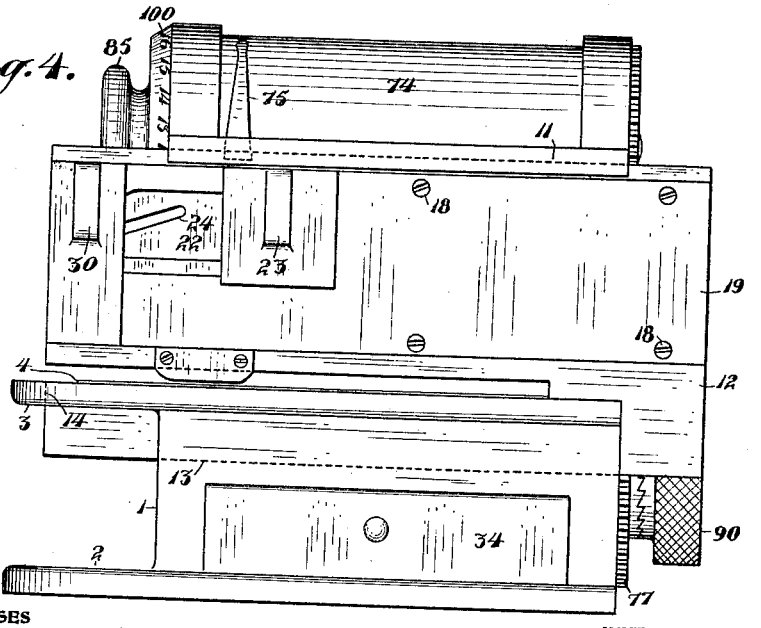


Fig. 4.



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3 SHEETS—SHEET 3.

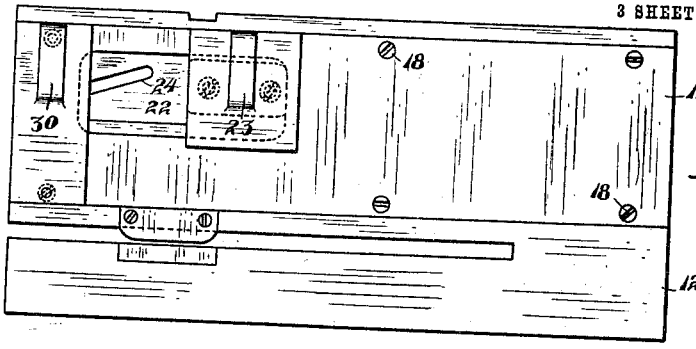


Fig. 5.

Fig. 7.

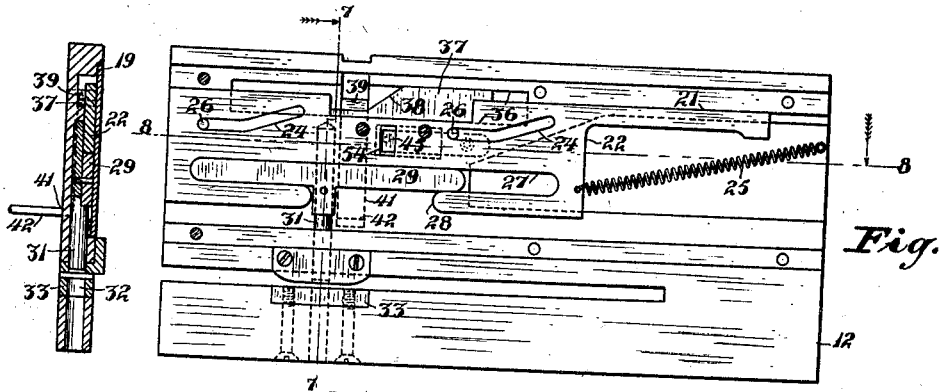


Fig. 6.

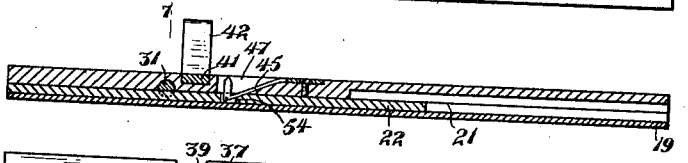


Fig. 8.

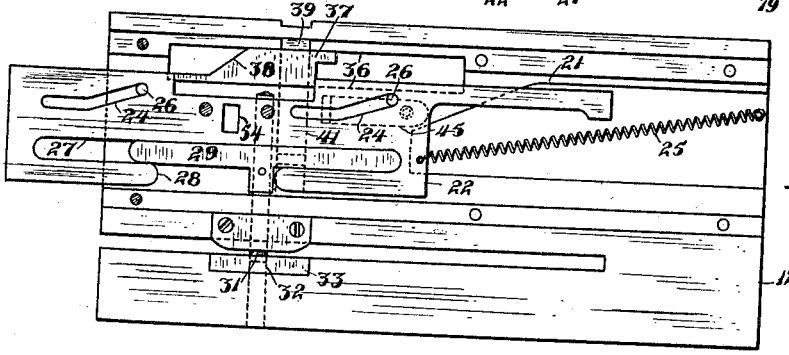


Fig. 9.

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EDWARD H. HEBERN, OF OAKLAND, CALIFORNIA, ASSIGNOR TO H & H PATENT-DEVELOPING COMPANY, OF OAKLAND, CALIFORNIA, A CORPORATION OF CALIFORNIA.

MACHINE FOR FORMING CODE MESSAGES.

1,084,010. Specification of Letters Patent. Patented Jan. 13, 1914.

Application filed March 11, 1912. Serial No. 682,934.

To all whom it may concern:

Be it known that I, EDWARD H. HEBERN, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented new and useful Improvements in Machines for Forming Code Messages, of which the following is a specification.

The object of the present invention is to provide a machine for perforating or otherwise marking a check or other document a number of times, the respective locations of which perforations or marks will serve as a means to transmit to the payer of the check, or recipient of the document, information as to the amount to be paid, or as to other facts, thus preventing the successful fraudulent alteration of the check or document.

A further object of the invention is to provide a device of this character which shall be cheap and simple in construction and will yet contain means for furnishing said information in a large number of different ways.

In the accompanying drawing, Figure 1 is a broken plan view of the apparatus; Fig. 2 is a longitudinal section; Fig. 3 is a transverse section; Fig. 4 is an end view; Fig. 5 is a side view of the carrier, removed; Fig. 6 is a similar view, an outer plate being removed; Fig. 7 is a vertical section on the line 7—7 of Fig. 6; Fig. 8 is a horizontal section on the line 8—8 of Fig. 6; Fig. 9 is a view similar to Fig. 6 showing the parts in different positions.

Referring to the drawing, 1 indicates the body of the machine mounted upon a suitable base 2, and formed with a plate or table 3 for supporting a check 4 or other document to be perforated or otherwise marked. Said table is formed at one margin with a raised portion 6, containing a straight edge forming a guide for the check when being moved over the table. Upon said raised portion is secured the rear wall 7 of an oblong frame 8, the other walls 9 of which are spaced sufficiently above said plate or table to permit the passage of the check over said plate and under said walls. One end wall of said frame has an upward extension formed with an overhanging portion 11, providing an upper guideway for a cam-plate carrier 12, the lower guideway 13 of which is formed in the body of the machine, said upper and lower guideways extending transversely of the machine, and the carrier, sliding therebetween, being limited in its forward movement by its lower portion abutting against the forward end of a slot 14 formed in the plate or table 3, and in its rearward movement by a pointer 75 abutting against a shoulder 17 in the raised portion 11. Said carrier is formed on one side with a recess in which is secured by screws 18 a removable plate 19, forming the outside wall of a guideway 21 for a slidable cam plate 22, to which is secured a finger piece 23 by which it may be moved longitudinally, a stationary piece 30 being formed on the carrier. The cam plate is retracted by a coiled spring 25 secured at one end to its rear edge and at the other end to the rear portion of the carrier. To move the carrier to any desired position the finger is applied either to the finger 23 or to the finger piece 30, in the former case the spring 25 being sufficiently strong to cause the carrier to move with the cam plate unless such pressure is applied to both finger pieces as to cause the cam plate and carrier to approach one another. In this way the carrier can be moved to any desired position. When it has been moved to approximately the desired position, it is centered therein by any movement of the cam plate relative to the carrier, for, then, a spring 45 carried by the carrier in a recess 47 therein and a recess 54 in the cam plate is pressed outwardly, by the shoulder of said recess 54, so that the tooth of said spring enters one of a series of notches 81 in the frame of the machine, and, on account of said notches being angular in form said carrier is centered with reference to said notches. Said cam plate is formed with two cam slots 24 through which pass pins 26 extending from the carrier, so that, when said cam plate is, by pressure on said finger piece 23, moved in its longitudinal direction in the guideway in the carrier, that is, transversely of the machine, a vertical movement is imparted thereto by means of said cam slots 24 and pins 26. The first portions of said slots are horizontal, so that the cam plate has no vertical movement in the first part of the movement of the cam plate in the carrier, but the rear portions of said slots extend obliquely upward, so that said cam plate is depressed in the latter part of its longitudi-

nal movement. Said cam plate 22 is also formed with a long horizontally extending slot or opening 27, and the plate is cut through to the bottom from the lower side of said opening, as shown at 28. In said opening 27 is contained a punch plate 29, having secured thereto a downwardly extending punch 31. Said punch extends below the lower surface of the carrier through a hole therein and is thus prevented from moving longitudinally except with the carrier. The cam plate is, however, not prevented from moving longitudinally, because when the cam plate is depressed in the manner already described, the punch plate is also depressed, but without being moved longitudinally with the cam plate, because it is shorter than the opening 27 by the distance through which the cam plate moves longitudinally.

The check or other document can be passed over the apron or table 3, and beneath the punch, and, when the punch descends in the manner just described, it passes through said check and through a hole 32 formed in a die 33 of hardened steel secured in the carrier, the disks punched from the check falling through a slot 35 in the body 1, into a drawer 34 which can be removed from time to time. Said carrier is formed with a guideway 36 in which rests a cam 37 having an upwardly extending cam or oblique edge 38 and moved forwardly and backwardly with the cam plate, but not moving vertically with the cam plate, being prevented from dropping by the guideway 36. Said cam edge engages an elbow 39 of a lifter 41, the lower end of which has a finger 42 which engages the under side of a yoke 43 pivoted upon a transverse shaft 44 secured in the walls of the frame 8, one member of said yoke being extended beyond said pivot, and to the outer end of said extended member is secured one end of a pitman 46, the other end of which is pivotally attached to an arm 48, loosely mounted on a shaft 50. Said arm carries a spring-pressed pawl 52 engaging a ratchet wheel 53 secured to a feed roller 51 mounted on the shaft 50. By this arrangement, with each reciprocation of the pitman the roller is caused to advance a uniform angular part of a revolution. Said roller is centered in such position by a small roller 60 carried by a spring arm 65. Said roller 51 extends through a slot 56 in the table or apron, and two rollers 57, spaced apart, press on its upper side, being carried by a shaft 58 having vertically elongated bearings 59 in the side walls of the body, and being depressed in said bearings by coiled springs 61 in recesses in said walls, pressing against blocks 62, the lower sides of which press against said shaft. A flat spring 63 is attached at one end to a transverse rod 64, and passes underneath the transverse shaft 44, and its free end presses upon said yoke against the action of the lifter 41. To raise said rollers 57 for the purpose of inserting a check or other piece of paper between said rollers and the lower roller 51, there is operated a crank arm 67 upon a longitudinal shaft 69, said shaft carrying, between the two rollers 57, a cam 71, which is in contact with the shaft 58 of said rollers. When said shaft is thus turned the cam surface of the cam raises the shaft 58 and the two rollers 57 carried thereon against the pressure of the springs 61.

Mounted in bearings supported upon the walls of the upper housing is the shaft 72 of a rotary code carrier 73, having formed thereon any suitable number, here shown as sixteen of series of figures or characters arranged in a fortuitous manner to form codes, all different. Only the uppermost code can be seen at a time, this code appearing through a narrow slot in a cylindrical cover 74 extending around the code carrier. Extending into proximity with said visible code is a pointer 75 carried on the cam-plate carrier, the end of which pointer is by the movement of the carrier, adapted to be brought into contiguity with any one of the figures or characters on the visible code. The code carrier shaft 72 is rotated automatically with the rotation of the feed-roller shaft 50 by means of a gear wheel 77 on said shaft meshing with an idler gear wheel 78 rotatable on a screw stud 80, which in turn meshes with a gear wheel 79 on the shaft 72 of the code carrier, so that, each time that the paper is advanced, the next succeeding code is rendered visible.

In case it should be desired to turn the roller 51 without advancing the code carrier, this may be accomplished by drawing back a head 90 which is formed with ratchet teeth 91 engaging ratchet teeth 92 on the gear wheel 77, said head having a cavity in which is a coiled spring 95 around the shaft 50 compressed between a collar 96 on said shaft and a shoulder 97 of the head and thus pressing said ratchet teeth 91 in engagement with the ratchet teeth 92. Said collar has an outwardly extending pin 98 which engages the slotted portion 99 of the head, so that, when said head is withdrawn, and the ratchet teeth 91 are out of engagement with ratchet teeth 92, by turning the head 90 the shaft 50 and the roller 51 are also turned. To restore the code carrier to its normal position, or to any other position desired, there is provided a knob 85 which is formed with indices 100 which indicate the code which is in operative position. To prevent the yoke 43 exerting a pressure on the finger 42, due to the pressure of the spring 63, which would make the carrier difficult to move longitudinally, the yoke is held up by a rod 94

so as to be just out of contact with said finger.

I claim:—

A machine for forming code messages comprising a punch, a punch carrier, a cam plate for operating said punch and carried by said carrier, an indicator carried by said carrier, a device having a plurality of series of characters to any one of which the indicator may be moved by the movement of the carrier, means for automatically operating said device to advance each series in succession into contiguity with said indicator, and means operated by the cam plate to actuate said punch.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

EDWARD H. HEBERN.

Witnesses:

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D. B. RICHARDS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."