F. M. MAHOOD.

STAMPING MACHINE.

APPLICATION FILED MAY 29, 1913.

1,082,541.

Patented Dec. 30, 1913.

2 SHEETS—SHEET 1.

Fig. 5.

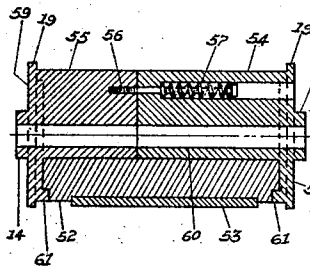


Fig. 4.

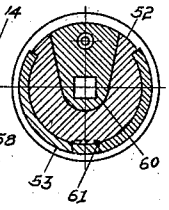


Fig. 1.

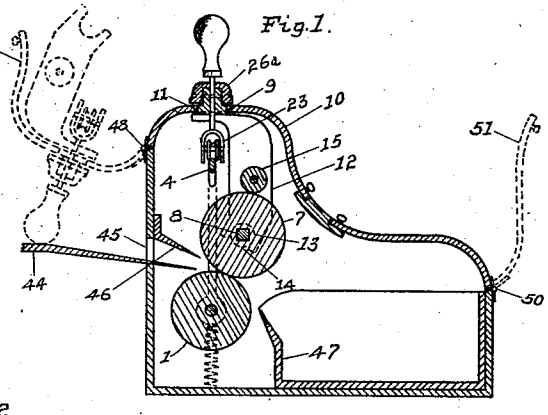


Fig. 2

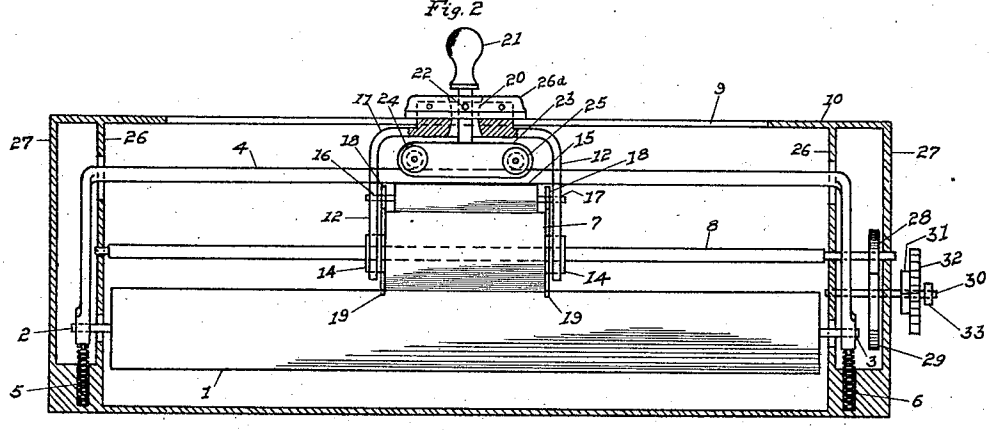
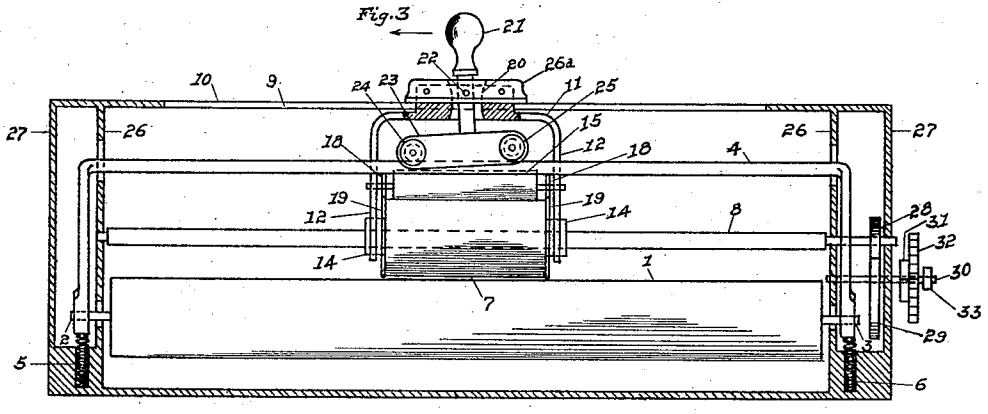


Fig. 3



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2 SHEETS—SHEET 2.

Fig. 6.

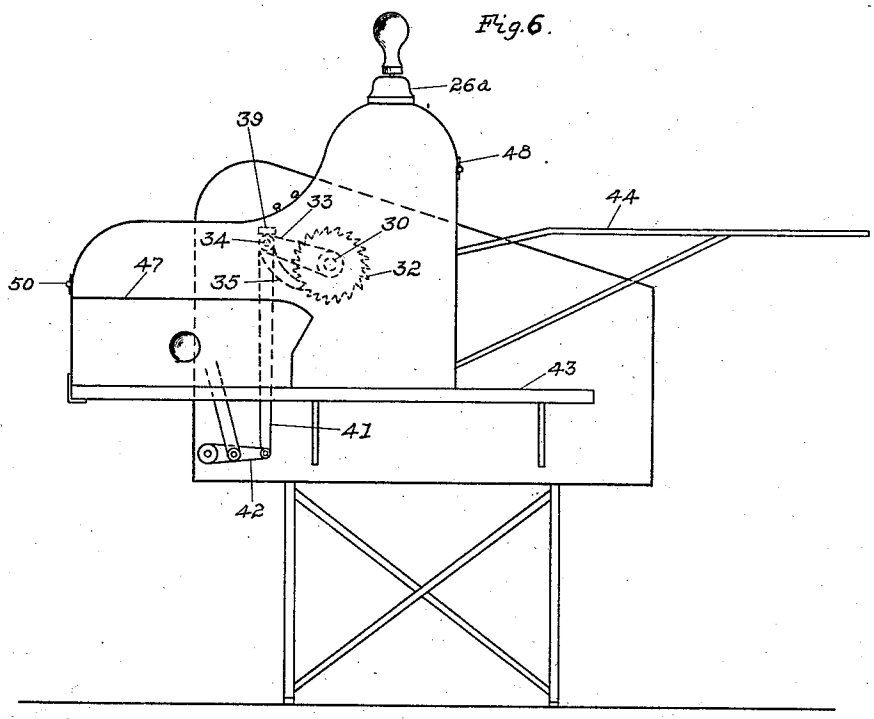
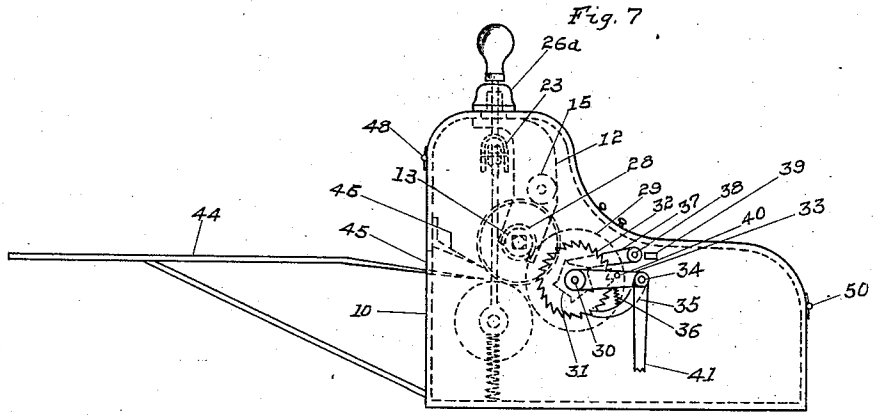


Fig. 7



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STAMPING-MACHINE.

1,082,541. Specification of Letters Patent. Patented Dec. 30, 1913.

Application filed May 29, 1913. Serial No. 770,674.

To all whom it may concern:

Be it known that I, FRANK M. MAHOOD, a citizen of the United States, residing at Roanoke, in the county of Roanoke and State of Virginia, have invented certain new and useful Improvements in Stamping-Machines, of which the following is a specification.

The object of my invention is to provide a convenient means for printing or stamping small papers such as vouchers, checks, etc., with which object in view it consists of the arrangements of elements as hereinafter described and finally claimed.

In the drawings, Figure 1 shows a transverse section of my invention, Fig. 2 a longitudinal section of the same, and Fig. 3 a longitudinal section with the main feed roller depressed for shifting the type roller carriage. Fig. 4 shows a transverse section of the type roller, and Fig. 5 a longitudinal section of the same. Fig. 6 shows an end elevation of my invention attached to an ordinary adding or listing machine, and Fig. 7 is an elevation of the opposite end, showing the operating mechanism.

Referring to the drawings in which like parts are represented by the same reference numbers wherever they occur, 1 represents a main feed roller journaled at the ends 2 and 3 in the depending legs of a presser bar 4. This presser bar 4 is supported on springs 5 and 6 for a purpose which will be hereinafter stated.

Bearing on the main feed roller is a type roller 7. This type roller 7 is made to shift freely along a shaft 8 which, in the drawings, is shown square. This shaft, however, may be of any shape or design that will allow the type roller to shift freely and at the same time serve to revolve the type roller when the shaft 8 is revolved. The type roller 7 may be of any suitable design, but is made preferably as shown in detail in Figs. 4 and 5, which show the type roller as being composed of a type holding block 52 of substantially U-shaped cross section, into which is set the type 53. The body of this type roller 7 is composed of two sections 54 and 55, divided transversely of the axis of the roller. A screw or pin 56 and a spring 57 hold the two sections 54 and 55 together, thereby clamping the type block 52 between the circular heads 58 and 59 of the sections of the type roller body. The portions of the sections of the type roller body over which the U-shaped type block fits are shaped to complement the cut-out portion of the type block. A hole 60 is provided through the two sections of the type roller body for the accommodation of the type roller shaft 8, said hole being concentric with the axis of the type roller. In order to prevent the type roller block 52 from dropping out from between the sections of the type roller body in case the spring 57 fails to clamp the parts sufficiently, I provide a keying extension 61 on each of the circular heads of the sections 54 and 55 of the type roller body, with a corresponding portion cut away at each end of the type block.

Extending through a slot 9 in the top of a case 10 is a type roller carriage 11, which is made in the form of a yoke with depending arms 12. The ends of these depending arms are cut out in a semi-circular shape at 13 to embrace short hubs 14 on the ends of the type roller 7. At 15 is an inking roller journaled in the depending arms 12 of the type roller carriage at 16 and 17, and bearing on the face of the type in the type roller 7. At the ends of the inking roller 15 are small collars 18 adapted to roll on similarly disposed collars 19 on the type roller 7. The purpose of these collars is to prevent the inking roller from depositing ink on any portion of the type roller except the face of the type, while at the same time, the collars 18 being slightly removed from the main body of the inking roller 15, there is little possibility of ink being carried on the faces of these collars 18 to the collars 19 of the type roller. The collars 19 drive the main feed roller 1 and the inking roller 15 when the type roller 7 is revolved, and the said collars 19 together with the main feed roller 1, propel the sheet of paper or other matter to be printed through the machine.

As previously stated the top of the type roller carriage 11 extends through a slot 9 in the top of the case 10. Through this top portion of the type roller carriage is a vertically disposed slot 20, through which extends a lever 21 pivoted to the type roller carriage 11 at 22. To the lower end of the lever 21 and integral with the same is a housing 23 carrying rollers 24 and 25, which are adapted to roll on the horizontal portion of the presser bar 4. The sides of the housing 23 extend slightly below the horizontal

portion of the presser bar 4, forming a guide. For securing the type roller carriage 11 in the slot 9 I provide an oblong cap 26ª, which is secured to the top of the type roller carriage 11 by any suitable means.

Secured to the shaft 8 and located preferably between the walls 26 and 27 of the case 10 is a small gear pinion 28. This small gear pinion engages a gear wheel 29 which is secured to a short shaft 30, the inner end of which is journaled in the wall 26 and the outer end, passing through the wall 27, carries the operating mechanism as follows: The ratchet wheels 31 and 32, which are so disposed as to operate in reverse directions, are secured to the end of the shaft 30. These ratchet wheels may be made in one piece or they may be made separate and be individually secured to the shaft 30. Pivoted loosely around the shaft 30 is the main operating lever 33, to which is pivoted, at 34, a ratchet pawl 35, adapted to engage the teeth of the ratchet wheel 32. A spring 36 is provided to pull the pawl 35 into engagement with the ratchet wheel 32. A pawl 37, pivoted to the outer wall 27 of the case 10 at 38, is provided for the ratchet wheel 31. A pin 40 is fixed to the lever 33, so that when the lever 33 is raised the pin 40 will strike the pawl 37, disengaging it from its position on the ratchet wheel 31. The upward movement of the lever 33 will be limited by the stop 39 on the case 10. When the lever 33 is moved downwardly the ratchet wheel 32 will be revolved for a portion of a revolution until stopped by a tooth of the ratchet wheel 31 coming into position against the pawl 37. This portion of a revolution will, through the gears 29 and 28, revolve the type roller and through this the other rollers as previously described. The machine as shown in the drawings is designed to give one complete revolution of the type roller for each portion of a revolution of the ratchet wheel 32 as limited by one tooth of the ratchet wheel 31. In instances where a greater or less amount of revolution of the type roller is desired for each movement of the main operating lever 33, the ratio of the gears 28 and 29 may be changed.

The main operating lever 33 may be actuated by any suitable means, as by hand or power. At 41 is shown a rod for connection to a suitable part 42 of an adding or listing machine of the type to which it is intended particularly to apply this invention. Fig. 6 of the drawings shows my invention applied directly to this adding or listing machine, it being placed on the table or shelf 43 of the said adding or listing machine.

At 44 I provide a table or shelf for convenience in handling the matter to be passed through the machine, which matter is fed by hand through an opening 45 in the case 10.

A specific instance of the use of my invention in conjunction with an adding or listing machine is to be seen in the operation of listing and adding checks and other items in the routine work of a bank, where it is necessary to stamp the bank's indorsement on the back of each item. The items to be treated are stacked face upward on the table of my invention. As the amount of each item is placed in the adding machine, the item itself is fed face downward into the machine of my invention. When the mechanism of the adding machine is actuated to complete the adding and listing the item is simultaneously propelled through my machine and deposited, with the bank's indorsement on the back thereof, in the drawer provided for that purpose.

At 46 is a guide to assist in entering the matter to be printed between the rollers 1 and 7.

At 47 I provide a drawer for receiving the matter after it has passed through the machine as already described.

The entire top portion of the case 10 is hinged at 48, so that it may be swung back as shown in dotted lines at 49, for readily changing the type in the type roller or for other purposes. The rear portion of the case 10 is hinged at 50, so that it may be opened as shown in dotted lines at 51 to inspect the machine or for other purposes.

As previously stated the presser bar 4 is supported at either end on the springs 5 and 6. The purpose of this is as follows: When it is desired to shift the position of the type roller on the shaft 8, in order to make the imprint of the type at any desired position on the matter to be stamped, the knob-shaped top of the lever 21 is pushed as to the left in Fig. 3, when the lever 21, pivoting about 22 will slightly depress the roller 24 and rise the roller 25. This, in turn, will force the one depending leg of the presser bar 4 down on the spring 5, compressing this spring and lowering the roller 1. This relieves the friction between the roller 1 and the type roller 7 so that the type roller carriage 11 may be freely shifted. In shifting to the right, of course, the results are the same, the spring 6 at the opposite end of the machine being compressed.

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

1. In a stamping machine, the combination of a case, a type roller shaft mounted therein, a type roller mounted on said type roller shaft, a presser bar having depending legs, a type roller carriage adapted to be shifted on the horizontal portion of said presser bar, a main feed roller journaled in the depending legs of said presser bar and adapted to bear on said type roller, and means for relieving the contact between said

type roller and said main feed roller, substantially as described.

2. In a stamping machine, the combination of a presser bar having depending legs, a main feed roller, springs for supporting said presser bar and main feed roller, a type roller carriage adapted to be shifted on the horizontal portion of said presser bar, a type roller, and means for revolving said type roller, substantially as described.

3. In a stamping machine the combination of a presser bar having depending legs, a main feed roller, springs for supporting said presser bar and main feed roller, a type roller carriage, a lever fulcrumed in said type roller carriage, said lever carrying at its lower end a pair of rollers adapted to roll along a horizontal portion of the said presser bar, the arrangement of lever and rollers being such that when the top of the lever is moved longitudinally the rollers will be canted and will depress the aforesaid presser bar and main feed roller on the aforesaid springs, substantially as described.

4. In a stamping machine, the combination of a case having outer and inner end walls, a presser bar of substantially inverted U-shape extending longitudinally of the case, the depending legs of the same passing downwardly between the inner and outer end walls of the case, a main feed roller journaled in the lower ends of the presser bar legs, springs for supporting said presser bar and main feed roller, a type roller carriage adapted to be shifted longitudinally along the horizontal portion of said presser bar, a type roller shaft, a type roller embraced within said type roller carriage and adapted to be shifted along said type roller shaft, and means for actuating the said type roller shaft, substantially as described.

5. In a stamping machine, the combination of a case, a type roller shaft journaled therein, a type roller mounted on said type roller shaft and adapted to be shifted longitudinally along said type roller shaft, a gear pinion secured to the end of said type roller shaft, a gear wheel secured to a short shaft, said gear wheel being adapted to engage the said gear pinion on the end of the type roller shaft, a pair of reversely disposed ratchets secured to said short shaft, said ratchets and their pawls comprising an escapement for limiting the rotation of said short shaft, and means for operating said mechanism, substantially as described.

6. In a stamping machine, the combination of a case, a type roller shaft journaled therein, a type roller mounted on said type roller shaft and adapted to be shifted longitudinally along said type roller shaft, a gear pinion secured to the end of said type roller shaft, a gear wheel secured to a short shaft, said gear wheel being adapted to engage the said gear pinion on the end of the type roller shaft, a pair of reversely disposed ratchets secured to said short shaft, said ratchets and their pawls comprising an escapement for limiting the rotation of said short shaft, and means for operating said mechanism from an adding machine, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK M. MAHOOD.

Witnesses:
THOS. L. ENGLEBY,
C. W. BENBOWER.

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