

March 15, 1960

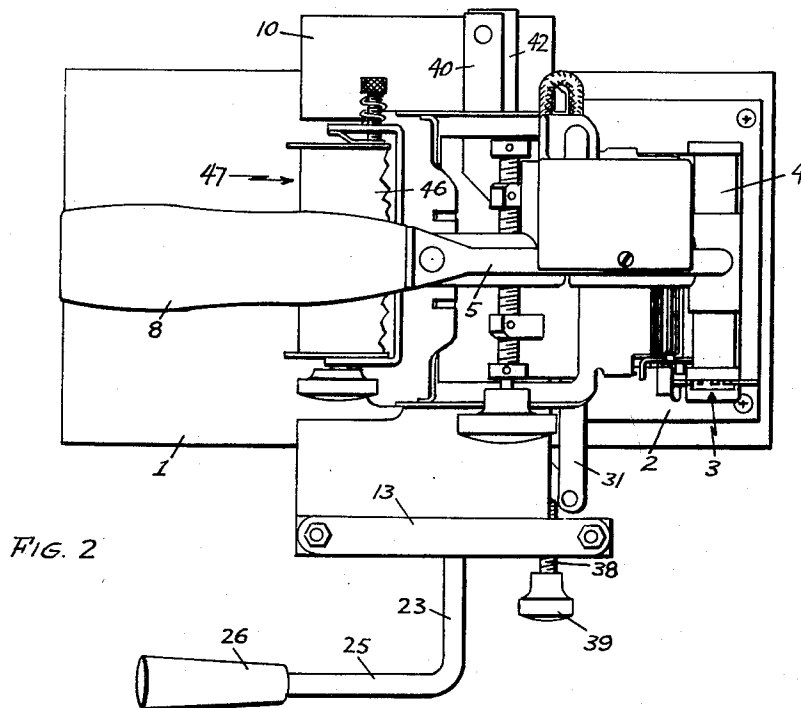
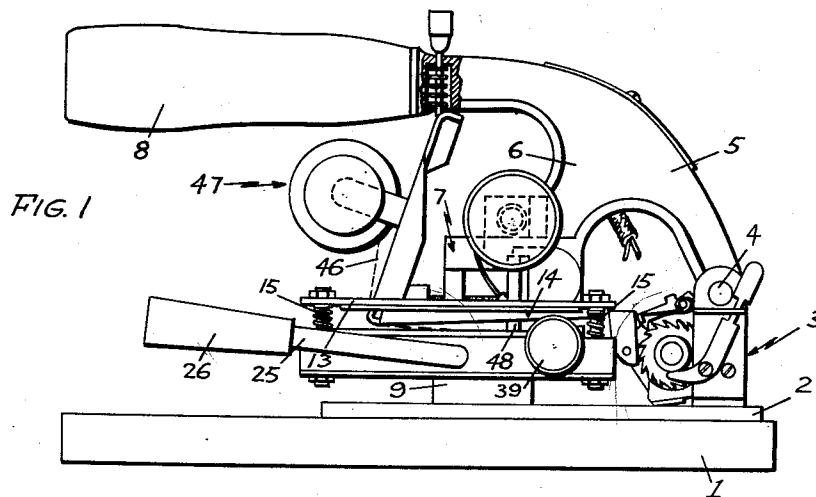
H. A. MINTZ

2,928,343

CHECK STAMPING MACHINES

Filed March 7, 1956

3 Sheets-Sheet 1



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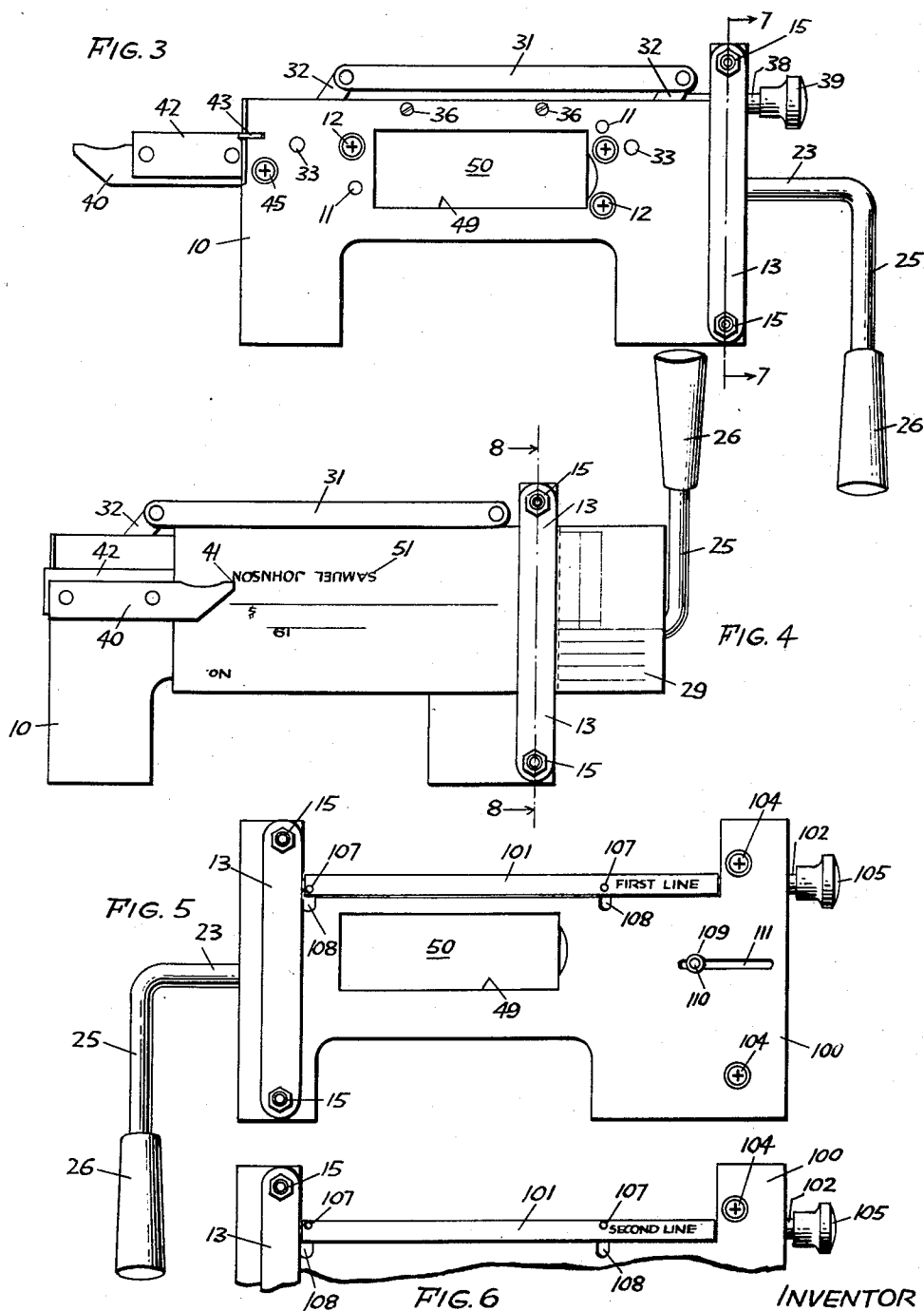
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3 Sheets-Sheet 2



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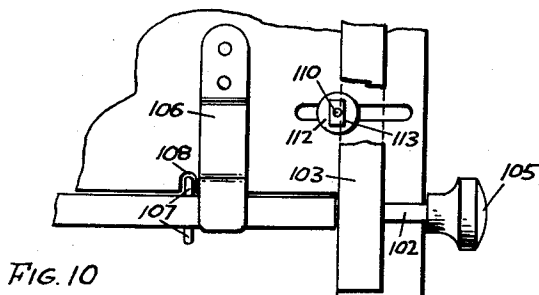
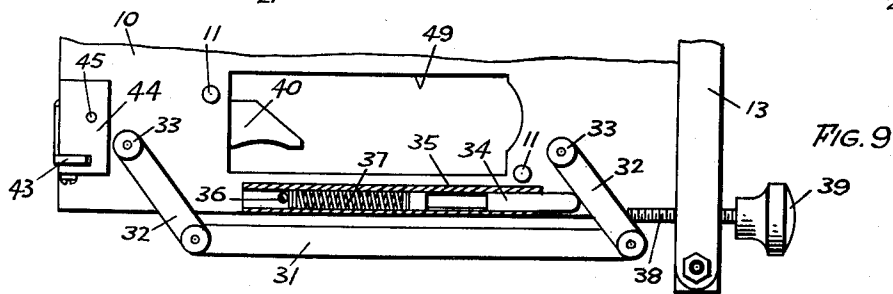
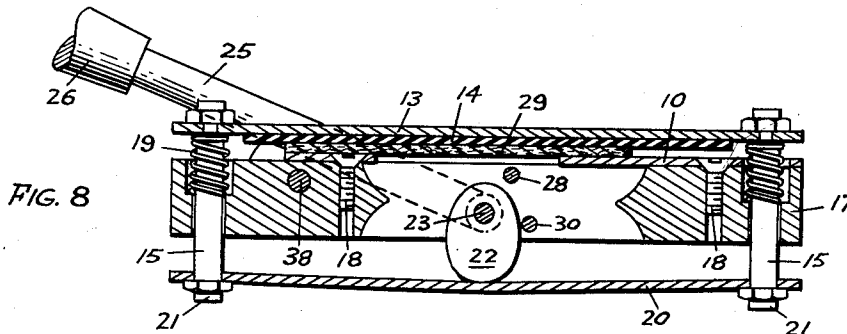
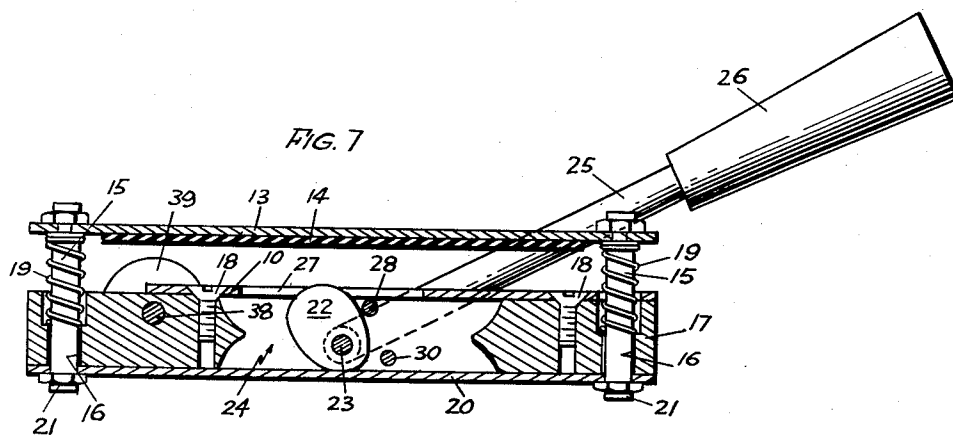
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3 Sheets-Sheet 3



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2,928,343

CHECK STAMPING MACHINE

Henry A. Mintz, Norwood, Mass.

Application March 7, 1956, Serial No. 569,982

3 Claims. (Cl. 101-407)

This invention relates to a check stamping machine in which one or more lines of type, containing information such as the name and address of the drawer of the check, may be stamped.

A common practice has arisen with respect to bank checks in which the name and other information relating to a bank depositor, who desires to draw checks upon his bank, are printed on the face of each check in check books issued by the bank. Heretofore this has been done by standard printing machines which are large and expensive and which require the separate checks to be so printed and which are then bound into a check book. As a result, such personalized printing is expensive and time consuming. Thus a need has arisen for a small, compact machine which is able to perform such printing on check books which are already bound and to do so in such a short period of time that it is feasible for the bank depositor to wait while it is being done.

This invention consists of a machine which satisfies all of the above desirable needs and is of such flexibility as to adapt itself to various sizes of checks and various arrangements of printing. The invention consists of a stamping machine using heated type to stamp the printing through a foil carrying the desired color ink onto the face of each check. A flexible clamping device is used to adjust itself to various sizes of check books and to clamp the bound edge of the book, thus enabling each individual check to be turned out of the path of the stamping type mounted on a rotatable arm, after the check has been stamped, thus enabling all the checks in the book to be stamped in succession without removing them from the binding. Novel spacing and aligning devices are also incorporated in the machine so that the checks may be mounted accurately in such a position that the printing appears in exactly the desired position.

The foregoing and other novel aspects of this invention will be best understood from the following description of exemplifications thereof, reference being had to the accompanying drawings wherein:

Fig. 1 is a side elevation of one form of the novel check stamping machine;

Fig. 2 is a top view of the machine shown in Fig. 1;

Fig. 3 is a top view of one form of check clamping and aligning assembly ready to receive a check book;

Fig. 4 is a view of the arrangement of Fig. 3 with a check book clamped therein;

Fig. 5 is a top view of another form of check clamping and aligning assembly;

Fig. 6 is a fragmentary view of the arrangement of Fig. 5 with the type aligning bar in position to locate the checks for the printing of a line of type spaced from the line of type for which Fig. 5 is adjusted;

Fig. 7 is an enlarged cross-sectional view taken along line 7-7 of Fig. 3 and showing the clamping bar and clamping lever in the open position;

Fig. 8 is an enlarged cross-sectional view taken along line 8-8 of Fig. 4 and showing the members of Fig. 7 in the closed or clamping position;

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Fig. 9 is a fragmentary bottom view of the embodiment shown in Figs. 3 and 4 with portions in section; and

Fig. 10 is a fragmentary bottom view of the embodiment shown in Figs. 5 and 6.

The check printing mechanism is illustrated as being incorporated in a stamping machine of the type as described and claimed in the patent to Henry A. Mintz, No. 2,604,387, for Automatic Foil-Feeding Mechanism for Stamping Machines. The device includes a sub-base 1, upon which is mounted a base plate 2 to which is secured a frame 3. A shaft 4, rotatably mounted on the frame 3, carries an arm 5 which has formed therein a branch arm 6 carrying a pallet 7 rigidly secured thereto. The arm 5 is extended to form a handle 8 whereby the entire arm assembly carrying the pallet 7 with it may be rotated. In order to provide a mounting member for the check clamping and aligning mechanism, a pedestal 9 is rigidly secured to the base plate 2 and is in a location preferably directly below the pallet 7 in its stamping position.

For the purpose of supporting the check book to be stamped, a supporting plate member 10 is adapted to be placed upon the pedestal 9 and retained in proper position by pins 11 carried by plate 10 and received in corresponding holes in the pedestal 9. Screws 12, passing through holes in plate 10 and tapped into the top of pedestal 9, fasten plate 10 removably, yet securely, in place.

To retain the check book in place, the plate 10 is provided at one edge thereof with a clamping bar 13, to the lower side of which is secured a soft, resilient pad 14, made of a suitable material, such as foam rubber, to engage the check book without marring its surface. The clamping bar 13 is carried by two rods 15, 15 slidably mounted in openings 16, 16 in a mounting block 17. The mounting block 17 is secured to the underside of plate 10 by means of screws 18, 18. The bar 13 is biased toward its opened position by means of springs 19, 19 surrounding rods 15 and received in enlarged openings formed at the upper ends of the openings 16. Secured to the lower ends of rods 15 is a stiff spring bar 20 retained in place by nuts 21, 21 threaded onto the lower ends of rods 15.

In order to actuate clamping bar 13, a cam 22 is rotatably mounted by means of a shaft 23 in an opening 24 cut through the block 17. The cam 22 is fixed to the shaft 23 which passes through the block 17 and is bent to form a crank arm 25 carrying a handle 26 at its outer end. The plate 10 is provided with an opening 27 so that, in the opened position, the cam 22 may extend therethrough. A stop 28 limits the motion of the cam in its opened position.

As the handle 26 is rotated from the position shown in Fig. 7 to the position shown in Fig. 8, the cam 22 engages the upper surface of the bar 20 and forces it downwardly against the action of the springs 19. The movement of the bar 20 carries the rods 15 downward and thus forces the clamping bar down into its clamping position. In this position a check book 29 may be clamped between the pad 14 and the upper surface of plate 10. In the clamped position, the bar 20 may bow outwardly due to the pressure of the cam 22. Due to the fact that the depth of the bow is determined by the position at which the bar 13 is stopped by the check book 29, it will be seen that the check books may be of widely differing thicknesses and still be firmly clamped in place. Thus the machine is capable of handling such various thicknesses of check books without any special adjustment by the operator. The cam 22 is arrested in its clamping position by a stop 30.

The orientation and location of the printing on the checks is an important aspect of the machine. For this

purpose one edge of the check book is adapted to engage a spacing bar 31. This bar is pivotally mounted at its ends on a pair of links 32, 32 which in turn are pivotally mounted at pivots 33, 33 on the lower side of plate 10 (see Fig. 9). In this way bar 31 always moves so as to be parallel with the edge of plate 10 and thus assures that check book 29 will always be oriented with its printing parallel to the edge of each printed check. One of the links 33 is engaged by a spring pressed rod 34 to bias the bar 31 toward the edge of the plate 10. The rod 34 is received in a tube 35 secured to the bottom of plate 10 by screws 36. A spring 37 contained in the tube 35 provides the biasing pressure. The link 33, engaged by the rod 34, is moved in the opposite direction by an adjustable screw rod 38 threaded through block 17. The outer end of the screw rod 38 is provided with a knob 39 so that the screw rod and thus the bar 31 may be adjusted to any desired position.

It is also important for the operator to know where the line of type will appear on each check so as to be able to clamp the check book 29 in its proper position. For this purpose, plate 10 is provided with an index number 40, the index end 41 of which will indicate the exact location of one end of the line of type, as shown, for example, in Fig. 4. The index member 40 is mounted on a plate 42 provided with a tab 43 which is hinged onto a block 44 secured to the lower side of plate 10 by means of a screw 45.

The details of the mechanism carried by the arm 5 are described and claimed in the above-mentioned Patent No. 2,604,387 and also in the patent to Henry A. Mintz, No. 2,591,369 for Stamping Machines. Since such details do not form part of this invention, they will not be described in detail herein. That mechanism includes means for moving a printing foil 46 from a spool 47 over the face of a line of printing type 48 secured in the pallet 7. This type is heated by an electrical heating element (not shown) located within the body of the pallet 7. The printing foils used in machines of this kind usually consist of a strip of paper or plastic coated on one side with an ink which, under the action of the heated type, is transferred to the surface of the check to be stamped. Since the surface of each check is cool, the ink sets immediately and no danger of smudging exists even though the checks are turned on top of each other as the stamping of each one rapidly follows the other.

In order to provide the proper surface beneath the stamping area, the plate 10 is provided with an opening 49 which receives an impression pad 50 made of suitable resilient material, such as several layers of cardboard.

The operation of the machine is as follows. The handle 26 is moved to the position shown in Fig. 3 and the index member 40 rotated out of the way, as shown in Fig. 3. A check book 29 is slipped under the clamping bar 13 and the index member 40 turned back onto the face of the check book. With the edge of the check book 29 held against the bar 31, the knob 39 is turned until the index end 41 indicates that the line of type will occur at the proper level. The check book 29 is then slid along the bar 31 until it contacts the right-hand edge of plate 42, in which position the end of the line of type will occur at the proper point. The handle 26 is moved to the position shown in Fig. 4 to clamp the check book 29 in position and the index member is then rotated out of the way of the stamping member.

Either at this point or previously, the desired line of type 48 is set up in the pallet 7 and the foil 46 pulled over the face of the type, all as described in Patent No. 2,604,387. Thereupon the handle 8 is pulled down to print the line of type, as indicated at 51 in Fig. 4. The top check is then turned back since the open end of the check book has been left free. Each check may then be printed rapidly one after the other.

If an additional line of type is desired, the positions of the bar 31 and the check book may be adjusted, a new

line of type set up and that line stamped at the new desired location on the face of the check.

Where a plurality of lines of type is to be printed on a check face at predetermined distances apart, as, for example, in the upper left-hand corner of a check, the modification illustrated in Figs. 5 and 6 may be used. In these figures, where the elements are the same as in the previous embodiment, the same reference numbers are used. In this embodiment the plate 100 corresponds to the plate 10. The clamping bar 13 and its associated mechanism are mounted on the opposite side of the plate 100 from where it is mounted on the plate 10. The alignment of the edge of the check book is carried out by means of an alignment bar 101. This bar is of a prismatic form, such as square, in cross-section and is mounted to be rotated about its longitudinal axis on a shaft 102 journaled in a block 103 (see Fig. 10) secured to the lower surface of plate 100 by screws 104. The other end of the bar 101 is journaled in the block 17 which carries the shaft 23 for the clamping cam 22. The bar 101 may be rotated by a knob 105 secured to the outer end of shaft 102. The bar 101 is held in each of its positions of rotation by a flat spring 106 riveted to the lower face of plate 100 and having its flat free end pressing against the flat sides of the bar 101. The bar 101 carries a pair of pins 107 which are fastened through the bar 101 adjacent one edge. When the bar 101 is rotated into the position as shown in Fig. 5, one set of ends of the pins 107 lies closer to the edge of plate 100. When the bar 101 is turned over into the position shown in Fig. 6, the opposite ends of the pins 107 lie farther from the edge of the plate 100. The plate 100 is cut away at 108 to permit passage of the pins 107 as the bar 101 is rotated. Thus it will be seen that a check printed with its edge pressed against the pins 107 in each of the two operative positions thereof will have two lines of type spaced apart by twice the distance by which the pins 107 are spaced from the longitudinal center line of bar 101.

The lateral edge of the check book, in this second modification, is located by means of a stud 109 carried by a pin 110 extending through a slot 111 in plate 100. The lower end of pin 110 is retained by a washer 112 and by a flat spring 113 riveted to the lower end of the pin 110. The flat spring bears against washer 112 and thus yieldably retains stud 109 into whatever position it is moved by the operator.

In this embodiment the check book is aligned by the pins 107 and the stud 109. It is then clamped in place by bar 13 and printed as described above. Thereafter the check book is moved to the new position as determined by rotating the bar 101 through 180 degrees and a second line of print is impressed on the faces of the checks.

This completes the description of the foregoing embodiments of this invention, in which many equivalents of the details described will suggest themselves to those skilled in the art.

What is claimed is:

1. A check stamping machine comprising a base carrying a support plate adapted to support a check book to be stamped, stamping means movably mounted with respect to said base, said stamping means being adapted to support a line of stamping type, said stamping means being movable into a stamping position at which said stamping type is adapted to be imprinted upon said check book, a stop member adjustably supported with respect to said plate and having portions of said stop member adapted to engage a lateral edge of said check book, means for moving said stop member into a plurality of positions wherein said portions are spaced at desired distances from said stamping position, a clamping bar overlying one end of said plate and normally spaced from said plate a sufficient distance to receive one end of said check book, said clamping bar being carried by rods slid-

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ably passing through said plate and spring biased away from said plate, a flat spring member bridging said rods on the side of said plate opposite from said clamping bar, and a cam member rotatably mounted with respect to said plate and being rotatable into engagement with said spring member to move said spring member away from said plate whereby said clamping bar is forced toward said plate to clamp said check book in position between said bar and plate.

2. A check stamping machine comprising a base carrying a support plate adapted to support a check book to be stamped, stamping means movably mounted with respect to said base, said stamping means being adapted to support a line of stamping type, said stamping means being movable into a stamping position at which said stamping type is adapted to be imprinted upon said check book, an elongated bar having the ends of a pair of links of substantially equal lengths pivoted to spaced points on said bar, the opposite ends of said links being pivoted to said plate, one side of said bar being adapted to engage a lateral edge of said check book, means for rotating said links into a plurality of positions wherein said side of said bar is spaced at desired distances from said stamping position, and clamping means for clamping one end of said check book in position on said plate.

3. A check stamping machine comprising a base carrying a support plate adapted to support a check book to be stamped, stamping means movably mounted with respect to said base, said stamping means being adapted

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to support a line of stamping type, said stamping means being movable into a stamping position at which said stamping type is adapted to be imprinted upon said check book, an elongated bar mounted on said plate rotatably about a longitudinal axis of said bar, said bar having stop members projecting from different sides of said bar, means for rotating said bar into a plurality of fixed positions with said stop members fixed to engage a lateral edge of said check book, said stop members being located at different positions from said stamping position in the various fixed positions of said bar, and clamping means for clamping one end of said check book in position on said plate.

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