May 22, 1956 W. J. HANSON 2,746,382

VALUE PRINTING DIE COVER MEANS

Filed Dec. 20, 1951 3 Sheets-Sheet 1

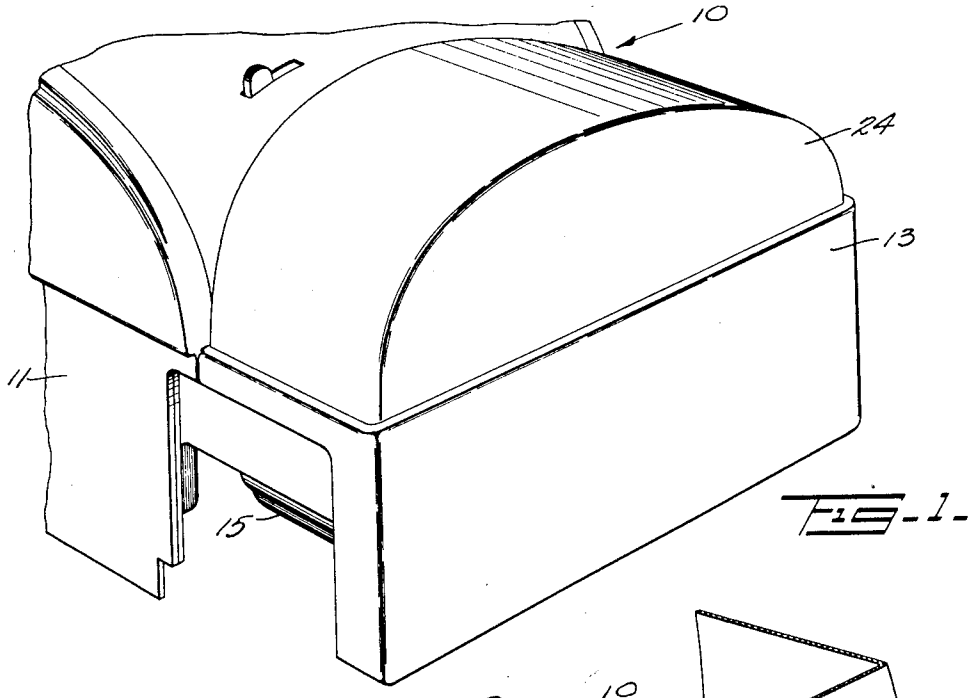


FIG-1-

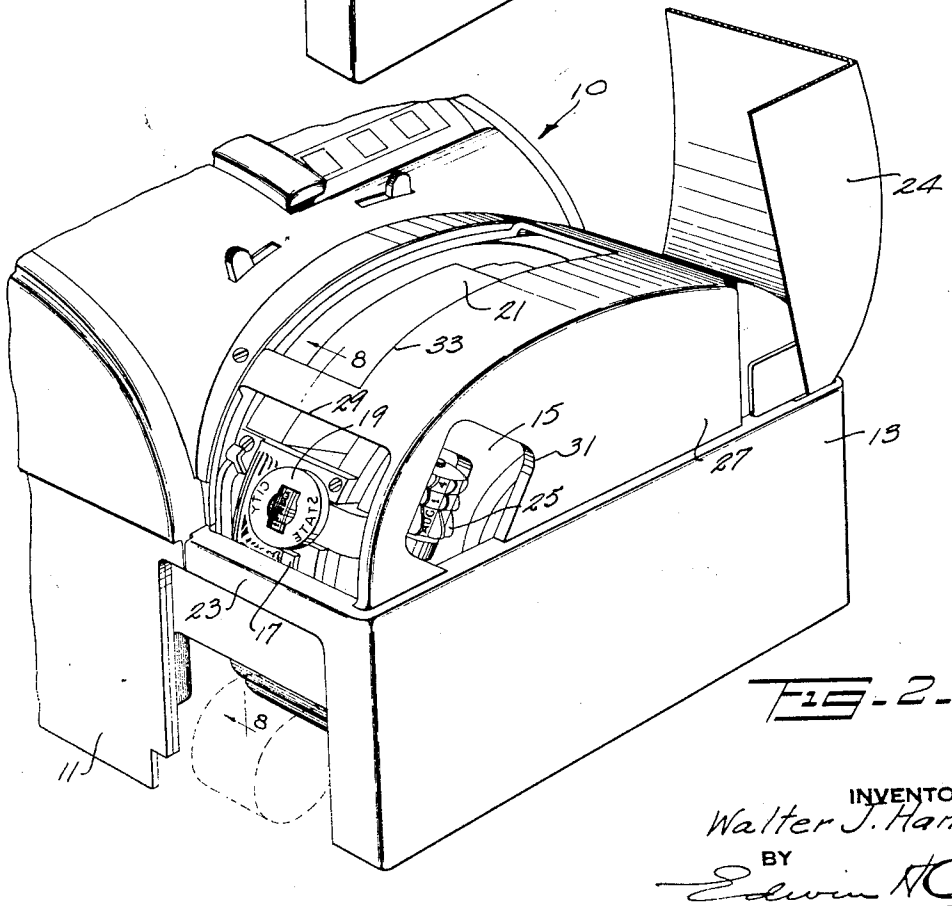


FIG-2-

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VALUE PRINTING DIE COVER MEANS

Filed Dec. 20, 1951 3 Sheets-Sheet 2

FIG. 3.

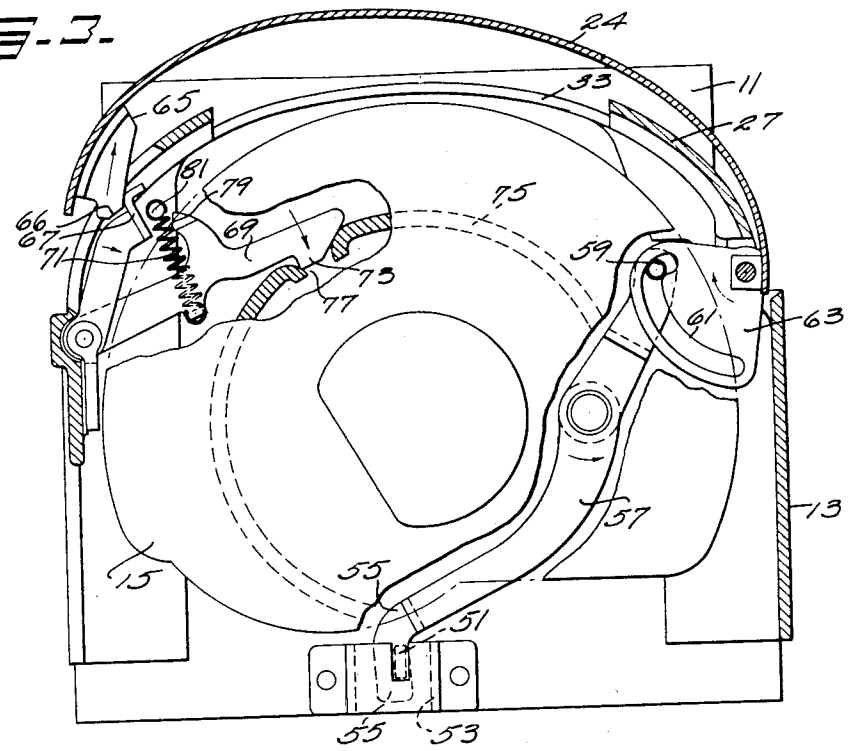
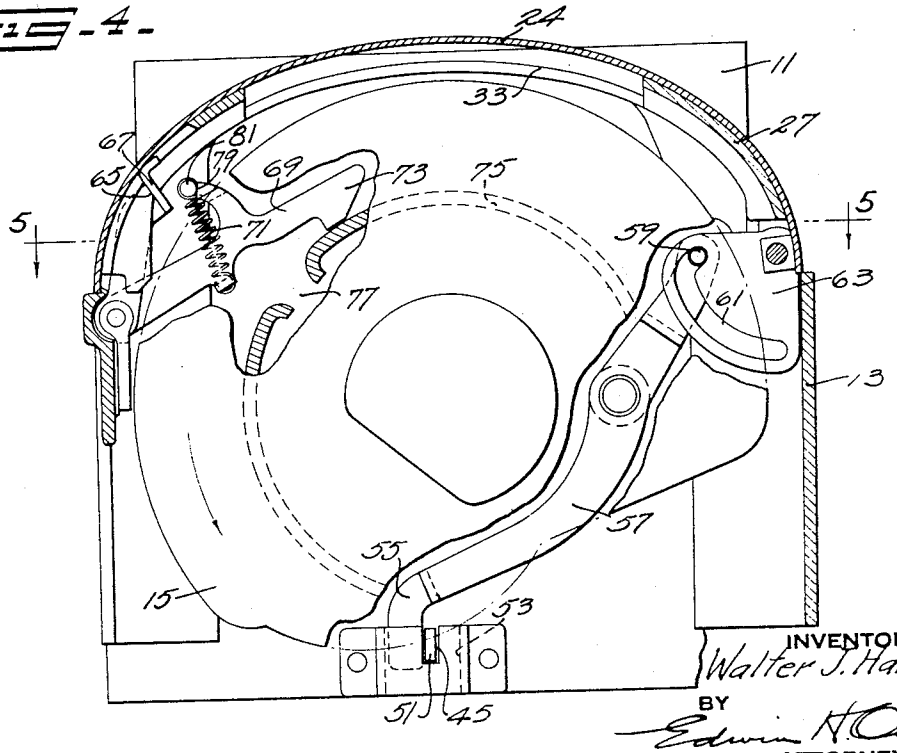


FIG. 4.



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VALUE PRINTING DIE COVER MEANS

Filed Dec. 20, 1951 3 Sheets-Sheet 3

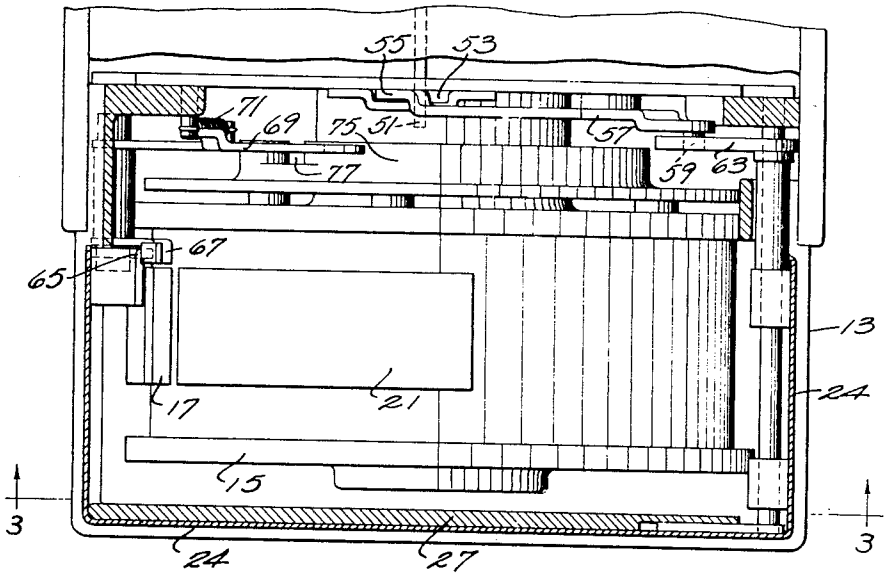


FIG. 5.

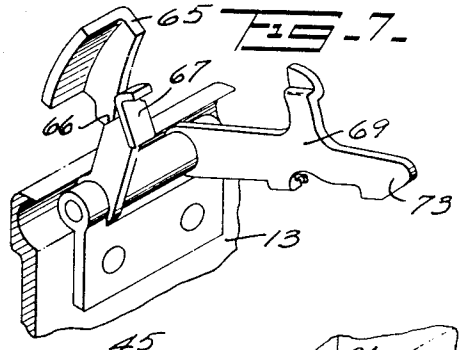


FIG. 7.

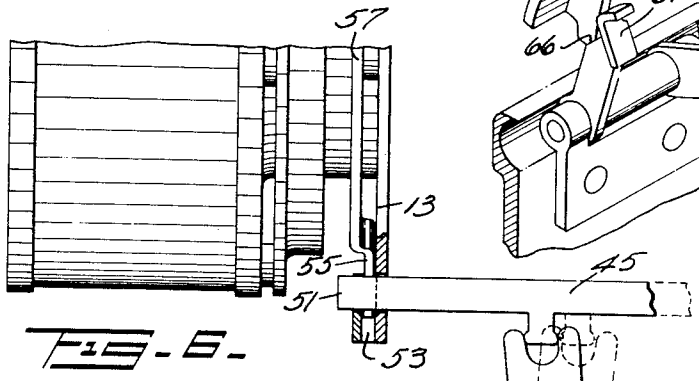
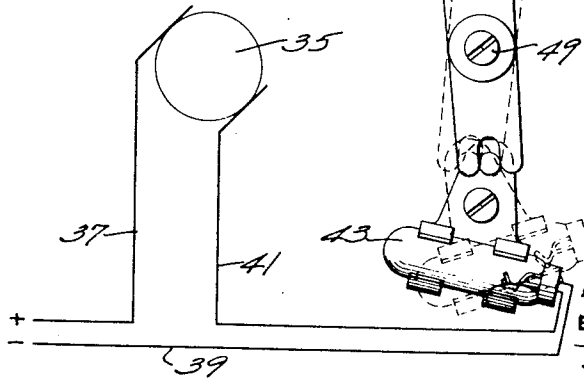


FIG. 6.



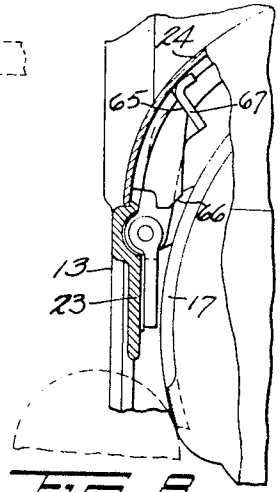


FIG. 8.

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2,746,382

VALUE PRINTING DIE COVER MEANS

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Application December 20, 1951, Serial No. 262,512

14 Claims. (Cl. 101—91)

This invention relates to value printing, for example postage and tax stamp printing, and is particularly directed to machines for printing value indicia simultaneously with other indicia.

More specifically the invention relates to housing and cover means for the printing members of such printing machines, designed to provide convenient access to the printing members, while, at the same time, offering additional impediments to the taking of fraudulent impressions from the value dies thereon.

Heretofore it has been the practice to provide value printing devices having cases open at the bottom to expose the printing member or drum for a printing operation. Access to this bottom opening is normally prevented when the device is assembled in place on its machine base opposite the impression roller and supporting bracket structure. To prevent wiping of fraudulent impressions the printing member is usually arranged to be held in a stopping or home position such that the value dies are directed other than downwardly towards the bottom opening and in a position where they are protected by a barrier, and the drum is automatically locked in this position at the end of every operation. The drum, of course, remains so locked if and when the printing device is removed from its machine base.

In addition to the bottom opening described above, it has heretofore been found desirable to provide openings in the upper part of the housing through which various adjustments may be made. For example, one opening is usually provided adjacent the stopped position of the face of the date bearing die or near the stopped position for the control means for the same to permit changing the date setting from day to day. Another opening is often provided adjacent the stopped position of an elongated die bearing advertising matter which may be changed from time to time, and known as the slogan die. These openings are in the upper part of the housing and may be entered with the printing device secured in place on the machine base. Heretofore it has been necessary, however, to make these various openings of minimum size to reduce the possibility of an operator's being able to use them for fraudulent printing access to the drum in case the latter should be stopped in a position other than its proper stopping position. While additional known safeguards are also provided to this end, the size of the openings has been deemed critical as well, and thus a distinct limitation was placed upon the length of slogan dies which could be employed in such printing devices. Each of these small openings has previously been closed by a door which prevents the accumulation of dust in the machine and tends to reduce somewhat the chances for inadvertently introducing an impelment or finger into the opening while the printing device is operating.

It is an object of the present invention to render the access area at the upper part of the printing device casing larger and hence easier to use and to provide for using much larger slogan dies, while also providing improved protection against improper or fraudulent use of

the device as well as much safer conditions for the operator. It is a feature of the invention that this object is attained by providing a large cover extending over substantially the whole upper portion of the casing to cover and uncover the entire access area by a single closing or opening movement, and by providing automatic controls for relating the cover operation to the condition of the printing device.

It is another object of the invention to provide locking means for a displaceable cover for the upper portion of a value printing device that will be released only when the printing member is at rest in its proper stopping and locked position. It is a feature of the invention that this situation is brought about by providing a first means which locks the cover except when the control means for the motive power which operates the printing mechanism is in inoperative position, and a second means which locks the cover except when the printing mechanism is in its proper stopping position, so that both conditions must be simultaneously satisfied before the cover can be opened.

It is still another object of the invention to provide a displaceable cover for the upper portion of a value printing device which includes an interlock which prevents the operation of the motive power control means for the printing device except when the cover is closed. It is a feature of the invention that this interlock is provided by the same means which locks the cover in closed position except when the means controlling the motive power for the printing device is in inoperative position.

It is a further object of the invention to provide access to various parts of the printing mechanism such as the date setting mechanism, the slogan die and the like by means of a plurality of openings all of which may be closed by a single cover even though disposed on separate surfaces of the casing.

A preferred form of the invention is illustrated in the drawings, wherein:

Fig. 1 is a fragmentary perspective view of the outside of the cover portion of a printing device according to the invention;

Fig. 2 is a view similar to Fig. 1 but showing the cover open and partially broken away and in an open position;

Fig. 3 is a vertical section taken substantially on line 3—3 of Fig. 5, but showing the cover partly opened, the printing drum being broken away to show a portion of the drum locking means;

Fig. 4 is a view similar to Fig. 3, but with the cover closed and the printing drum in a partially rotated position;

Fig. 5 is a section taken substantially on line 5—5 of Fig. 4;

Fig. 6 is a fragmentary elevation, partially diagrammatic, showing the interlock between the cover and the power operating means for the printing drum;

Fig. 7 is a detail perspective of a cover locking means controlled by the drum position, with the parts in the Fig. 3 position; and

Fig. 8 is a section taken on the line 7—7 of Fig. 2.

The invention is illustrated in the drawing as applied to a postage meter, and reference to the drawing will be had as the description proceeds. In Figs. 1 and 2 is shown the removable meter portion **10** of a postage printing machine, including a register frame and housing **11** and an integrally connected printing drum frame and housing **13**. Mounted for movement between printing and non-printing position in the housing **13** is a printing member, shown in the preferred form which consists of a rotary printing drum **15**, which is adapted to print on pieces of mail or tape as the same are fed past the bottom opening of the housing **13** by known types of feeding mechanism provided on the conventional machine base (not shown). The printing drum **15** is shown in its stop-

ping position wherein it is normally automatically locked by known means (not shown) on the frame 11, 13 between printing actuations of said drum. The surface of the printing drum 15 carries several printing dies, e. g. a postage die 17 including value and authenticating indicia, a town and dater die assembly 19, and a slogan die 21. As will be seen from Fig. 8, which illustrates the condition in question, when the drum 15 is in its proper stopped, locked position, the postage die is positioned adjacent and largely behind a barrier portion 23 of the frame 13 so that access thereto for the purpose of taking fraudulent impressions not charged on the meter is effectively prevented. A cover 24 is hinged at one end to the upper part of the casing 13 and is arranged to completely encompass the upper part thereof when the cover is closed. With the cover open, the town and dater die assembly 19 are accessible as shown in Fig. 2 so that setting of the dater die may be easily observed when changing the date setting. The slogan die 21 is likewise exposed to permit ready changing from time to time, and the manual dater control means 25 at the end of the drum is likewise exposed and accessible so that the date setting may be changed from day to day.

While it may be that in some cases complete exposure of the upper portion of the drum by opening of the cover 24 would be feasible, it is presently preferred to provide an apertured cage member 27 integral with the frame 13 and overlying the upper portion of the drum 15 to provide greater protection against tampering with the various locking mechanisms which prevent rotation of the drum 15. The openings shown include a dater opening 29, a dater control opening 31 and a slogan opening 33. Since these openings are intended merely to make lock tampering impractical and are not, for reasons which will appear hereinafter, called upon to act as barriers to prevent directly the taking of impressions, they may be made large enough for the most convenient viewing, changing and setting of the dies, as can be seen in Fig. 2. It will be noted that in place of the individual cover usually provided for such openings as 29, 31 and 33, all now cooperate with a single cover 24 which, when closed, overlies them all, and when open permits access to all.

Turning now to Fig. 6, it can be seen that an electric motor 35 is provided which serves as the motive power for the printing drum 15. The power for the motor 35 is furnished by a source of electrical energy through the conductors 37, 39, and 41. The conductors 39 and 41 are in series with a mercury switch 43 which serves to start and stop the motor 35 when the meter is tripped for a printing operation. As can be seen in Fig. 6, a control bar 45 suitably connected with the trip mechanism of the meter is arranged to actuate a lever 47 pivoted, for example, as at 49, and provided with means for operating the switch 43. When the bar 45 is in a direct or solid line position in Fig. 6, the switch 43 will be closed to energize the motor 35 and rotate the printing drum. When the bar 45 is in its right hand or dotted line position as seen in Fig. 6, the switch 43 will be open, motor 35 will not be energized, and the printing drum 15 will not be rotating. As the bar 45 moves from left to right or vice versa, the tip 51 thereof moves back and forth across a guide slot 53 formed integral with the frame 13. The movement is such that the tip 51 extends across and obstructs the guide slot when the bar 45 is to the left and the switch 43 is closed. When the bar 45 is to the right and the switch 43 opened, the tip 51 clears the guide slot 53 as indicated in dotted lines in Fig. 6.

Movable back and forth in the guide slot 53 is the conflict member 55 formed by the tip end of a lever 57 which is designed to control the movements of the cover 24. As seen in Fig. 4, the other end of the lever 57 carries a pin 59 which rides in a cam slot 61 formed in a segmental bracket 63 connected to and movable with the cover 24. The first portion of the cam slot 61 encountered by the pin 59, when the cover 24 starts to open, is so shaped as to move the conflict member 55 rapidly into a position in guide slot 53 such that it conflicts with the path of travel of the tip 51 of control bar 45. The remainder of the slot 61 is centered on the hinge axis of the cover 24 and merely maintains the lever 57 in a position such that the conflict member 55 is in said interfering position regardless of the angle at which the cover is opened.

Means for latching the cover 24 and holding the same closed, depending upon the position of the printing drum 15, is shown particularly in Figs. 3, 4, and 7. This means consists of a latch surface 65 formed on the cover 24 near the free end thereof. Engageable with the latch surface 65 is a latch lever 67 pivoted on the housing 13. The engaging portions of latch 67 and of surface 65 are so configured that the opening movement of the cover tends to cam the latch 67 towards release position. Integrally connected with the latch 67 is a lever arm 69 which forms a part of the latch assembly and controls the movements of the latch. Spring means such as tension spring 71 are provided for urging the assembly 67, 69 towards a position in a direction such that the latch 67 will seek to engage the cover 24 and its latching surface 65. The lever 69 is provided at its free end with a control nose 73. Drum 15 carries at one end a control ring 75 which has an aperture 77. Ring 75 occupies a position such that it underlies the nose 73 at all times and is normally adapted to be contacted thereby whenever the latch assembly 67, 69 is swung in latch releasing direction. A stop 79 on lever 69 is arranged adjacent a fixed abutment such as pin 81 which anchors one end of spring 71. The stop 79 serves to maintain the nose 73 adjacent ring 75 and latch 67 in normal position at all times whether the cover 24 is closed or open. The opening 77 in ring 75 is so located that it can receive the nose 73 only when the drum 15 is in its home position, wherein the drum is normally locked against rotation until a printing cycle is again effected. From an inspection of the drawings, particularly Figs. 3 and 4, it can be seen that owing to the integral construction of the latch assembly 67, 69, Fig. 7, the latch 67 can be moved away from its locking or Fig. 4 position only when the nose 73 is permitted to enter opening 77 in the ring 75. Whenever the main body of the ring 75 opposes the nose 73, movement of the latch 67 is prohibited, and the cover 24 is securely locked.

When the cover 24 is closed as shown in Fig. 1, the device may be tripped for printing in a known manner any desired number of times. At any time when the printing drum 15 is rotating as seen in Figs. 4 and 6, motor 35 is, of course, energized which means that the tip 51 of rod 45 is in its Fig. 6 or guide slot blocking position. By reference to Fig. 4 it can be seen that swinging of lever 57 is thus prevented and since the cam groove 61 is thus unable to displace the pin 59, opening of cover 24 is further prevented and will be permitted only after the power for rotating drum 15 has been cut off through switch 43.

If the operator desires to open the cover 24 to inspect or change the dies, or for any other reason, he may do so at any time providing that the attempt is made when the drum 15 is in its home and locked position as seen in Fig. 3. Under these circumstances, of course, the switch 43 is open and the tip 51 of control rod 45 is withdrawn from the guide slot 53. No obstruction is offered to the movement of the conflict member 55 or of lever 57, the cam slot 61 is accordingly able to move the pin 59 and the cover 24 is thus permitted to open as seen in Fig. 3. No obstruction to opening of the cover 24 is offered by the latch 67, for at this time the nose 73 is received in the opening 77, as shown in Fig. 3, which permits the surface 65 to cam the latch 67 to one side and thus permit opening of the cover 24.

A suitable cam surface 66 is preferably provided on the cover 24 to cam the latch 67 to one side and permit

automatic latching of the cover in response to closing thereof.

With the cover **24** open, ready access may be had to the dater control **25** through the opening **31** for setting the correct date, and to the slogan die **21** through the opening **33** for changing the same if desired. Opening **29** permits ready inspection of the dater die. All of the openings are of sufficient size so that no inconvenience in inspection or manipulation of the parts is experienced.

By reference to Fig. 3, it can be seen that so long as the cover **24** is open, the conflict member **55** or the lever **57** is in a position to block movement of the control rod **45**. The rod **45** is therefore prevented from moving out of the dotted line position of Fig. 6, and hence the printing movement of the printing drum cannot be either intentionally or inadvertently started.

From an inspection of Fig. 6, it can be seen that the tip **51** of rod **45** must extend well across the guide slot **53** before it is possible for the switch **43** to close. Hence, it is made impossible for the cover **24** to be opened simultaneously with the connecting of the motive power for the drum, either intentionally or by inadvertence.

Another way of stating the relationship of the tip **51** of control member **45**, and conflict member **55**, is that they move in intersecting paths with their critical positions at the intersection so that only one may occupy the critical position at a time.

It is thus apparent that whenever the cover **24** is opened, the drum **15** must be in its proper home and locked position with the value die **17** well protected by the barrier portion **23** of the frame **13**, so that the taking of fraudulent impressions is precluded. No danger to the operator or to the machine itself is likely since there is no possibility of rendering the motive power operative to rotate the drum **15** so long as the cover is open.

If one should attempt to disconnect the motive power by trial in such a manner as to stop the printing drum with value die **17** opposite one of the openings **29** or **33**, he would then be prevented from opening the cover **24** by the displacement of the opening **77**. The openings **29** and **33** may be made fully adequate for their purposes of inspection and manipulation and need not be restricted by the necessity for acting as guards against wiping of a fraudulent impression from a value die placed opposite the opening, since such placement of the value die is effectively precluded except when cover **24** is closed.

From the foregoing description, it can be seen that a value printing mechanism has been provided wherein ready access to the printing element can be had without prejudice to the safe operation of the machine or to the security of the device from the standpoint of the possibility of the pilfering improper impressions.

While the foregoing description has proceeded on the basis of controlling the motive power for the printing drum by means of an electric switch, this feature is purely exemplary, and it will be perceived that other means for connecting and disconnecting the motive power can be readily substituted. Postage printing machines now in use and provided with automatic work feeding mechanisms, for example, conventionally employ a clutch mechanism for such connection and disconnection operations, and the equivalence of such an arrangement with switch **43** in the combination shown will be readily appreciated.

The terminology employed hereinafter includes expressions such as "means for rendering the power means inoperative to move the printing member." It will be readily understood that such expressions denote means in the nature of those set out in the immediately preceding paragraph which prevent any application of power to the printing member or parts integrally connected therewith, or any movement whatever of the printing member by the power means rather than means for merely locking the printing member against extensive movements, inasmuch as the printing member (when in home position) is normally thus locked by other means as previously explained.

Having described the invention, what is claimed is:

1. In a machine of the character described, a rotatable printing drum; means surrounding the printing drum including a cover having a position preventing access to the printing drum and removable therefrom to permit access to portions of the printing drum; a latch for engaging said cover and holding the same in closed position; a control ring rotatable with said drum and having a track which is essentially circular but has a non-circular portion of limited extent; a latch control element having a feeler portion disposed adjacent said track, and operatively associated with said latch to prevent release thereof when the feeler is opposed by the circular portion of the track, but effective to permit release of the latch when the feeler is opposed by said non-circular portion, whereby removal of the cover is permitted only when the printing drum is in a predetermined position.

2. In a value printing device, a rotatable printing drum having value printing indicia on a portion of its surface, and having a locked, non-printing position; a barrier immovably attached to the device in a position so fixed with respect to the drum axis that when the drum is in said locked position, the value printing indicia lies closely adjacent and behind said barrier whereby fraudulent impressions are prevented; means surrounding the printing drum including a cover hinged for movement between a closed position preventing access to the upper portions of the printing drum and an open position permitting access thereto; a latch for engaging said cover and holding the same in closed position; a control ring mounted on said drum for rotation therewith; a latch control element connected to said latch and having a feeler portion normally positioned adjacent said control ring and engageable therewith to prevent movement of said latch sufficient to release said cover, said control ring having an aperture placed so as to be opposite said feeler when said drum is in said locked position, whereby release of said latch is permitted only when said drum is in said locked position and said value indicia inaccessible.

3. In a machine of the character described, a movable printing member; power means for moving said printing member; means including a control member for rendering said power means operative to move said printing member, or for rendering the power means inoperative, said control member being movable back and forth in a path between positions corresponding to the operative and inoperative settings of said power means; means surrounding the printing member including a cover movable between a closed position preventing access to the printing member and open positions permitting access to portions thereof; and means connected with said cover and including a conflict member having a portion movable back and forth in a path between positions corresponding to closed and open positions of said cover, the paths of said control member and said conflict member intersecting with the control member being designed to occupy the intersection when in a position to render said power means operative, and the conflict member being designed to occupy the intersection for substantially all open positions of siad cover, whereby either the cover may be open or the power means may be operative but not both.

4. In a machine of the character described, a movable printing member; power means for moving said printing member; means including a movable control member settable in either of two positions for rendering said power means operative to move said printing member responsive to the setting of the control member in one of said two positions, or for rendering the power means inoperative responsive to the setting of the control member in the other of said two positions; means surrounding

the printing member including a cover having a position preventing access to the printing member and removable therefrom to permit access to portions of the printing member; and means preventing said removal of the cover until said control member has been first moved to said other position to render said power means inoperative.

5. In a machine of the character described, a movable printing member; power means for moving said printing member; means including a movable control member settable in either of two positions for rendering said power means operative to move said printing member responsive to the setting of the control member in one of said two positions, or for rendering the power means inoperative responsive to the setting of the control member in the other of said two positions; means surrounding the printing member including a cover having a position preventing access to the printing member and removable therefrom to permit access to portions of the printing member; and means preventing movement of said control member to said one position to render said power means operative until said cover has first been moved to access preventing position.

6. In a machine of the character described, a movable printing member having a locked, non-printing position; power means for moving said printing member; means including a movable control member settable in either of two positions, for rendering said power means operative to move said printing member responsive to the setting of the control member in one of said two positions, or for rendering the power means inoperative responsive to the setting of the control member in the other of said two positions; means surrounding the printing member including a cover having a position preventing access to the printing member and removable therefrom to permit access to portions of the printing member; means preventing said removal of the cover except when said control member is in said other position to render said power means inoperative, and for preventing movement of said control member to said one position to render said power means operative except when said cover is in access preventing position; and means for preventing removal of said cover except when said printing member is in said locked position.

7. In a machine of the character described, a movable printing member having a locked, non-printing position; power means for moving said printing member; means including a movable control member settable in either of two positions for rendering said power means operative to move said printing member responsive to the setting of the control member in one of said two positions, or for rendering the power means inoperative responsive to the setting of the control member in the other of said two positions; means surrounding the printing member including a cover having a position preventing access to the printing member and removable therefrom to permit access to portions of the printing member; means preventing said removal of the cover except when said control member is in said other position to render said power means inoperative; and means for preventing removal of said cover except when said printing member is in said locked position.

8. In a machine of the character described, a movable printing member; power means for moving said printing member; means including a movable control member settable in either of two positions for rendering said power means operative to move said printing member responsive to the setting of the control member in one of said two positions, or for rendering the power means inoperative responsive to the setting of the control member in the other of said two positions; means surrounding the printing member including a cover having a position preventing access to the printing member and removable therefrom to permit access to portions of the printing member; and means preventing said removal of the cover except when said control member is in said other position to render said power means inoperative.

9. In a machine of the character described, a movable printing member; power means for moving said printing member; means including a movable control member settable in either of two positions for rendering said power means operative to move said printing member responsive to the setting of the control member in one of said two positions, or for rendering the power means inoperative responsive to the setting of the control member in the other of said two positions; means surrounding the printing member including a cover having a position preventing access to the printing member and removable therefrom to permit access to portions of the printing member; and means preventing movement of said control member to said one position to render said power means operative except when said cover is in access preventing position.

10. In a machine of the character described, a movable printing member; power means for moving said printing member; means including a movable control member settable in either of two positions for rendering said power means operative to move said printing member responsive to the setting of the control member in one of said two positions, or for rendering the power means inoperative responsive to the setting of the control member in the other of said two positions; means surrounding the printing member including a cover having a position preventing access to the printing member and removable therefrom to permit access to portions of the printing member; and means preventing opening of said cover except when said control member is in said other position to render said power means inoperative, and for preventing movement of said control member to said one position to render said power means operative except when said cover is in access preventing position.

11. In a machine of the character described, a movable printing member; electric motor driven power means for moving said printing member; a movable control member movable only in a predetermined path; means including a circuit opening or closing switch connected with said control member and associated directly with said power means so that predetermined positions of said control member in said path compel the power means to be rendered operative to move the printing member and other predetermined positions in the path compel the power means to be rendered inoperative, said control member having a blocking portion; means surrounding the printing member including a cover movable between a closed position preventing access to the printing member and open position permitting access to portions thereof; and a lever connected at one end with and actuable by said cover and having a sensing portion positioned adjacent the blocking portion of said control member and constrained to move in a predetermined direction during cover opening, said blocking portion, when the cover is closed, lying close to that side of the sensing portion of the lever towards which it would move during opening movement of the cover and in a position normally to block the path of said sensing portion and hence the opening movement of the cover, said blocking portion being of sufficient extent to block the path of the sensing portion for all of the normal control member positions except those in which the power means is rendered inoperative, and when the control member is in any of said last-mentioned positions, lying clear of the path of said sensing portion to permit opening movement thereof and of said cover.

12. In a machine of the character described, a movable printing member; electric motor driven power means for moving said printing member; a movable control member movable only in a predetermined path; means including a circuit opening or closing switch connected with said control member and associated directly with said power means so that predetermined positions of said control member in said path compel the power means to be rendered operative to move the printing member and other predetermined

positions in the path compel the power means to be rendered inoperative, said control member having a blocking portion; means surrounding the printing member including a hinged cover movable between a closed position preventing access to the printing member and open position permitting access to portions thereof; a bracket integral with said cover and having a cam slot therein; a lever having a follower at one end positioned in said slot for actuation thereby and having a sensing portion positioned adjacent the blocking portion of said control member and constrained by the cam and follower to move in a predetermined direction during cover opening, said blocking portion, when the cover is closed, lying close to that side of the sensing portion of the lever towards which it would move during opening movement of the cover and in a position normally to block the path of said sensing portion and hence the opening movement of the cover, said blocking portion being of sufficient extent to block the path of the sensing portion for all of the normal control member positions except those in which the power means is rendered inoperative, and when the control member is in any of said last-mentioned positions, lying clear of the path of said sensing portion to permit opening movement thereof and of said cover.

13. In a machine of the character described, a movable printing member; electric motor driven power means for moving said printing member; a movable control member movable only in a predetermined path; means including a circuit opening or closing switch connected with said control member and associated directly with said power means so that predetermined positions of said control member in said path compel the power means to be rendered operative to move the printing member and other predetermined positions in the path compel the power means to be rendered inoperative and having a sensing portion constrained to move in a predetermined direction whenever the control means is moved towards a position rendering the power means operative; means surrounding the printing member including a cover movable between a closed position preventing access to the printing member and open position permitting access to portions thereof; and a lever connected at one end with and actuable by said cover and having a blocking portion positioned adjacent said control member, said blocking portion, when the control member is in power inoperative position, lying close to that side of the sensing portion of the control member towards which it would move for rendering the power means operative and in a position normally to block the path of the sensing portion and hence prevent control member movement rendering the power means operative, said blocking portion being of sufficient extent to block the path of the sensing portion for all of the normal lever positions except those in which the cover is substantially closed. and when the lever is in any of said last-mentioned positions, lying clear of the path of said sensing portion to permit movement thereof and of said control member to power operative position.

14. In a machine of the character described, a movable printing member; electric motor driven power means for moving said printing member; a movable control member movable only in a predetermined path; means including a circuit opening or closing switch connected with said control member and associated directly with said power means so that predetermined positions of said control member in said path compel the power means to be rendered operative to move the printing member and other predetermined positions in the path compel the power means to be rendered inoperative and having a sensing portion constrained to move in a predetermined direction whenever the control means is moved towards a position rendering the power means operative; means surrounding the printing member including a hinged cover movable between a closed position preventing access to the printing member and open position permitting access to portions thereof; a bracket integral with said cover having a cam slot therein provided with a sharp initial rise corresponding to the commencement of cover opening and a dwell over the remainder of its operative surface; a lever having a follower at one end positioned in said slot for actuation thereby and having a blocking portion positioned adjacent said control member, said blocking portion, when the control member is in power inoperative position, lying close to that side of the sensing portion of the control member towards which it would move for rendering the power means operative and in a position normally to block the path of the sensing portion and hence prevent control member movement rendering the power means operative, said blocking portion being of sufficient extent to block the path of the sensing portion for the normal lever position as determined by the dwell portion of said cam when said lever is in the position corresponding to any opened position of the cover, and when the lever is in any of the positions determined by the initial portion of the cam and said cover is substantially closed, lying clear of the path of said sensing portion to permit movement thereof and of said control member to power operative position.

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