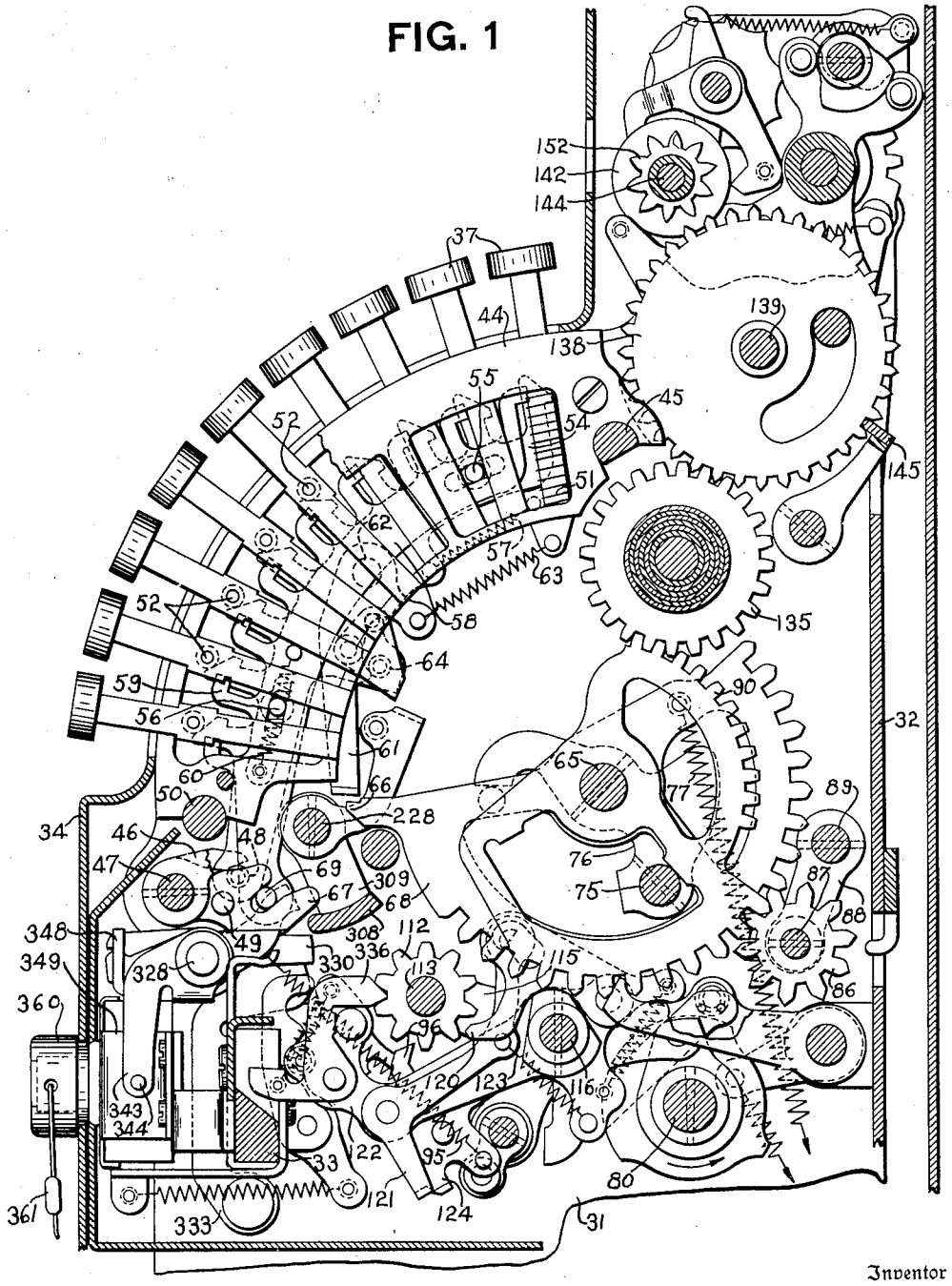
March 5, 1935. W. H. ROBERTSON 1,993,626

CASH REGISTER

Original Filed July 27, 1931 2 Sheets-Sheet 1

FIG. 1



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CASH REGISTER

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FIG. 2

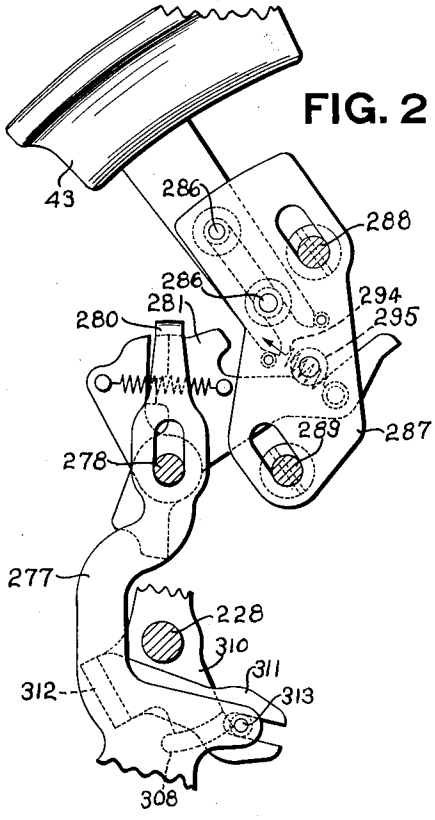


FIG. 3

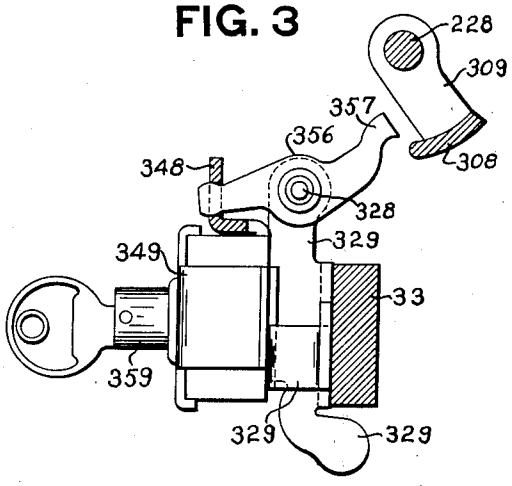
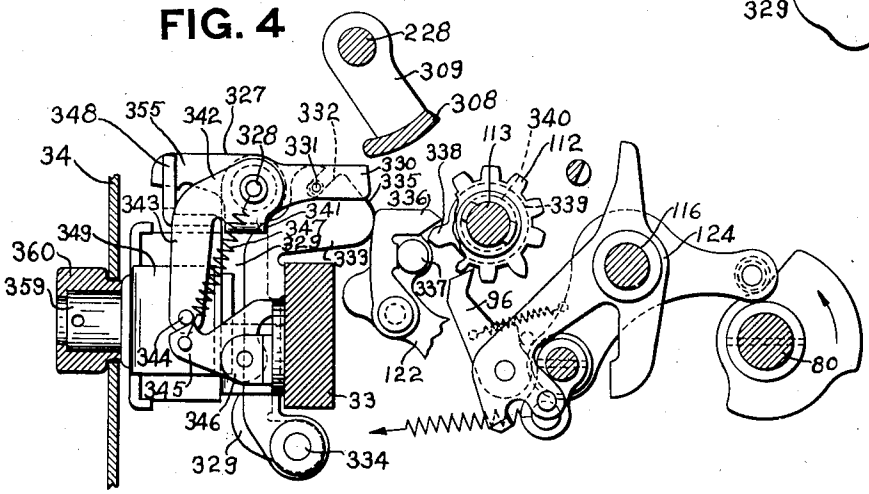


FIG. 4



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UNITED STATES PATENT OFFICE

1,993,626

CASH REGISTER

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Original application July 27, 1931, Serial No. 553,329. Divided and this application November 8, 1933, Serial No. 697,117

7 Claims. (Cl. 235—130)

This invention relates to improvements in registers, ticket issuing machines and the like of the type shown and described in Letters Patent of the United States No. 1,816,263, issued July 18, 1931 to William H. Robertson, and is a division of the application for United States Letters Patent of William H. Robertson, Serial Number 553,329 filed July 27, 1931.

Machines of the type disclosed in the above mentioned patent are small, compact, light in weight, and yet are provided with a full complement of keys and other manipulative devices to control said machine to perform all of the functions usually attributed to larger and more costly machines. These functions include generally the accumulation of amounts on one or more totalizers, the printing of amounts registered and other data on a plurality of record materials, making repeat operations, totalizing operations, etc.

The machine disclosed in the parent application above mentioned is particularly adapted for printing and recording transactions entered into the machine and for issuing gummed postage labels, said machine printing the date, serial number or consecutive number of the label, permit or meter number, zone, weight and department in which the label is to be affixed, the amount of the postage and the postoffice and state where mailed.

It is, therefore, an object of this invention to provide a machine of the type indicated with novel means to lock the machine against operation after the total has exceeded a predetermined capacity in order to prevent the issuance of gummed labels after the amount of money paid to the Postoffice Department by the person using the machine has been exhausted, thus compelling that person to return to the Postoffice and pay more money before the machine can be used to issue further postage labels.

It is a further object of this invention to provide a novel means intermediate the totalizer and the machine releasing mechanism which novel means is under control of the totalizer to positively lock the machine releasing means against effective operation as soon as the totalizer has exceeded its capacity.

With these and incidental objects in view, the invention consists of certain novel features of construction and combinations of parts, the essential elements of which are set forth in appended claims and a preferred form of embodiment of which is hereinafter described with reference to the drawings which accompany and form part of this specification.

In said drawings:

Fig. 1 is a sectional view through the machine taken to the right of one of the amount banks.

Fig. 2 is a fragmentary view of a portion of the machine releasing mechanism.

Fig. 3 is a detail view of the device for locking the machine against operation while the totalizer is being unlocked.

Fig. 4 is a detail view of the mechanism for locking the machine against operation when the totalizer exceeds its set predetermined capacity.

General description

The machine disclosed in the parent application, of which this case is a divison, is adapted for recording postage and for printing and issuing gummed postage labels for use on first, second, third and fourth-class mail. It is particularly adapted for use where heavy packages of different sizes and weights have been weighed to determine the amount of postage required.

The machine of the present invention is small, compactly arranged and is encased in a suitable cabinet. This cabinet is locked on the machine by two locks (only one of which is shown) the key to one of which is in the possession of the postal authority. The key to the other lock (the one which is not shown) is retained by the manufacturer of the machine, and is used only when it is necessary to remove the cabinet from the machine in order to repair or adjust the same. A keyboard having rows or banks of manipulative keys is provided for controling the registration of the amount of postage on two totalizers with which the machine is provided.

Other rows of keys, a total lever and a repeat key are provided in the machine shown in the parent case but those are not shown herein as they are not necessary for purposes of this divisional case. If the reader wishes a detailed illustration and description thereof, reference may be had to the parent case.

The usual differential mechanism is provided and is operated under control of the manipulative devices to add onto the totalizers and to adjust type carriers from which are printed the amounts and other data corresponding to the keys depressed as is fully illustrated and described in the parent case. It has not been thought necessary to show in this case any of the printing mechanism whatsoever in that it is in no way connected with the specific subject matter of the claims of this divisional application.

The machine of the present invention is provided with two separate and independent totalizers, one of which is located in that position of the machine usually occupied by the indicators, and is but generally shown in this case, there being no indication provided in the instant machine. This totalizer is a reading totalizer and is constantly visible through a sight opening in the cabinet. The purpose of this totalizer is to accumulate the amounts of postage issued by the machine. This totalizer cannot be reset to zero and movement of the usual control lever in machines of this type to the "Read" position disables the engaging mechanism for this reading totalizer. Consequently this totalizer can be engaged with its actuators only when the machine is set to add.

The other totalizer, and the one in which we are more particularly interested in this case is substantially the same structurally and is located in the same position as the totalizer in the machine of the patent above mentioned. This totalizer is engaged with the actuators during adding operations and reading operations under the control of the usual total control lever. On adding operations the totalizer accumulates the amount of the postage issued, according to the amount keys depressed. This totalizer is set by the postal authority to issue a predetermined amount of postage and when this amount is exhausted the machine is automatically locked against operation under the control of mechanism directly operated by that totalizer. The machine is then taken to the postoffice where the postmaster, who has in his possession the key to the sealed lock, releases the machine by breaking the seal and operating the lock. On reading operations the total standing on this totalizer is cleared therefrom, set up on the usual type wheels and printed on an inserted slip or government form and also on an audit strip which strip is in the machine. The total is then replaced on the totalizer, which may not otherwise be manipulated.

As before stated, none of the printing mechanism has been shown in this divisional application.

Such machines are usually operated by suitably designed electric motors, or in the event of failure of the electric current the machine may be operated manually by a crank provided for that purpose. In either case the machine is released for operation by the depression of what is known in the art as a motor release bar.

Detailed description

Main frame work and cabinet

The main body of the machine is supported between side frames 31 (only one being shown), joined at the back by a back frame 32 and at the lower front by a cross bar 33. A cabinet or casing 34 having suitable openings for keys, operating crank and other control members, and a sight opening for the reading totalizer, encloses the machine and is secured to the base (not shown).

Keyboard

Only one key bank has been shown in this divisional application. It will now be described.

This amount bank is provided with a plurality of amount keys 37 (Fig. 1) which are slidably mounted in a key frame 44 (shown partly broken away for clearance) having its upper and lower ends supported on cross-rods 45 and 50 respectively extending between the machine side frames 31. Each of the keys 37 is provided with a spring 51, only one being shown, coiled about its shank to normally retain the keys in their undepressed positions and to return the depressed keys to their undepressed positions when they are released.

Each of the amount keys 37 carries a pin 52 which upon depression of its key wipes along the beveled edge of a shouldered projection 53 on a flexible detent bar 54 slidably mounted on studs 55 and 56 in the key frame 44. There are as many projections 53 on the detent bar 54 as there are keys in the banks. The pin 52 on the particular key depressed, as it wipes by its associated projection 53 slides the detent bar 54 toward the left against the tension of a restoring spring 57. When the key pin 52 has passed the shoulder on the projection 53 the spring 57 partially restores the detent bar 54, hooking the shouldered projection over the key pin 52 of the depressed key, thus retaining said key in depressed position until another key in the same bank is depressed or until the detent bar 54 is shifted toward the left to release the depressed key. This may be accomplished either manually or automatically. When the key pin 52 is thus released from the detent bar 54 the spring 51 returns it to its normal undepressed position.

Each of the banks of amount keys is provided with a locking bar 58 slidably mounted on the studs 55 and 56 to lock the depressed amount key in its depressed position and the undepressed amount keys against depression during operation of the machine. Mechanism to be later described is operated as soon as the machine is released for operation to shift the locking bar 58 upwardly and toward the right to engage hooked projections 59 thereon with the key pins 52, the projection associated with the depressed key passing above the pin 52 on this key to hold the same in depressed position and the projections associated with the remainder of the keys passing beneath the pins 52 to prevent depression of the undepressed keys during the operation of the machine. A restoring spring 60 normally holds the locking pawl 58 in its normal position with the upper walls of the slots therein bearing against their respective studs 55 and 56.

Near the end of the operation of the machine both the detent bar 54 and the locking bar 58 are shifted toward the left to free the depressed key, which is immediately restored to its normal undepressed position by its spring 51.

Each bank of keys is provided with a zero stop arm 61 pivoted on a stud 62 in the key frame 44 to stop the differential mechanism at zero when the machine is operated with no key depressed in the particular bank. A spring 63 normally holds the stop arm 61 against a stop stud 64 projecting laterally from the detent bar 54. When the detent bar 54 is shifted by depression of one of the keys 37 the stud 64 cams the stop arm 61 clockwise against the tension of the restoring spring 63 to its ineffective position. When the depressed key 37 is released near the end of the operation and the detent bar 54 is restored to its normal position, the spring 63 rocks the zero stop arm 61 counter clockwise to its normal position.

Key release mechanism

As before stated it is desired to release all of the depressed keys near the end of each adding operation. To do so it is necessary to lower the detent bars 54 which are spring urged upwardly

to flexibly hold the depressed keys in depressed positions, and also to lower the locking bars 58 which are mechanically raised when the machine is released to lock all of the keys against manipulation during the operation of the machine.

A series of fingers 46 (Fig. 1), one associated with each bank of keys, is fast on a shaft 47 journaled in the machine side frame 31. Each finger 46 is adapted to cooperate with a stud 48 on the lower end of the detent bar 54 for its particular bank. Also the fingers 46 are adapted to cooperate with studs 49 carried by slotted arms 67 pivoted on the shaft 47. Each slotted arm 67 embraces a stud 69 projecting from the lower end of its associated locking bar 58 which bars as stated above are shifted upwardly when the machine is released, carrying the studs 49 to points just beneath their respective fingers 46.

At the proper time near the end of each operation, the shaft 47 is rocked first clockwise and then counter clockwise to normal through a constant extent of travel. At the clockwise movement of the shaft 47 the fingers 46 come into contact with the studs 48 and 49 on the detent bars 54 and the slotted arms 67 respectively and continued clockwise movement of the fingers lowers the detent bars 54 and, rocking the slotted arms 67 clockwise, lowers the locking bars 58 thus releasing the depressed keys to the action of their springs 51.

The mechanism for rocking the shaft 47 will not be described in this divisional application. Reference may be had to the parent application if a description thereof is desired.

Amount differential

The amount keys 37 control the differential mechanism to set the type carriers (not shown) and to add amounts on the totalizer. The differential mechanism provided in the machine chosen to illustrate the present invention is substantially the same as that disclosed in the above mentioned Robertson Patent No. 1,816,263 and for this reason only a brief description thereof will be included in this specification.

The differentials are of the spring-actuated type and are identical for all amount banks. They are mounted on a rock shaft 65 (Fig. 1) journaled in the side frames 31 of the machine.

Depression of one of the keys 37 thrusts its inner end into the path of a projection 66 extending forwardly from an adding segment 68 pivoted on the rock shaft 65. There is one segment 68 for each of the banks of amount keys and one for each of the banks of weight keys (shown only in the parent application). The differential segments 68 which are associated with the banks of weight keys are what are known in the art as overflow differentials.

When a key 37 is depressed it also displaces the zero stop arm 61 which normally prevents advance of the adding segment 68 beyond its zero position. A universal rod 75 carried by a pair of arms 76, only one of which is shown, fast on the rock shaft 65 normally restrains the adding segment 68 against the influence of a spring 77 which tends to advance the segment. The universal rod 75 is operated at the proper time during the operation of the machine by cams (not shown) on the main drive shaft 80 which is journaled in the machine side frames 31.

As the arms 76 carry the universal rod 75 clockwise or toward the front of the machine, the adding segment 68 advances with the rod 75 under the influence of the spring 77 until it is arrested by the inner end of the depressed key or if no key is depressed by the zero stop arm 61 for that particular bank of keys. The universal rod 75, however, completes its full clockwise stroke.

Setting segments 90 are provided to set the type wheels (not shown) to their new position as determined by the particular data set up by the keys on the keyboard. These setting segments 90 are normally coupled to the adding segments 68 by broad coupling pinions 86 meshing with both.

Before the adding segment 68 can be set under the control of the depressed key 37 or the zero stop arm 61 and before the setting segment 90 can be restored to zero position, it is necessary to disengage the coupling pinions 86 from those segments 68 and 90. For this purpose the coupling pinions 86 are pivoted on a rod 87 carried by arms 88, only one of which is shown, fast on a shaft 89 journaled in the machine side frames 31. This shaft 89, at the beginning of the operation of the machine just before the adding segment 68 commences its clockwise movement, and by means which is not shown nor described in this divisional application moves the coupling pinions 86 out of mesh with the segments 68 and 90 to disconnect these segments so that when the spring 77 advances the adding segment 68 clockwise under the control of the depressed key or the zero stop arm, the setting segment 90 may be restored to its normal position by the universal rod 75 on its clockwise or forward travel.

As the adding segment 68 travels clockwise under the influence of the spring 77 the projection 66 thereon strikes the inner end of the depressed key thereby arresting the movement of the segment 68. The restraining and restoring rod 75 continues its clockwise travel to restore the segment 90 to its home position and as soon as this segment reaches its home position the coupling pinion 86 is again moved into engagement with the segments 68 and 90.

At the same time the coupling pinions 86 are reengaged with their segments, mechanism is operated to engage the totalizer with the adding segment 68 so that when the universal rod 75 rocks the segment 68 counter clockwise an amount equal to the value of the value of the keys depressed is accumulated thereon.

Lower or issuing postage totalizer

The issuing postage control totalizer includes a plurality of wheels 112 rotatably mounted on a rod 113 rigidly supported between a pair of arms 115 (only one of which is shown) fast on a totalizer shaft 116 journaled in the machine side frame 31. The rod 113 together with the totalizer shaft 116 and arms 115 form a rockable totalizer frame which at the proper time on adding operations is rotated to engage the totalizer wheels 112 with the adding segments 68.

After the totalizer wheels are engaged with the segments 68 the universal rod 75 is rocked counter clockwise or toward the rear of the machine to return the segments 68 to their home positions, and since the totalizer wheels 112 are at that time engaged with their respective adding segments the wheels are rotated to accumulate thereon the amounts set up on the keyboard.

After the adding segments 68 arrive at their normal or home positions the totalizer frame is rocked to disengage the adding wheels 112 from the segments 68.

The usual transfer or carrying mechanism is provided to advance the totalizer wheel of high-

er order one step of movement when the wheel 112 of next lower order passes from "9" to "0". This transfer mechanism is fully disclosed in the above mentioned Robertson Patent No. 1,816,263 and, therefore, only a brief description thereof will be included herein.

As the totalizer wheel 112 passes from "9" to "0" a tripping tooth thereon rocks a restraining pawl 120 to release a tripping pawl 121 pivoted on an arm 122 fast on the totalizer shaft 116 to the action of its spring 123 which immediately rocks the tripping pawl 121 clockwise to free a transfer arm 124 pivoted on the totalizer shaft 116 to the influence of a spring 95. This spring 95 rocks the arm 124 clockwise about its pivot shaft 116 as viewed in Figs. 1 and 4 and by a transfer pawl 96 pivotally carried on the transfer arm 124 advances the totalizer wheel 112 of next higher order one step of movement.

However, since this tripping of the transfer device occurs while the totalizer is engaged with the adding segment 68, mechanism fully described in the above Robertson Patent No. 1,816,263 is provided to delay the transfer until the totalizer is disengaged from the adding segment 68.

Upper totalizer

The previously mentioned setting segments 90 mesh with gears 135 (Fig. 1) which in turn mesh with actuator gears 138 for the upper totalizer. These totalizer actuator gears 138 are pivoted on a shaft 139 supported in the side frame 31.

This upper totalizer includes a series of reading totalizer wheels 142 rotatably mounted on a rod 144. Each of the wheels 142 carries a gear 152 which at the proper time are adapted to be brought into engagement with the totalizer actuator gears 138 so that the amount corresponding to the amount set up on the keyboard may be added into this upper totalizer. The usual aliner 145 is provided to properly aline the actuators.

Insofar as this divisional application is concerned it is thought that the very brief description which has been given for the upper totalizer is all that is necessary and if a further description and illustration are desired, reference may be had to the parent application above mentioned.

Releasing mechanism

The mechanism for releasing the machine for operation provided in the present machine is substantially the same as that provided in the machine shown in the previously mentioned Robertson Patent No. 1,816,263.

The machine is normally restrained in its home or normal position and may be released by the depression of a starting or release motor bar 43 (Fig. 2).

When the machine is being driven by an electric motor the full depression of this bar 43 under normal circumstances connects the motor clutch and turns on the current and the machine is operated by the motor. When the machine is hand-operated the depression of the motor bar 43 under normal conditions merely releases the machine and the operation thereof may be completed by the usual type of handle on machines of this character.

Intermediate the motor clutch releasing arm (not shown) and the release bar 43 is a vertically disposed link 277 slidably mounted on a stud 278 on another stud (not shown in this divisional application).

An ear 280 bent at right angles to the upper end of the link 277 rests on the shoulder of an arm 281 pivoted on the stud 278 and normally prevents downward movement of the link 277, which downward movement is necessary, as is fully described in the parent case for releasing the motor clutch stop mechanism to permit the motor to drive the machine.

After the desired keys of the machine have been depressed the machine is released for operation by depressing the motor release bar 43 the stem of which bar is removably supported on two studs 286 carried on a slide 287 mounted on studs 288 and 289 supported by the machine frame.

When the motor bar 43 is operated a stud 295 carried thereby rocks the arm 281 clockwise and removes the shoulder thereon from beneath the ear 280 of the link 277 whereupon this link, under the action of a spring not shown, is moved downwardly to release the motor clutch mechanism fully described in the above mentioned Robertson Patent No. 1,816,263.

Near the end of the operation of the machine the link 277 is raised which positions the ear 280 above the shoulder on the arm 281 whereupon a spring 294 rocks the arm 281 counter clockwise to position the shoulder thereon beneath the ear 280 thereby retaining the releasing mechanism in its normal position. At the same time the spring 294 rocks the arm 281 counter clockwise and through the engagement of this arm with the stud 295 restores the slide 287 and thereby the motor release bar 43 to their normal positions.

Key locking mechanism

The link 277 when it moves downwardly to release the machine operates mechanism to raise the locking bars 58 (Fig. 1) to lock the keys against manipulation either in their depressed or undepressed positions. This mechanism includes a bail 308 (Figs. 1 to 4) carried by arms 309 (Figs. 1, 3 and 4) and 310 (Fig. 2) journaled on a shaft 228. An arm 311 (Fig. 2) connected by a yoke 312 to the arm 310 is bifurcated to embrace a stud 313 projecting from the link 277. When the link 277 moves downwardly as above described to release the machine the stud 313 rocks the arm 311 and the arms 309 and 310 clockwise carrying the bail 308 therewith. On its clockwise movement the bail 308 (Fig. 1) picks up the slotted arms 67 (Fig. 1), rocking said arms counter clockwise to raise the locking bars 58 to position the hooked projections thereon over the key pin 52 of the depressed keys and under the pins 52 of the undepressed keys thereby preventing manipulation of the keys during the operation of the machine.

When, near the end of the operation of the machine the link 277 is raised, the stud 313 (Fig. 2) on the link 277 rocks the arm 311, yoke 312, the arms 309 and 310 and the bail 308 counter clockwise withdrawing the bail from contact with the arms 67 to permit the mechanism described above to lower the slotted arms 67 thereby releasing the keys to the action of their springs 51, which springs immediately restore the depressed keys to their undepressed positions.

Mechanism to lock the machine when the postage issuing totalizer exceeds its predetermined capacity

It was stated above that the lower or postage control totalizer is set by the postal authority to issue a predetermined amount of postage and when this amount is exhausted mechanism is

operated to lock the machine against further operation. This locking mechanism includes a restraining lever 327 (Fig. 4) pivoted on a stud 328 projecting laterally from a bracket 329 (Figs. 3 and 4) secured to the cross-bar 33. When the totalizer exceeds its predetermined set capacity the lever 327 is rocked counter clockwise carrying an arm 330 thereof into the path of the bail 308. It can be clearly seen by referring to Fig. 2 that if the bail 308 is held against clockwise movement the arm 310, the yoke 312 and the arm 311 also are held against clockwise movement thus restraining the link 277 in its uppermost position and thereby preventing release movement of this link 277. Therefore, since it is necessary for this link 277 to move downwardly to release the machine it is very clear that the machine may not be operated until the arm 327 (Fig. 4) is rocked clockwise to free the bail 308 and consequently the link 277 to its downward movement.

The mechanism for raising the arm 330 into the path of the bail 308 when the totalizer exceeds its predetermined capacity will be first described.

A stud 331 projects laterally from the arm 330 through an angular open slot 332 in an operating lever 333 pivotally supported on a stud 334 projecting from the lower end of the bracket 329. A nose 335 on the operating lever 333 normally abuts against the lefthand edge (as viewed in Fig. 4) of a finger 336 pivotally carried on the arm 122 of highest denominational order. The finger 336 normally rests against a stud 337 projecting from the arm 122 which stud prevents clockwise movement of the finger from the position in which it appears in Fig. 4. The end of the finger 336 normally rests in the path of a tappet 338 carried on a disk 339 rotatably mounted on the rod 113 rigidly connected to the totalizer wheel 112 of highest order by a sleeve 340.

When the totalizer wheel of highest order is rotated from "0" to "1" by its spring actuated pawl 96, the tappet 338 cams the finger 336 counter clockwise and since the finger 336 normally abuts against the operating lever 333 it rocks this lever also counter clockwise camming the stud 331 and thereby the lever 327 counter clockwise. At this time the bail 308 is in its tripped position and, therefore, the arm 330 is arrested by the underside of the bail 308. The transfer spring 95, through the elements 96, 338, 336, 333, and 331, presses the arm 330 against the underside of the bail 308 until near the end of the operation of the machine. At this time the bail 308 is restored to its normal position to withdraw it from the path of the arm 330 thus allowing the spring 95 to position the end of the arm 330 in the path of the bail 308.

The lever 327 is alined in either its ineffective position in which it appears in Fig. 4 or in its moved position. A yoke 341 connects the lever 327 with an arm 342 which arm has a finger 343 projecting downwardly therefrom carrying a stud 344. The nose of an alining pawl 345 pivotally supported by a bracket 346 secured to the cross-bar 333 is pressed against the stud 344 by a spring 347. When the lever 327 is rocked counter clockwise to its locking position as above described the stud 344 wipes by the nose of the pawl 345 tensioning the spring 347 which immediately moves the nose upwardly against the stud 344 to hold the lever 327 in its moved position.

Before the machine may be further operated to issue additional postage it is necessary for the mailer to take the machine to the postal authority who has in his possession the key to the lock which controls the locking lever 327. A lock bolt 348 projecting upwardly from a lock 349 secured to the bracket 329 cooperates with a tail 355 projecting forwardly from the lever 327. When a duly authorized person operates the lock 349 the bolt 348 is shifted vertically upwardly rocking the lever 327 clockwise, lowering the arm 330 out of the path of the bail 308 which action cams the operating lever 333 clockwise to normal at the same time rocking the finger 336 also clockwise to interpose the nose thereof in the path of the tappet 338 so that when the disk 339 makes a complete rotation said tappet 338 again comes beneath the finger 336.

The highest denominational order totalizer wheel 112 included in the present machine is the one hundred dollar wheel. It is obvious therefore that each time the wheel 112 of highest order, that is, the hundred dollar wheel, makes a complete rotation, one thousand dollars has been added into the totalizer. It is also obvious that the tappet 338 (Fig. 4) trips the locking device at each rotation. Therefore, by unlocking the machine the postal authority merely sets the locking device so that when the hundred dollar wheel 112 completes another rotation, or as stated above, when one thousand dollars worth of postage has been issued by the machine the totalizer wheel 112, that is, the one hundred dollar totalizer wheel, passes from "0" to "1" it again trips the locking device. If annother tappet were added to the disk 339 diametrically opposite the tappet 338 it is obvious that the locking device would be tripped at each half rotation of the hundred dollar wheel, and when wheel 112 completes another rotation, or as stated above, when one thousand dollars worth of postage has been issued by the machine the totalizer wheel 112, that is, the one hundred dollar totalizer wheel, passes from "0" to "1" it again trips the locking device. If another tappet were added to the disk 339 diametrically opposite the tappet 338 it is obvious that the locking device would be tripped at each half rotation of the hundred dollar wheel or at the issuance of each five hundred dollars worth of postage. Similarly if a tappet were placed at every other space about the disk 339 the machine would automatically lock at the issuance of each two hundred dollars worth of postage. It is to be understood therefore that the amount of postage to be isued before the machine automatically locks against release may be varied without departing from the spirit of this invention.

The person authorized to unlock the machine is compelled to turn his key backwardly to normal before the machine may be released for operation. To accomplish this result the lock bolt 347 (Fig. 3) controls a second locking lever 356 also pivoted on the stud 328. When the key is inserted in the lock and turned to restore the lever 327 to normal the lever 356 is rocked clockwise to position the end of an arm 357 thereof in the path of the bail 308. An arm 358 of a lever 356 projects through a slot in the lock bolt 348. The lever 356 remains in this locking position until the key is turned backwardly to normal position lowering the bolt 348 and rocking the lever 358 counter clockwise to withdraw the arm 357 from the path of the bail 308. The machine may now be released to issue further postage.

The barrel 359 of the lock 349 projects through the cabinet 34 at the front of the machine (Fig. 1)

where a shouldered collar 360 is adapted to be slipped over the end of the barrel 359. A seal 361 is then adapted to be applied through coinciding holes in the collar 360 and the barrel 359 of the lock to prevent unauthorized removal of the collar 360. Thus, the collar 360 when in place prevents insertion of the key into the lock and likewise prevents removal of the cabinet from the machine since the diameter of the collar is greater than the diameter of the opening in the cabinet 360 through which the bolt 359 and the shouldered portion of the collar 360 projects.

When the machine is taken to the postal authority for the purpose of unlocking the machine the authorized person first breaks the seal 361 and inserts the key, turns the key one-fourth turn, rocking the lever 327 (Fig. 4) clockwise, removing the arm 330 from the path of the bail 308, and at the same time rocking the lever 356 (Fig. 2) clockwise to position the arm 357 in the path of the bail 308. He then reverses the movement of the key, rotating it counter clockwise to normal, which movement rocks the lever 356 counter clockwise raising the arm 357 out of the path of the bail 308, the lever 327 being held in its ineffective position (see Fig. 4) by the pawl 345. The collar 360 is then replaced on the barrel 359 and the seal affixed.

While the forms of mechanisms herein shown and described are admirably adapted to fulfill the objects primarily stated, it is to be understood that it is not intended to confine the invention to the forms of embodiment herein disclosed, for it is susceptible of embodiment in various forms all coming within the scope of the claims which follow.

What is claimed is:

1. In a machine of the class described, the combination of a totalizer; machine releasing means; a bail operated by the releasing means; normally ineffective means to block releasing movement of the bail; means operated by the totalizer to render the blocking means effective; manipulative means to restore the blocking means to ineffective position; and other means to block releasing movement of the bail when said manipulative means is operated.

2. In a machine of the class described, the combination of a totalizer; machine releasing means; a bail operated by the releasing means; a normally ineffective lever to block releasing movement of the bail; a cam cooperating with said lever; an arm adapted to be rocked by the totalizer when said totalizer exceeds a predetermined capacity to actuate the cam to render the lever effective; a lock bolt cooperating with the lever; and manipulative means to operate the lock bolt to render the lever ineffective.

3. In a machine of the class described, the combination of a totalizer; machine releasing means; a bail operated by the machine releasing means; a plurality of normally ineffective means to block releasing movement of the bail; means operated by the totalizer to render one of said blocking means effective; means to render another of the blocking means effective; and manipulative means to render all of said blocking means ineffective.

4. In a machine of the class described, the combination of a totalizer; machine releasing means; a bail operated by the releasing means; a normally ineffective lever to block releasing movement of the bail; means operated by the totalizer to render the lever effective; a second lever normally ineffective to block releasing movement of the bail, said second lever being pivoted concentrically with the first mentioned lever; and manipulative means to render the second mentioned lever effective and to render both levers ineffective.

5. In a machine of the class described, the combination of a totalizer; machine releasing means; a device operated by the machine releasing means; a lock bolt; and means intermediate said totalizer and said lock bolt and adapted to be operated under control of said totalizer to prevent operation of said device by said releasing means, and also adapted to be operated by said lock bolt to be restored to normal.

6. In a machine of the class described, the combination of a totalizer; machine releasing means; a device operated by the machine releasing means; a lock bolt; a rockable member adapted to be moved into position to prevent movement of said device; an operating lever for said member and controlled by said totalizer; and means connected to said lock bolt to restore the rockable member to normal.

7. In a machine of the class described, the combination of a totalizer; machine releasing means; a device operated by the machine releasing means; normally ineffective means to prevent operation of said device; a member also normally ineffective to prevent operation of said device; rockable means to render said ineffective means effective; an actuating element connected to said totalizer; means intermediate said rockable means and said actuating element and operated by the latter to actuate said rockable means when the totalizer reaches a predetermined point; means to render said normally ineffective member effective; and means to render said ineffective means and said ineffective member effective.

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