

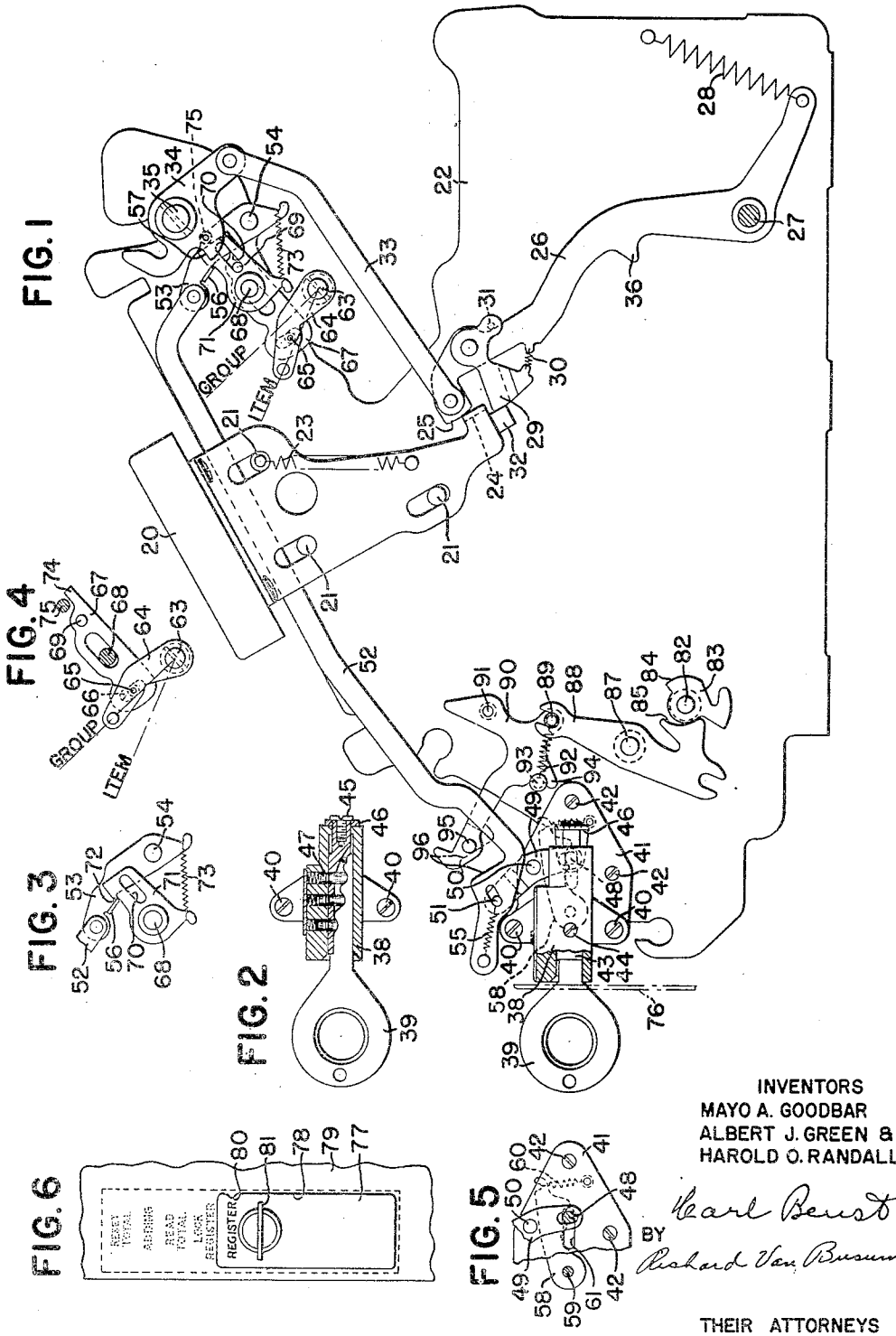
April 22, 1952

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2,593,666

KEY LOCK MEANS FOR CASH REGISTER CONTROL MECHANISM

Filed April 5, 1950



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2,593,666

KEY LOCK MEANS FOR CASH REGISTER CONTROL MECHANISM

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Application April 5, 1950, Serial No. 154,176

8 Claims. (Cl. 235—130)

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The present invention relates to cash registers and accounting machines and is particularly directed to mechanism to control the operation of such machines.

The machine chosen to illustrate the present invention is small, compact, and efficient, which makes it particularly suitable for use in connection with comparatively small business concerns, such as filling stations, dry-cleaning establishments, beauty shops, and analogous businesses.

In using a machine of the above character, it is often of decided advantage to place the machine in a rather exposed and unprotected location, where it will be readily accessible to the attendants or other persons authorized to use the machine. The chief disadvantage of this is that, at times when the machine is unattended, it is quite vulnerable to tampering with by unauthorized persons, who may be just curious or who may have more sinister motives, and with this in mind it is the general object of the present invention to provide means to lock the machine against operation by such unauthorized persons.

Another object is the provision of means to render the operating mechanism of the machine inoperative except by persons authorized to operate it.

Another object is to provide means normally effective to lock the machine against operation, said means capable of being rendered ineffective by persons authorized to operate the machine.

A further object is to provide a locking mechanism controlled by a key and effective, when unlocked and the key is in the lock, to permit operation of the machine, and effective, when locked and the key is removed from the lock, to prevent operation of the machine.

Another object is the provision of means under control of a lock and key for preventing operation of the machine by unauthorized persons, said means having associated therewith mechanism to retain it in unlocked condition during certain related operations of the machine.

A further object is to provide a machine having a plurality of totalizers, with means under control of a lock and key for locking the machine against operation except when the key is inserted in the lock, said means having associated therewith mechanism to retain it in unlocked condition once it is unlocked until a certain one of the totalizers is selected for actuation.

With these and incidental objects in view, the invention includes certain novel features of construction and combinations of parts, a preferred form or embodiment of which is hereinafter de-

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scribed with reference to the drawings which accompany and form a part of this specification.

In the drawings:

Fig. 1 is a side elevation of the right-hand frame of the machine, showing in particular the machine-releasing mechanism and the locking mechanism for rendering said releasing mechanism inoperative by unauthorized persons.

Fig. 2 is a sectional view taken along the perpendicular center line of the lock mechanism and shows said lock and the key associated therewith.

Fig. 3 is a detail view of a part of the mechanism for retaining the machine in unlocked condition during certain related operations.

Fig. 4 is a detail view of the mechanism for rendering the retaining mechanism shown in Fig. 3 ineffective when the group totalizer is selected for actuation.

Fig. 5 is a detail view of the retainer mechanism for the lock.

Fig. 6 is a detail view showing the slide for controlling the functions of the machine.

Description

The machine chosen to illustrate the present invention is a small, compact, and efficient cash register or accounting machine of the type disclosed in Letters Patent of the United States No. 2,443,652, issued June 22, 1948, to Edward J. Carey et al., and United States Patent No. 2,450,165, issued September 28, 1948, to Harold O. Randall et al., to which reference may be had for a complete description of the mechanism of the machine not disclosed herein, as in this specification only mechanism pertinent to the present invention will be fully disclosed.

As stated at the beginning of this specification, the present invention is concerned with mechanism for locking the operating mechanism of the machine against manipulation by persons who are not authorized to use the machine, and by referring to Fig. 1 it will be seen that the operating mechanism of the machine comprises a release bar 20, depressibly mounted by means of three parallel slots therein, in cooperation with corresponding studs 21 secured in a right machine frame 22, which, in cooperation with a left main frame, not shown but similar in outline to frame 22, supports the mechanism of the machine, said frames being maintained in proper spaced relationship to each other by means of a machine base and various cross frames, bars, and rods (not shown). A spring 23 (Fig. 1), extending between one of the studs 21 and a stud in the release bar 20, urges said bar upwardly to nor-

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mally maintain it in its undepressed position, as here shown. The downward end of the release bar 20 is bent at right angles to form an ear 24, which cooperates with a rounded surface 25 on a hook-shaped upper portion of a lever 26 pivotally supported by a stud 27 in the frame 22. The lever 26 has, pivotally mounted near its upper end, a non-repeat pawl 29, urged clockwise by a spring 30 to normally maintain a stop or positioning stud 31, carried thereby, in engagement with the rearward edge of said lever 26. A spring 28 (Fig. 1) urges the lever 26 counter-clockwise to normally maintain the pawl 29 in yielding engagement with a square stop stud 32 secured in the frame 22.

Depression of the release bar 20 (Fig. 1) moves the ear 24 downwardly out of the path of the surface 25 and simultaneously causes said ear to engage the pawl 29 and rock said pawl counter-clockwise out of engagement with the stud 32 to free the lever 26 to the action of the spring 28, which immediately rocks said lever counter-clockwise to engage the usual clutch mechanism (not shown), which connects the operating motor (not shown) to the machine operating mechanism, and to simultaneously close the electric circuit to said motor to initiate operation of the machine in the usual and well-known manner. As the lever 26 (Fig. 1) moves counter-clockwise, under influence of the spring 28, the hook-shaped upper end thereof moves over the ear 24 to latch the release bar 20 in depressed position for the duration of machine operation. A link 33 (Fig. 1) pivotally connects the upper end of the lever 26 to an arm 34 secured on a key lock shaft 35 journaled in the machine framework, and, through this connection, counter-clockwise releasing movement of said lever 26 rocks said arm and said shaft clockwise, which movement is utilized to lock the depressed keys against release and to lock the undepressed keys against depression for the duration of machine operation.

Near the end of the cycle of operation, a restoring roller (not shown) engages a projection 36 on the lever 26 and restores said lever clockwise against the action of the spring 28 to move the pawl 29 beyond or to the right of the stud 32 (Fig. 1) and to simultaneously move the surface 25 beyond the ear 24 so that said pawl 29 may be spring-restored into the path of said stud 32, and so that the spring 23 may restore the release bar 20 upwardly to undepressed position and simultaneously move the ear 24 into the path of the surface 25, to retain said lever in its restored condition, after the roller by-passes the projection 36. Restoration of the lever 26 disengages the clutch mechanism and breaks the circuit to the operating motor, to terminate the cycle of machine operation.

To prevent unintentional repeat operations of the machine, in case the release bar 20 (Fig. 1) is retained depressed at the end of machine operation, the lever 26 is over-restored sufficiently in a clockwise direction to permit the pawl 29 to move into the path of the ear 24 and thus retain said lever 26 in its restored condition after the roller has by-passed the projection 36. As soon as pressure is removed from the release bar 20, the spring 23 returns said bar upwardly to its undepressed position, as here shown, during which movement the ear 24 moves out of engagement with the pawl 29 and into the path of the surface 25 to permit the spring 28 to complete the return of said lever to home or normal position, as here shown.

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If a more complete description is desired of the machine-releasing mechanism and the operating mechanism, reference may be had to Fig. 15, and the description in connection therewith, in the United States Patent No. 2,443,652.

A locking mechanism is provided to prevent operation of the machine by unauthorized persons, said locking mechanism, when effective, operating to obstruct clockwise releasing movement of the arm 34 (Fig. 1). The arm 34 in turn, through the link 33, prevents counter-clockwise releasing movement of the lever 26, so that the release bar 20 will be ineffective to initiate machine operation.

The locking mechanism comprises a cylinder-type lock 38 (Figs. 1 and 2) and a corresponding key 39, said key intended to be in the possession of a person authorized to operate the machine, such as an attendant in a filling station, for example. The lock 38 is secured by screws 40 to a plate 41, in turn fastened by screws to the right frame 22. The lock 38 has therein a bore arranged to receive a plunger or bolt 42 for sliding movement therein, said bolt having a reduced inner end which extends through a corresponding reduced portion of the bore in the lock 38. A screw 44 (Fig. 1), which is threaded in the body of the lock 38, has a reduced tenon on its end which engages a horizontal slot (not shown) in the bolt 43 to prevent rotation of said bolt, while at the same time permitting sliding movement thereof. A screw 45 (Figs. 1 and 2), which is threaded into a hole in the reduced portion of the bolt 43, secures a right-angle bracket 46 to said reduced end.

The usual spring-pushed pin plungers 47 (Fig. 2) are provided and, when the key 39 is inserted into the lock, are alined with the periphery of the bolt 43 and permit said bolt to be shifted back and forth by use of said key 39. The extent of the rearward shifting movement of the bolt 43 is determined by the shoulder formed by the reduced inner end of said bolt, in cooperation with the corresponding shoulder formed by the reduced portion of the bore in the lock 38, and the extent of the forward shifting movement of said bolt is determined by the bracket 46 contacting the inner end of the lock 38. Therefore, it should be evident from the foregoing description that the only time the key 39 may be removed from the lock 38 is when said key and the bolt 43 are in their forward positions, as shown in Fig. 2.

The bracket 46 (Figs. 1 and 5) carries a stud 48, which engages a slot in the lower end of a lever 49 pivoted on a stud 50 secured in the plate 41. Fast in the upper end of the lever 49 is a stud 51, which engages an annular slot in the forward end of a link 52, the rearward end of which link is pivotally connected to the upper end of a locking arm 53 pivoted on a stud 54 secured in the right frame 22. A spring 55, tensioned between the forward end of the link 52 and the stud 51 in the lever 49, forms a flexible connection between said link and said lever whereby they may move independently of each other under certain conditions, as will be explained presently, such independent movement being permitted by the slot in said link coacting with said stud 51.

When the key 39 is inserted in the lock 38 and the bolt 43 is pushed rearwardly to its unlocked condition, as shown in Fig. 1, the parts are positioned so as to retain a bent-over ear 56 on the arm 53 out of the path of a projecting surface 57 on the arm 34, and under these

circumstances said ear does not interfere with

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the clockwise releasing movement of said arm 34 upon depression of the release bar 20 to initiate machine operation, as explained earlier. In cases where it is necessary for the operator to leave the machine unattended, the system requires that he remove the key 39, and, in so doing, the bolt 43 is pulled forwardly from the position shown in Fig. 1 to the position shown in Fig. 2, which movement, through the lever 49 and the link 52, rocks the arm 53 clockwise to move the ear 56 into the path of the projection 57 to obstruct clockwise releasing movement of the arm 34, thus preventing operation of the machine under influence of the release bar 20, when the attendant's lock is in locked condition. The bolt 43, the lever 49, the link 52, and the arm 53 are yieldingly retained in either of their two positions by a retaining pawl 59 (Figs. 1 and 5) pivotally mounted on a stud 59 secured in the plate 41, said pawl having two aligning notches corresponding to the two positions of said parts, which are maintained in yielding engagement with the stud 48 in the bracket 46 by a comparatively light spring 60, to yieldingly retain said parts in either of their two positions. The pawl 58 is mounted on the left side of the plate 41, and the stud 48 extends through a clearance slot 61 in said plate and into the path of said pawl.

As previously explained, the machine embodying the present invention is provided with two totalizers, an item totalizer and a group totalizer, and in itemizing transactions the various items of said transactions are entered additively in the item totalizer at the same time they are listed separately upon the record material. After all the items have been entered, an item total operation is performed, in which the item totalizer is cleared and the amount cleared therefrom is entered additively in the grand or group totalizer at the same time it is printed upon the record material, to provide a quick and accurate total of the various items of the transaction.

Mechanism coacting with the machine locking mechanism, described above, functions automatically during item-entering operations to prevent movement of said locking mechanism to locking position, said mechanism being rendered ineffective during the item total operation so that at the end thereof the machine-releasing mechanism is automatically locked against manipulation.

A shifting mechanism, comprising a shaft 63 (Fig. 1), journaled in the machine framework, and an arm 64 secured thereon, is provided for alternately shifting the wheels of the item totalizer and the wheels of the group totalizer into alinement with the amount actuators. The shaft 63 and the arm 64 are similar to and function exactly like the corresponding parts 331 and 334 described in connection with Fig. 21 in the United States Patent No. 2,450,165. The arm 64 (Figs. 1 and 4) carries a stud 65, which engages a curved slot 66 in the forward end of a slide 67, supported by means of a slot therein in cooperation with a stud 68, secured in the right frame 22, and by means of a stud 69, carried thereby, which engages a slot 70 (Figs. 1 and 3) in an arm 71 free on the stud 68. The arm 71 has a shoulder 72, which under normal conditions is yieldingly maintained in the path of the ear 56 by a spring 73 tensioned between said arm 71 and the arm 53.

As long as the shaft 63 and the arm 64 (Fig. 1) are in their counter-clockwise or "item" position, as here shown, to aline the wheels of the

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item totalizer with the actuators, the shoulder 72, in cooperation with the ear 56, will restrain clockwise movement of the arm 53. This prevents movement of the ear 56 into the path of the projection 57 and consequently warns the operator, upon attempting to remove the key 39, that the item transaction has not been completed.

After all the items of an item transaction have been entered, an item total operation is performed, and during this operation the shaft 63 and the arm 64 are rocked clockwise from the position shown in Fig. 1 to "group" position, as shown in Fig. 4, to select the group totalizer to receive the item total. Clockwise movement of the arm 64, through the stud 65, in cooperation with the slot 66, shifts the slide 67 rearwardly to move a finger 74 thereon into the path of a stud 75 fast in the arm 34. Counter-clockwise restoring movements of the shaft 63 and the arm 34 causes the stud 75, in cooperation with the finger 74, to rock the slide 67 clockwise, the stud 68 serving in this case as a pivot for said slide. Clockwise movement of the slide 67 causes the stud 69, in cooperation with the slot 70 (Figs. 1 and 3) to rock the arm 71 also clockwise in unison therewith to move the shoulder 72 out of the path of the ear 56, and to further tension the spring 73. As soon as the shoulder 72 is rocked out of the path of the ear 56, the spring 73 (Figs. 1 and 3), which in its fully tensioned condition is strong enough to overcome the action of the spring 60 for the retaining pawl 58 (Fig. 5), immediately rocks the arm 53 clockwise to move said ear 56 into the path of the projection 57 to automatically lock the machine against operation at the end of a group total operation. Clockwise movement of the arm 53, through the link 52, rocks the arm 49 also clockwise to shift the bolt 43 and the key 39 forwardly from unlocked position, as shown in Fig. 1, to locked position, as shown in Fig. 2.

It is therefore evident from the foregoing description that, when the shaft 63 and the arm 64 are in their clockwise positions to aline the wheels of the group totalizer with the amount actuators, the slide 67 and the arm 71 will be rocked clockwise to render the locking means effective to lock the machine against operation. Return movement of the arm 34 (Fig. 1) from its extreme counter-clockwise position to its normal position, as shown here, at the end of the machine operation, permits the spring 73 to rock the arm 71 counter-clockwise into yielding engagement with the ear 56, and subsequent movement of the key 39 inwardly to unlocking position, which is necessary before another machine operation may be performed, will rock said arm 53 counter-clockwise to cause the ear 56 to by-pass the shoulder 72, so that said shoulder will again engage said ear and retain said arm 53 in unlocked position against the action of the spring 73.

In certain emergencies, such as failure of the machine to operate, it is necessary to remove the key 39 as a preliminary step to the removal of the cabinet for the purpose of investigating and correcting the inoperative condition. With this in mind, the shoulder 72 has been so shaped that it does not create a dead or positive locking condition with the ear 56 but does hold sufficiently to retain the mechanism in unlocked condition under all normal conditions. However, it is possible in cases of emergency to force the key 39 out of the lock, and, when this is done, the ear

56 is forced to by-pass the shoulder 72 and move into locking position without in any way damaging the locking mechanism. In case the projection 57 is in the path of the ear 56, the flexible connection, formed by the slot in the forward end of the link 52 and the stud 51, permits the bolt 43 to move forwardly, so that the key 39 may be removed from the lock.

The functions of the machine are controlled by a control slide 77 (Fig. 6) having five control positions; namely, Register, Lock Register, Read Total, Adding, and Reset Total, which are indicated by a pointer 80 formed in an aperture 78 in a plate 79, which forms a cover for the keyboard of the machine. The slide 77 has a cylinder-type lock mounted thereon, which is accessible through the aperture 78 for the insertion of a corresponding key 81, by means of which the slide may be unlocked and moved to any one of its five positions. When the slide 77 is in either Register position, as here shown, or Lock Register position, the key 81 may be turned ninety degrees to lock said slide in either of these positions, after which said key may be removed from the lock and retained by the proprietor or some other person in charge, who is authorized to read and reset the group totalizer and use the adding feature of the machine.

Under normal conditions of use, the slide 77 will be locked in Register position, so that an attendant or other authorized person in possession of the attendant's key 39 may operate the machine in the manner explained above, for the entering of the items and for the taking of item totals.

In order that the proprietor or other person in possession of the key 81 (Figs. 1 and 6) may operate the machine without the necessity of using the attendant's key 39 to unlock the releasing mechanism, connections between the slide 77 and the machine-locking mechanism are provided for rendering said locking mechanism ineffective when said slide 77 is moved to Read Total, Adding, or Reset Total positions.

The slide 77 is geared to a control shaft 82 (Fig. 1) journaled in the machine framework, said shaft having secured to its right-hand end a cam 83, and therefore said shaft and said cam are revolved back and forth in unison with said slide 77 as it is moved back and forth to any of its various positions. In other words, when the slide 77 is moved downwardly full distance from Register position, as shown in Fig. 6, to Reset Total position, the shaft 82 and the cam 83 are revolved counter-clockwise, as viewed in Fig. 1, through approximately 180 degrees of movement, and, when said slide 77 is moved upwardly its full extent, said shaft and said cam are revolved the same extent clockwise.

When the slide 77 is moved to Read Total, Adding, or Reset Total positions, the shaft 82 and the cam 83 are revolved sufficiently to cause a node 84 on said cam to engage a sole 85 on a foot-shaped extension of a lever 88 free on a stud 87 in the frame 22, and rock said lever clockwise. The upper end of the lever 88 is bifurcated to receive a stud 89 in a hook 90 pivotally supported by means of a stud 91 therein, in cooperation with a hole in the frame 22. A spring 92, tensioned between the stud 89 and a headed stud 93 secured in the frame 22, urges the hook 90 clockwise to normally maintain a stop finger 94, formed thereon, in yielding engagement with said stud 93. Clockwise movement of the lever 88 rocks the hook 90 counter-clockwise against the

action of the spring 92, to unlock a closure 76, in the usual manner, which closure gives access to the record material feeding and supply mechanisms for the purpose of replenishing the supply of said record material, or for making adjustments to the mechanism. Counter-clockwise movement of the hook 90 also causes a stud 95 carried thereby, in cooperation with an angular surface 96 on the link 52, to shift said link forwardly against the action of the spring 55, which movement is permitted by the slot in said link, in cooperation with the stud 51. Forward movement of the link 52 rocks the arm 53 (Fig. 1) counter-clockwise to move the ear 56 out of the path of the projection 57 to unlock the machine-releasing mechanism, so that the machine may be operated when the control slide 77 is in Read Total, Adding, or Reset Total positions without the necessity of using the attendant's key 39.

The parts 83, 88, and 90 (Fig. 1) are duplicated on the left-hand side of the machine and assist the corresponding right-hand parts in locking the closure 76 when the slide 77 is in either Register or Lock Register positions, to prevent access to the record material compartment by unauthorized persons.

The gearing which connects the slide 77 to the shaft 82 (Figs. 1 and 6) is similar to and operates in exactly the same manner as the mechanism described in connection with Figs. 30 and 47 of the Patent No. 2,443,652, for connecting the slide 92 to the shaft 459, which shaft is similar in every respect to and operates exactly like the shaft 82 of the present application. Likewise, the parts 84, 88, and 90, shown in Fig. 1 of the application, are similar to and function exactly like the corresponding parts 851, 848, and 843, described in connection with Fig. 47 in said Patent No. 2,443,652, to which reference may be had for a more complete description of the mechanism than has been given in the present application.

Before the proprietor can lock the lock for the slide 77 (Figs. 1 and 6) and remove the key 81 therefrom, it is necessary to return said slide to either Lock Register or Register position. In returning the slide 77 to either Lock Register or Register position, the shaft 82 is rotated to a position where the node 84 on the cam 83 is out of engagement with the sole 85 on the lever 88, thus permitting the spring 92 to return said lever and the hook 90 to normal positions, as here shown. Return movement clockwise of the hook 90 withdraws the stud 95 from the surface 96 on the link 52, thus permitting the spring 55 to restore said link and the arm 53 to locking positions to move the ear 56 over the projection 57 to again lock the machine against operation.

Inasmuch as the mechanism comprising the present invention is not of a complicated nature, it is believed that a full understanding of the operation of said mechanism will have been obtained by a perusal of the preceding specification, and for this reason it is thought unnecessary to incorporate herein a further and more detailed description of the operation of said mechanism.

While the form of mechanism herein shown and described is admirably adapted to fulfill the objects primarily stated, it is to be understood that it is not intended to confine the invention to the one form or embodiment herein disclosed, for it is susceptible of embodiment in various other forms.

What is claimed is:

1. In a machine of the class described, capable of transactions involving several preliminary

operations of a similar nature and a final operation of a different nature, the combination of means including a lever rockable in one direction to initiate machine operation and restorable in the opposite direction to terminate machine operation; a rockable arm; a link operatively connecting the arm and the lever for concert movement; a locking shoulder on the arm; a latch constructed and arranged to coact with the locking shoulder; a lock and key mechanism; yieldable connections between the lock and the latch whereby unlocking the lock moves the latch out of coacting relationship with the shoulder, and whereby locking the lock moves the latch into coacting relationship with the shoulder to obstruct movement of the lever in said one direction and thereby prevent operation of the machine; a spring-urged retainer coacting with the latch in said preliminary operations to retain said latch out of coacting relationship with the shoulder to prevent locking the machine against operation until the entire transaction is completed; means including a movable member located in one position in said preliminary operations but movable to another position in said final operation; a part operatively connected to the member for movement in unison therewith; means on the arm coacting with the part, when said part is moved to said another position by the member and during restoring movement of said arm, to rock said part relatively to said member; and connections between the part and the retainer whereby relative movement of said part moves said retainer out of coacting relationship with the latch to free said latch for movement into coacting relationship with the locking shoulder near the end of the final operation.

2. In a machine of the class described, capable of transactions including several preliminary operations of a similar nature and a final operation of a different nature, the combination of means including a lever rockable in one direction to initiate machine operation and restorable in the opposite direction to terminate machine operation; a rockable arm; a link operatively connecting the arm and the lever for concert movement; a locking shoulder on the arm; a latch constructed and arranged to coact with the locking shoulder; a lock and key mechanism; yieldable connections between the lock and the latch whereby unlocking the lock moves the latch out of coacting relationship with the shoulder to permit operation of the machine, and whereby locking the lock moves the latch into coacting relationship with the shoulder to prevent operation of the machine; a spring-urged retainer coacting with the latch in said preliminary operations to retain the latch out of the path of the shoulder to prevent locking of the machine release mechanism against operation until the entire transaction is completed; means including a movable member located in one position in said preliminary operations but movable to another position in said final operation; a part operatively connected to the member for movement in unison therewith; and means rendered effective by the member when it is moved to said another position and operated by the arm during its restoring movement to move the retainer out of coacting relationship with the latch to free said latch for movement into coacting relationship with the locking shoulder near the end of said final operation.

3. In a machine of the class described, con-

structed and arranged to perform transactions comprising several preliminary operations of a similar nature and a final operation of a different nature, the combination of means to initiate machine operations; means including a rockable arm operatively connected to the initiating means and operating in concert therewith, said arm rockable in one direction when machine operation is initiated and restorable in the opposite direction when machine operation is terminated; a lock and key mechanism; a latch yieldably connected to the lock and movable into coacting relationship with the arm when said lock is in locked condition to obstruct movement of said arm in said one direction to prevent initiation of a machine operation, said latch movable out of coacting relationship with the arm when the lock is in unlocked condition; a spring-urged retainer coacting with the latch in preliminary operations to retain said latch out of coacting relationship with the arm to render the locking mechanism ineffective during said preliminary operations; means including a movable member normally in one position in said preliminary operations, but constructed and arranged to be moved to another position in said final operation; and means operatively connected to the retainer and the member and operable by the arm during its restoring movement, said means constructed and arranged to be moved into the operating range of said arm by the member when said member is moved to said another position, to move the retainer out of coacting relationship with the latch to free said latch for movement into coacting relationship with the arm near the end of the final operation.

4. In a machine of the class described, constructed and arranged to perform item transactions, comprising preliminary item-entering operations and a final item total operation, the combination of means to initiate machine operation; means including a rockable arm operatively connected to the initiating means and operating in concert therewith, said arm rockable in one direction when machine operation is initiated and restorable in the opposite direction when machine operation is terminated; a lock and key mechanism; a latch yieldably connected to the lock and movable into coacting relationship with the arm when said lock is in locked condition to obstruct movement of said arm in said one direction to prevent the initiation of a machine operation, said latch movable out of coacting relationship with the arm when the lock is unlocked; a spring-urged retainer coacting with the latch in item-entering operations to retain said latch out of coacting relationship with the arm to render the locking mechanism ineffective during said item-entering operations; means including a movable member normally in one position in item-entering operations, but constructed and arranged to be moved to another position in item total operations; and a part operatively connected to the member and to the retainer and movable into coacting relationship with the arm by said member when it is moved to said another position, said part, after being so moved, arranged to be operated by said arm during its restoring movement, and effective upon being operated to move the retainer out of coacting relationship with the latch to free said latch for locking movement at the end of the item total operation.

5. In a machine of the class described, constructed and arranged to perform transactions comprising several preliminary operations of a

similar nature and a final operation of a different nature, the combination of means to initiate machine operation; means including a rockable arm, operatively connected to the initiating means and operating in concert therewith, said arm rockable in one direction when machine operation is initiated, and restorable in the opposite direction when machine operation is terminated; a lock and key mechanism; a latch yieldably connected to the lock and movable into coacting relationship with the arm when said lock is in locked condition, to obstruct movement of said arm in said one direction to prevent the initiation of a machine operation, said latch movable out of coacting relationship with the arm when the lock is unlocked to permit the initiation of a machine operation; a spring-urged retainer coacting with the latch in preliminary operations to retain said latch out of coacting relationship with the arm to render the locking mechanism ineffective during preliminary operations; a part operatively connected to the retainer; a finger on the part; a projection on the arm arranged to cooperate with the finger; and means operatively connected to the part and effective in preliminary operations to retain the finger out of the path of the projection, said means effective in final operations to move said finger into the path of the projection, which, upon restoring movement of the arm, actuates the part and the retainer to move said retainer out of coacting relationship with the latch to free said latch for locking movement.

6. In a machine of the character described, capable of several types of operation, the combination of means to initiate machine operation; an arm operatively connected to the initiating means and operable thereby in one direction to initiate machine operation and restorable in the opposite direction to terminate machine operation; a shoulder on the arm; a latch constructed and arranged to coact with the shoulder; a locking mechanism including a shiftable bolt and a key for shifting said bolt; means to operatively connect the shiftable bolt to the latch; a retainer for the latch; yieldable means connected between the retainer and the latch and effective to urge said latch into the path of the shoulder and also effective to normally maintain said retainer in engagement with the latch to prevent its movement into the path of said shoulder; a rockable member located in one position during said preliminary operations, but movable to another position during said final operation; and a part connected to the member and the retainer and movable by said member upon its movement to said another position into coacting relationship with the arm whereupon said arm during its restoring movement actuates said part to move said retainer to ineffective position to free the latch to the action of the yieldable means, which immediately moves said latch into the path of the shoulder to latch the arm against releasing movement and to simultaneously cause said latch to shift the bolt to locked condition to lock the machine against further operation until the bolt is shifted to unlocked condition.

7. In a machine of the class described, capable of several types of operations, the combination of means to initiate machine operation; an arm operatively connected to the initiating means and operable thereby in one direction to initiate machine operation and restorable in the opposite direction to terminate machine operation; a shoulder on the arm; a latch constructed and

arranged to coact with the shoulder; a retainer for the latch; yieldable means connected between the retainer and the latch and effective to urge said latch into the path of the shoulder and also effective to normally maintain said retainer in engagement with the latch to prevent its movement into the path of said shoulder; a rockable member located in one position during one type of machine operation, but movable to another position during another type of machine operation; a part operatively connected to the member and the retainer, and movable by said member upon its movement to said another position into coacting relationship with the arm, whereupon said arm, during its restoring movement, actuates said part to move said retainer to ineffective position to free the latch to the action of the yieldable means, which then acts to move said latch into the path of the shoulder to latch the arm against releasing movement; and a locking mechanism operatively connected to the latch and effective upon being unlocked to move said latch out of the path of the shoulder and back into engagement with the retainer to free the arm for releasing movement.

8. In a machine of the class described, capable of several types of operations, the combination of means to initiate machine operations; an arm operatively connected to the initiating means and operable thereby in one direction to initiate machine operation and restorable in the opposite direction to terminate machine operation; a shoulder on the arm; a latch constructed and arranged to coact with the shoulder; a retainer for the latch; yieldable means connected between the retainer and the latch and effective to urge said latch into the path of the shoulder, and also effective to normally maintain said retainer in engagement with the latch to prevent its movement into the path of said shoulder; a rockable member located in one position during one type of machine operation, but movable to another position during another type of machine operation; a part connected to the member and the retainer, and movable by said member upon its movement to said another position into coacting relationship with the arm, whereupon said arm during its restoring movement actuates said part to move said retainer to ineffective position to free the latch to the action of the yieldable means, which then acts to move said latch into the path of the shoulder to latch said arm against movement in said one direction; a manually operable locking mechanism; and means to operatively connect the locking mechanism to the latch, whereby movement of said latch into the path of the shoulder automatically locks said locking mechanism, said locking mechanism being effective upon subsequently being unlocked, to move said latch out of the path of the shoulder and back into engagement with the retainer to free the arm for releasing movement.

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