Nov. 10, 1953 E. L. ALLEN 2,658,782

LOCK MEANS FOR DOOR CONTROL MECHANISM

Filed Nov. 30, 1946 6 Sheets-Sheet 1

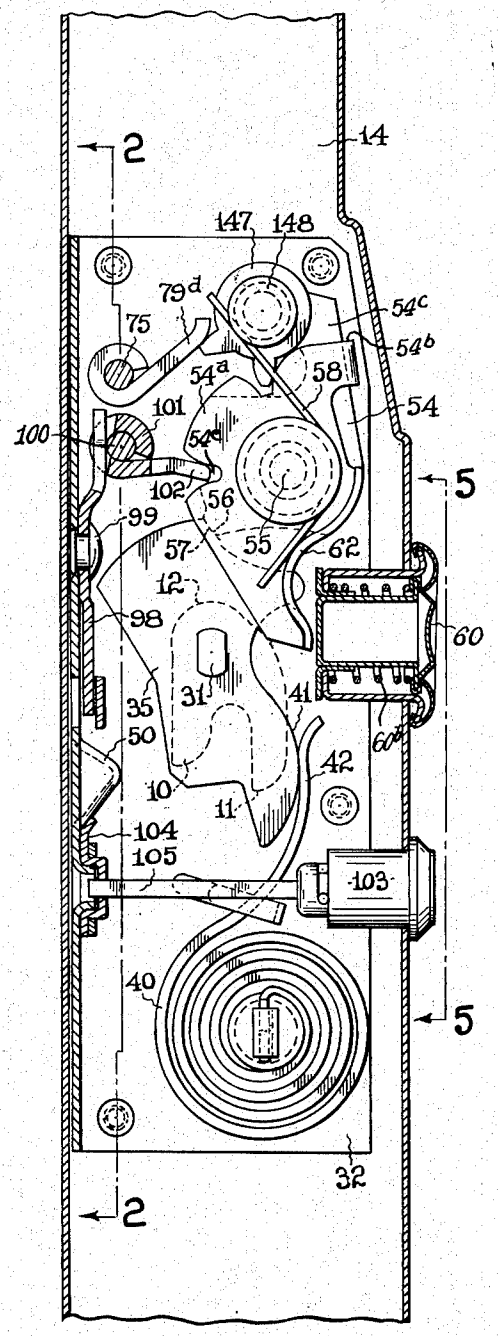


FIG. 1

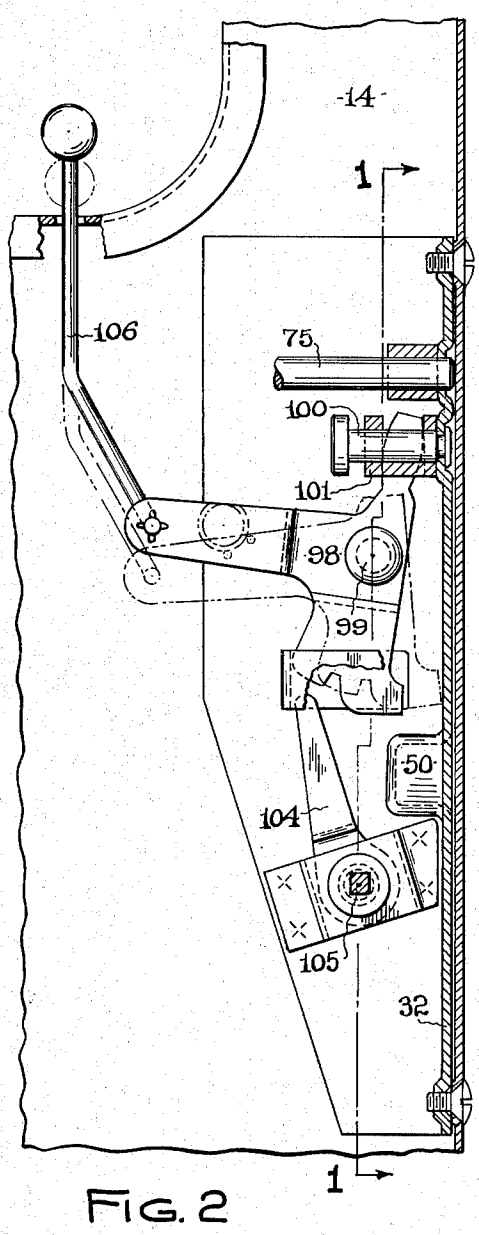


FIG. 2

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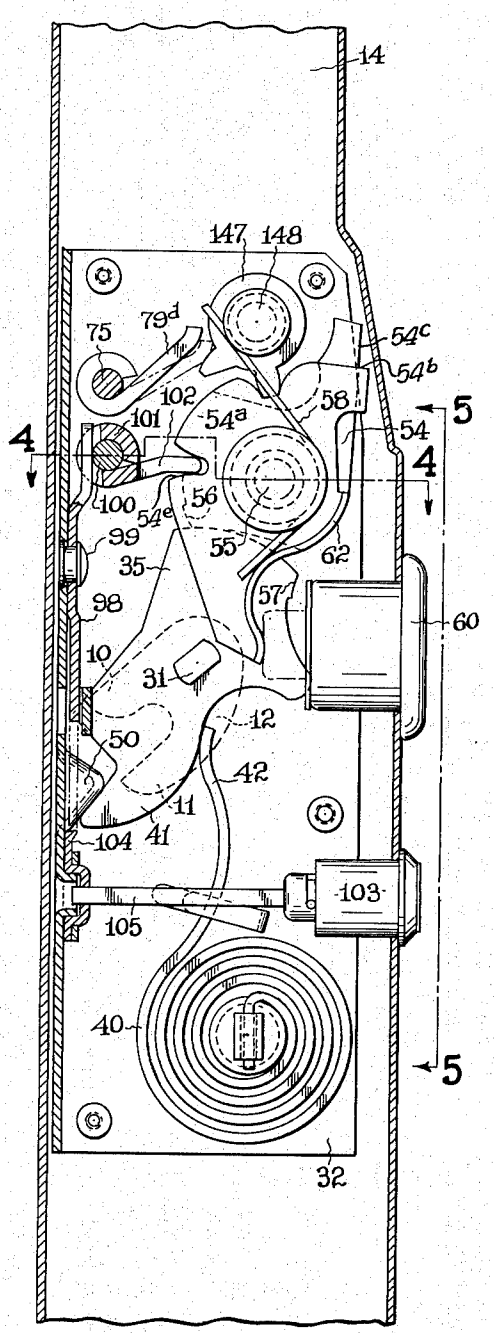


FIG. 3

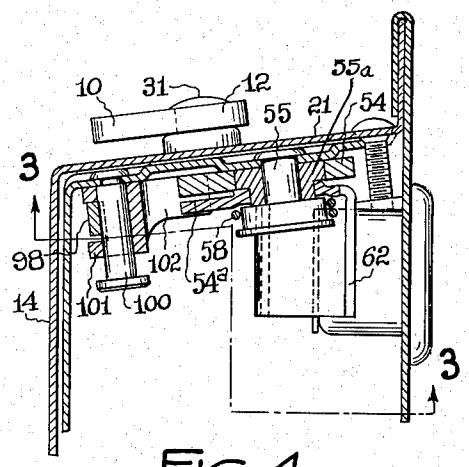


FIG. 4

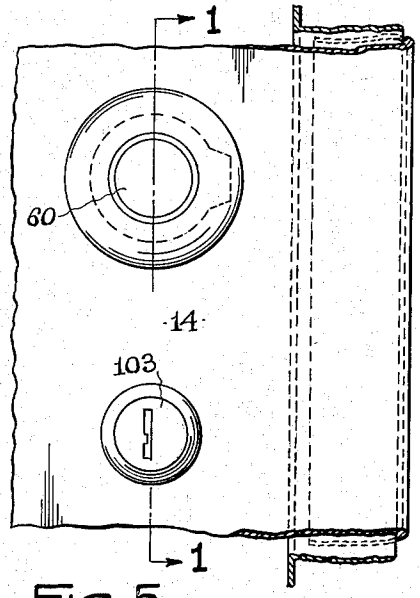


FIG. 5

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LOCK MEANS FOR DOOR CONTROL MECHANISM

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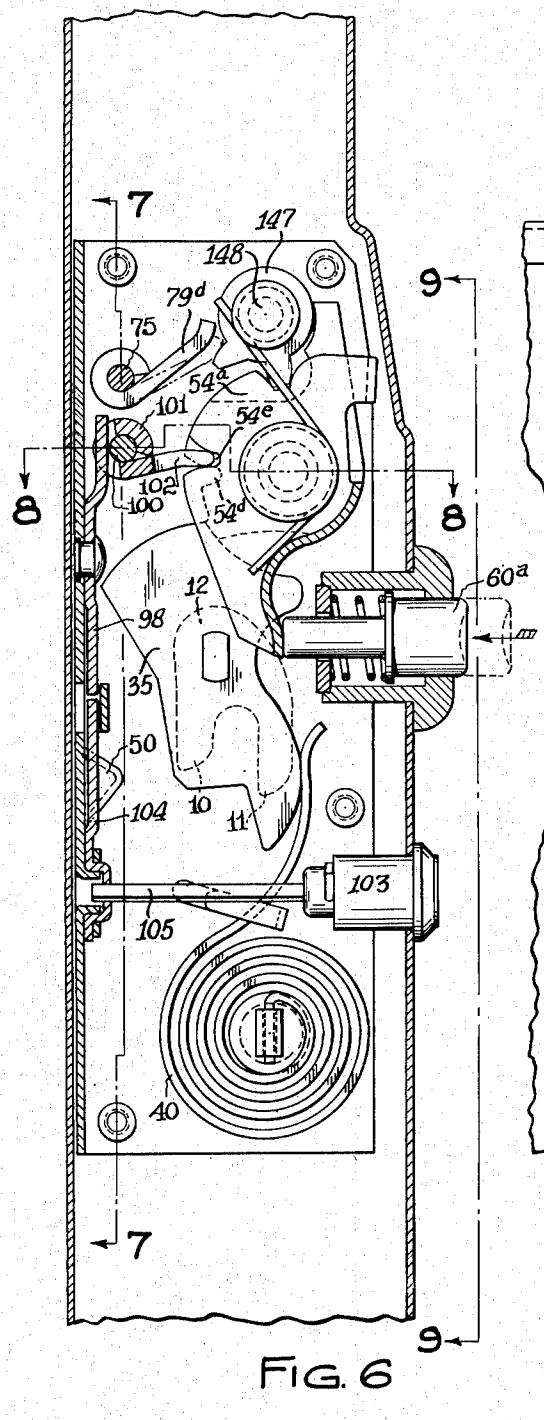


FIG. 6

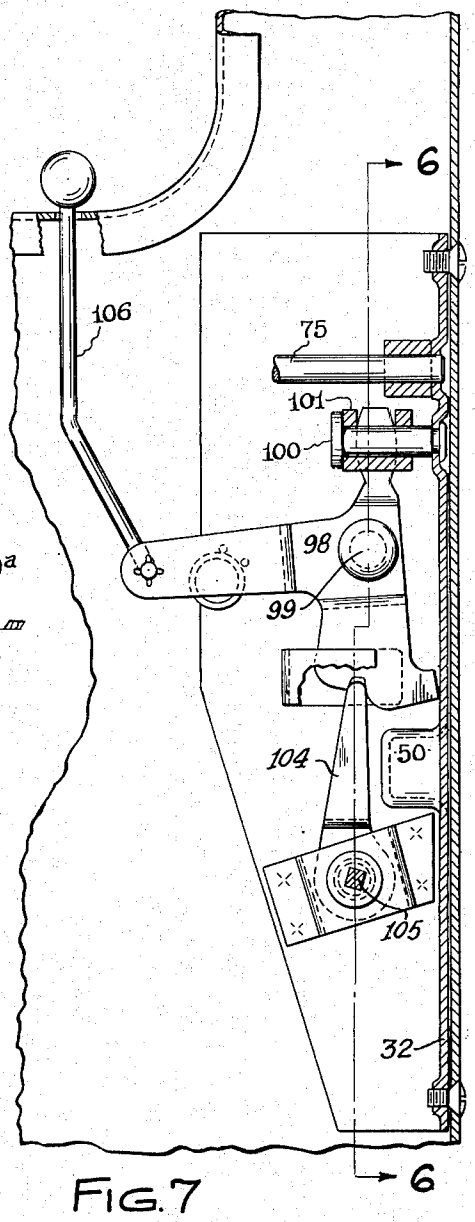


FIG. 7

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LOCK MEANS FOR DOOR CONTROL MECHANISM

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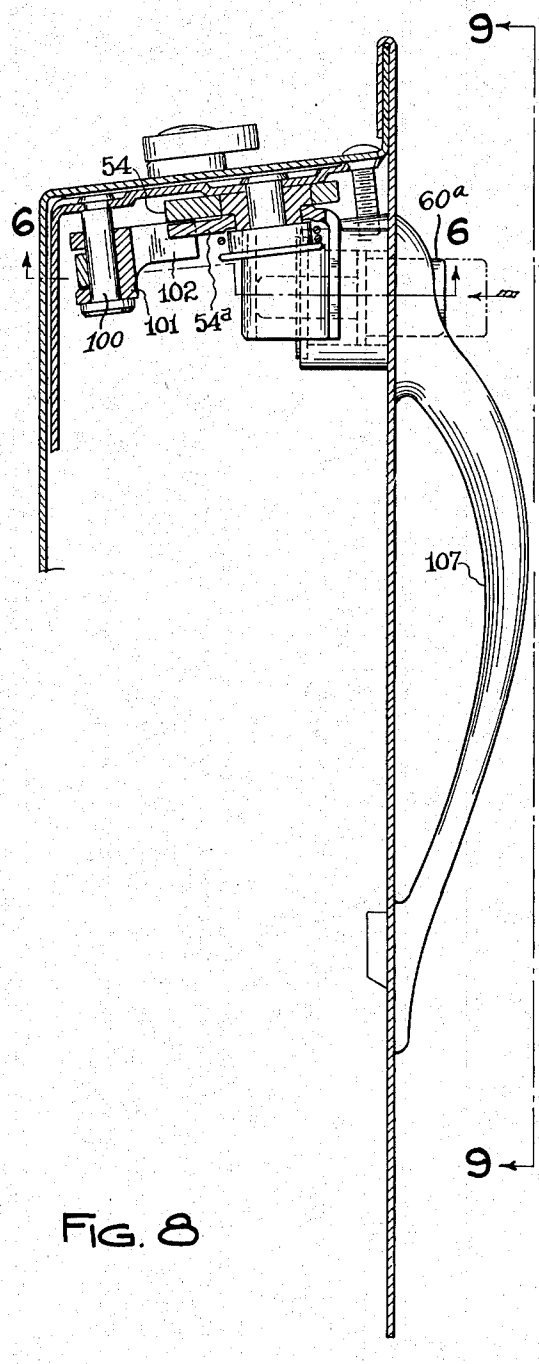


FIG. 8

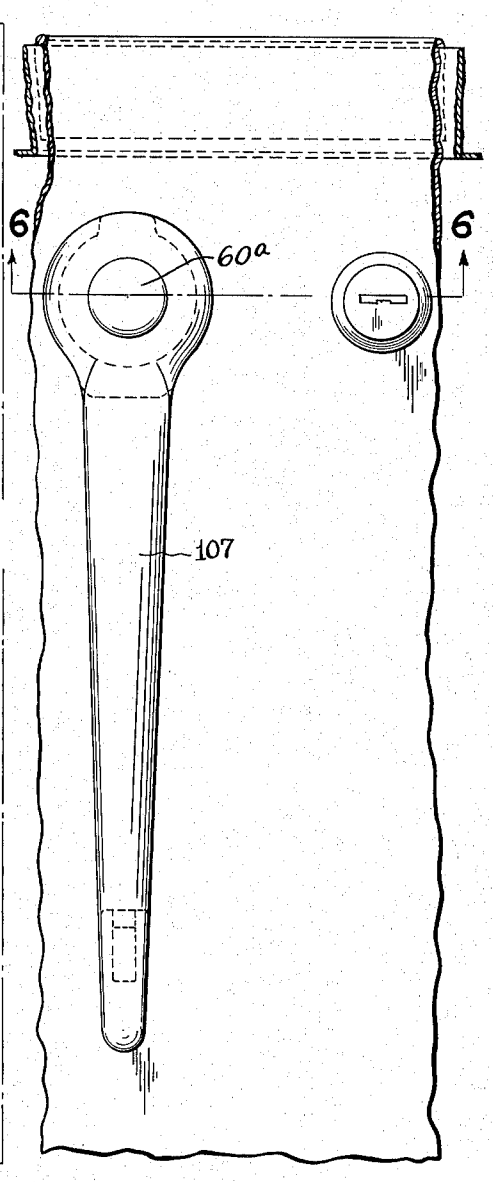


FIG. 9

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LOCK MEANS FOR DOOR CONTROL MECHANISM

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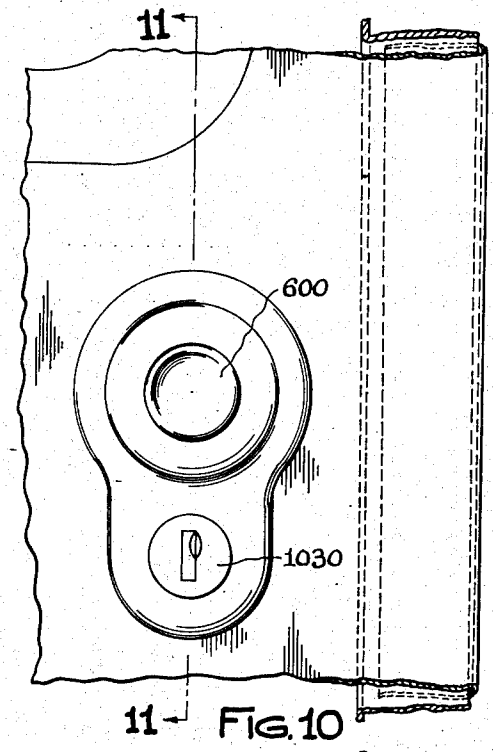


FIG. 10

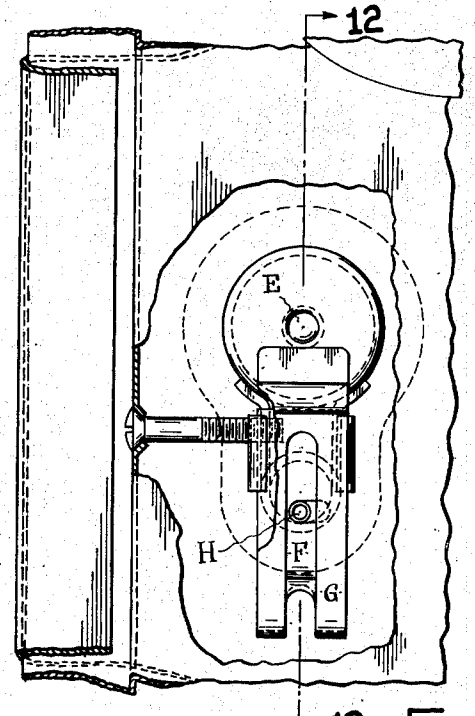


FIG. 13

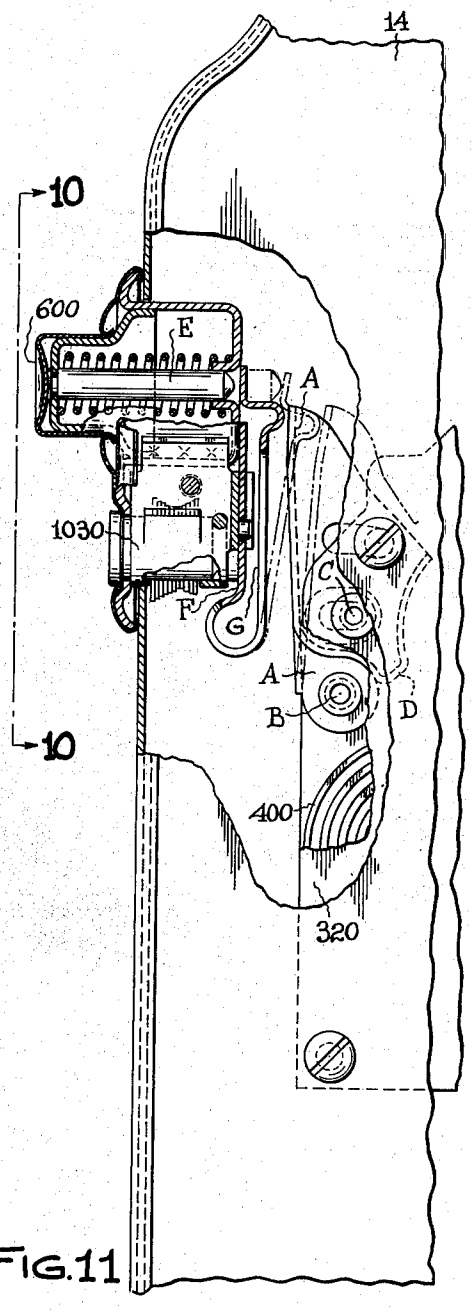


FIG. 11

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LOCK MEANS FOR DOOR CONTROL MECHANISM

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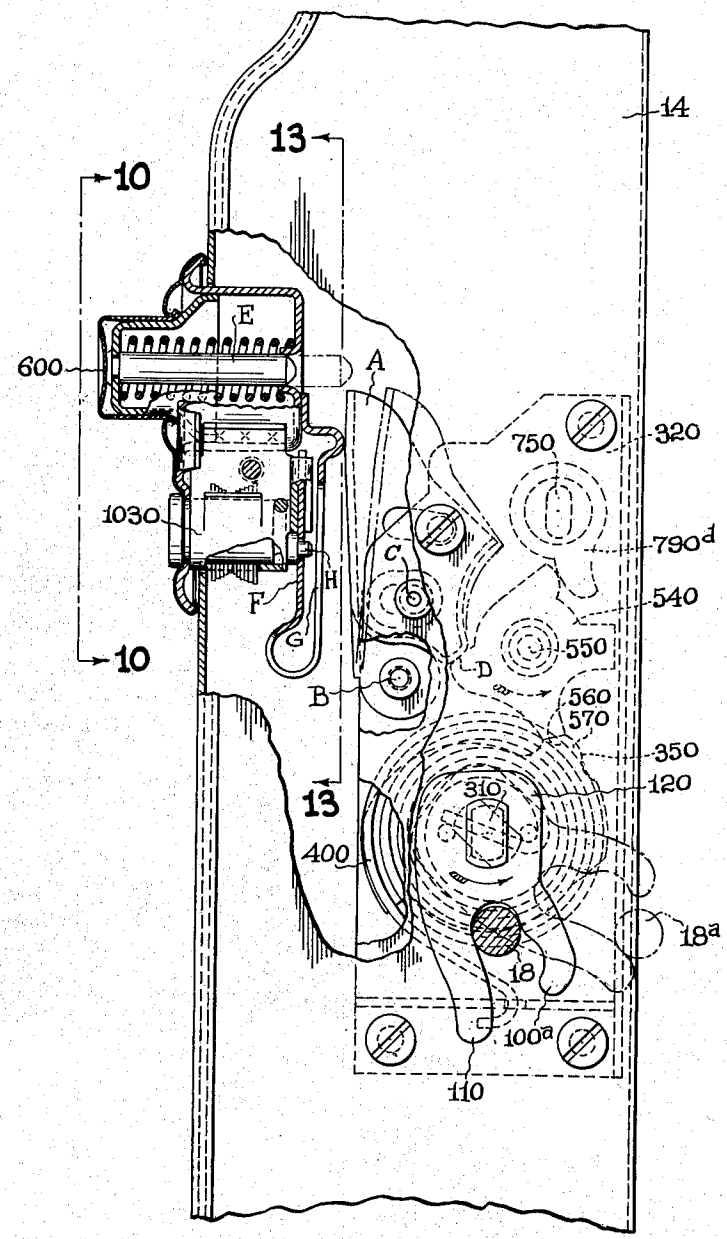


FIG. 12

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Patented Nov. 10, 1953

2,658,782

UNITED STATES PATENT OFFICE

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LOCK MEANS FOR DOOR CONTROL MECHANISM

Edwin L. Allen, Cleveland Heights, Ohio, assignor, by mesne assignments, to Rudolph I. Schonitzer, Cleveland, Ohio

Application November 30, 1946, Serial No. 713,220

7 Claims. (Cl. 292—216)

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This invention relates to door control mechanism characterized by means for receiving energy as a function of door closing movement, latching of the door, or both; storing of such energy while the door remains closed and latched; and when door opening is desired, release of such energy for the purpose of unlatching the door, urging it openwise, or both.

Such a door control mechanism is disclosed in Patent No. 2,094,413 issued September 28, 1937, to Rudolph I. Schonitzer wherein appears mounted on complementary wall and door structures, complementary latch pin and latch plate means and, for control of the movable member of the complementary pair (as there shown the latch plate means) associated detent and trip means mounted and arranged for operator-responsive detent-tripping operation.

Said patent also discloses means for preventing, when desired, tripping or latch releasing actuation of the detent means, by blocking of the tripping or actuating path of a member of the mechanism.

An object of the present invention is to provide improved means for preventing such tripping; and for the purpose, the invention contemplates optional prevention of tripping such detent means, while permitting nevertheless the normal operation by the operator of the actuating member by which tripping is otherwise accomplished. In other words, the invention provides means to predetermine the tripping or actuating effectiveness of operation of the actuating member.

Thus whereas in the prior art, as exemplified in said patent, unauthorized tripping attempt by forcing of the actuating member against the blocking means might result in damaging the mechanism, such possibility of damage is eliminated by the present invention.

Another object of the invention is to provide for exercise of the described optional control of tripping effectiveness, from a plurality of locations, such as inside and outside locations, and to provide lock means if desired for such control.

Still another object of the invention is to provide assembly of the parts of the mechanism in units improving the facility of their installation for subsequent cooperation.

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Further objects and advantages will be apparent from the following description taken in connection with the accompanying drawings, wherein

Figs. 1, 2, and 3 are sectional elevations showing an embodiment of the invention,

Fig. 2 being in the planes of line 2—2, Fig. 1 and

Fig. 1 being in the planes of line 1—1, Fig. 2,

Fig. 3 being a view generally similar to Fig. 1 but showing the parts in operated relation,

Fig. 4 is a horizontal section in the planes of line 4—4, Fig. 3, the section of Fig. 3 being indicated by the line 3—3, Fig. 4.

Fig. 5 is a detail in elevation as indicated by the lines 5—5, Figs. 1 and 3, the sectional plane of Fig. 1 being indicated by the line 1—1, Fig. 5.

Figs. 6 to 9 illustrate a modification of the embodiment of Figs. 1 to 5, Figs. 6, 7, and 8 being views generally corresponding to Figs. 1, 2, and 4 respectively except that the mechanism is shown in locked position, the sectional planes of Fig. 6 being indicated by the lines 6—6, Figs. 7, 8, and 9, the sectional plane of Fig. 7 being indicated by the line 7—7, Fig. 6, the sectional plane of Fig. 8 being indicated by the line 8—8, Fig. 6, and Fig. 9 being a detail from the outside, of parts appearing Fig. 8, as indicated by line 9—9 of the latter.

Figs. 10 to 13 illustrate a third form of the invention, Fig. 10 being a detail in elevation from the outside, as indicated line 10—10, Figs. 11 and 12.

Fig. 11 is a sectional elevation in the plane of line 11—11, Fig. 10, showing the parts in tripping relation as indicated by dotted lines.

Fig. 12 is a view generally similar to Fig. 11 but showing the parts in non-tripping relation.

Fig. 13 is a detail in elevation of parts appearing in Fig. 12 as indicated by the line 13—13 of the latter, the line 12—12, Fig. 13 indicating the sectional plane of Fig. 12.

In general, as to the drawings, similar parts or parts of similar function in the several modifications, bear the same reference characters in some instances these being also the same characters applied to the corresponding parts in said patent.

Also, while the drawings illustrate automotive vehicle body application of the invention, it will

be understood that this is by way of exemplification only, the invention being equally applicable to other complementary wall and door structures. Likewise, while the drawings show the principal mechanism as mounted in the door, it will be appreciated that such mechanism could, if desired, be mounted instead in the complementary wall structure.

Moreover, for simplification of the description herein, so far as possible specific reference to unessential details such as screws, mounting means, deformations, offsets, stops, and the like is omitted, as obvious to one skilled in the art, and not pertinent to the essential functional relationships of the invention.

With reference now to the drawings and first to Figs. 1 to 5 thereof, 14 represents a generally hinged door structure, which may be of hollow sheet metal construction as indicated, at the free edge of which is mounted, as on a sub-base or plate portion 32, secured within the door structure, a stub shaft 31 carrying on the outside a bifurcated latch member 12, of which the latch and throwout arms 10 and 11 respectively are integral parts, the latch element 35 being secured to the stub shaft 31 on the inside for oscillatory movement with the member 12 between the door latched or operative position of these parts indicated in Fig. 1 and the door unlatched or operated position indicated in Figs. 3 and 4.

Spring means 40, having an arm 42 bearing against a cam part 41 on the element 35 is arranged to yieldably urge these parts clockwise Figs. 1 and 3, from operative toward operated position, a stop 50 engageable by an extremity of the element 35 being provided to limit its spring-actuated movement.

Mounted on the plate portion 32 for rotational movement on the bushing 55*a*, which is supported by stud pin 55, in the plane of the member 35, is a detent 54 having a shoulder 56 cooperative with a shoulder 57 on the member 35 to restrain the latter, together with the latch member 12, in the door latched or operative position as shown Fig. 1. Detent 54 is movable between a latch restraining position as seen in Fig. 1 and a latch released position as seen in Fig. 3. As seen in Fig. 4, detent 54 has an inner hub portion to which the outer portions is secured as by a press fit thereon.

Also mounted for rotational movement on bushing 55*a* as shown in Fig. 4, and consequently effectively pivotally supported and oscillatable about the same center as detent 54, is a detent actuator lever or release member 54*a* having a downwardly extending arm member 62 engageable by a spring-returned push button 60 located to be accessible from the outside of the door, a spring 58 being arranged to yieldably urge the detent actuator lever 54*a* counterclockwise Figs. 1 and 3, so that when the push button is in return or non-operating position the actuator will be in the corresponding position. Engagement of a lug 54*b* on the upper part of the actuator 54*a* against an arm 54*c* on the detent 54, limits the motion of the actuator under the effect of the spring 58, so that the detent itself is subject to the spring 58 when the lug 54*b* and arm 54*c* interengage.

With a single exception what has thus far been described is not new in the art, and in substance appears in the Schonitzer patent to which reference has been made. In the Schonitzer patent the detent 54 and the detent actuator 54*a* are fast with each other though oscillatable on the stud 55, whereas herein the detent 54 and its actuator 54*a* may have relative rotary movement coaxial with the stud 55.

Assuming the detent 54 and actuator 54*a* in fixed relation with each other, and the parts in the operative or latched position of Fig. 1, it will be apparent that depression of the push button 60 would engage the arm 62 of the actuator 54*a* to move the detent 54 clockwise, remove the detent shoulder 56 from the shoulder 57 of the element 35, release the arm 41 of the latter to the action of the spring 40, and, by force through the stub shaft 31, throw the latch member 12 clockwise; subsequent release of the push button 60 leaving the parts positioned as in Figs. 3 and 4.

Likewise, commencing with the parts as in the operated position of Fig. 3, counterclockwise motion of the latch member 12 and element 35 against the spring 40 to the position of Fig. 1 would result in automatically relatching thereof by motion of the detent 54 and its actuator 54*a* in counterclockwise direction under the influence of the spring 58.

In practice, as disclosed in the Schonitzer patent, latching movement of the latch member 12 is accomplished as the door approaches closed position by engagement of a keeper pin, not herein illustrated, with the throwout arm 11 of the latch member, such pin being fixed for the purpose on the wall structure to which the door structure is complementary, so that when the door is fully closed and the member 12 latched, the latch arm 10 of the member 12 will secure such door in closed position. Likewise, upon unlatching, the member 12 is released to the action of the spring 40, whereupon its throwout arm 11 tends to move the door in opening direction and as the door is opened the latch arm 10 moves into unlatched or operated position as seen in Fig. 3.

By the present invention means are provided for control of operative relation between the detent 54 and its manually operable actuating means, which actuating means includes the push button 60 and the actuator lever 54*a*, so that, under controlled circumstances, on depression of push button 60, although the actuator 54*a* may be actuated thereby against the spring 58, nevertheless the detent 54 may not have latch releasing actuation.

For such purpose means for selectively operatively connecting or interlocking the detent 54 and actuating member 54*a* are provided. Such means, as illustrated, includes a fixed pin 100 upon which is swingably shiftably and oscillatably mounted an actuable transmitting member or link 101 having an arm 102 extending into registering notches or recesses 54*d* and 54*e* in the detent 54 and actuator 54*a* as indicated Figs. 1, 3, 4, and 6. The relation of the parts is such that when the member 101 is disposed as indicated in Figs. 1, 2, 3, and 4, the detent 54 and its actuator 54*a* are effectively operatively connected or interlocked to provide tripping or latch releasing operation of the detent by its actuator; whereas the member 101 may have selective disposition (to the left, Fig. 2, downwardly Fig. 4, and toward the observer Figs. 1 and 3) to the position seen in Figs. 6, 7 and 8 wherein its arm 102 is withdrawn from the notch or recess 54*d* in the detent 54. In such shifted position of the member 101, movement of the detent actuating member 54*a*, while similar to its detent releasing movement, will be ineffective on the detent for tripping thereof, although it will cause similar but idling oscillating motion of the link member 101. Thus

depression of the push button 60 has no latch releasing effect, and release of the button permits its automatic return from operated position under the action of its spring 60b, accompanied by similar automatic return of the member 54a under the action of its spring 58. In other words, selection of the disposition of the member 101 along its slideway 100 predetermines the tripping effectiveness of operation of the push button 60 and detent actuator 54a as manually operable actuating means for effecting movement of the detent 54 from its latch restraining to its latch released position. Return of the member 101 from its idled position as seen in Fig. 6 to its operative position shown in Figs. 1, 3 and 4, wherein operation of the push button 60 and the actuator 54a will provide detent tripping, is freely accomplishable once the spring 58 has returned the member 54a to its latched position, Fig. 1, thus realigning the notches 54d and 54e.

For control of the door similar to that of the push button 60 but from a second location, such as from the inside, a rock shaft 75 may be provided having an arm 79d effective on an idler 147 oscillatable on a pin stud 148, which idler has an arm effective upon the detent actuator 54a, and which idler 147 may serve as stop for the detent 54 by engagement of the upper end 54c of the latter therewith—all as appears Figs. 1 and 3.

The arrangement is such that motion of the rock shaft clockwise in Figs. 1 and 3 will cause clockwise motion of the detent actuator 54a, accompanied by counterclockwise motion of the idler 147; the resultant effect possible upon the detent actuator 54a being thus the same from the shaft 75 as that from the push button 60. Any suitable means such as that fully disclosed in the above identified Schonitzer patent may be employed for control of the rock shaft 75.

For selection of the disposition of the member 101 to predetermine the tripping effectiveness of the detent actuator 54a upon the detent 54, regardless of actuation of the member 54a by either the push button 60 or the shaft 75, a bell crank 98 pivoted on a stud 99 is provided, having an arm upwardly extending into a suitable recess in the member 101. For its actuation the bell crank has an outwardly extending arm actuable by a link 106 terminating in a handle which may be located at the window of the door as indicated Fig. 2.

From what has been described, it will be apparent that the arrangement is such that when the link 106 is in its upper position as shown in full lines Fig. 2, the arm 102 of the member 101 will be located as illustrated Fig. 4 to provide effective operative relation between the detent 54 and its actuator 54a so that tripping of the detent will result from operation of either the push button 60 or the shaft 75; whereas when the link 106 is depressed to its broken line position Fig. 2, normal operation of either the push button or the shaft will be ineffective for tripping the detent and an effective lock is provided against unauthorized opening of the door from outside.

For outside key actuated locking control of the tripping effectiveness, lock means generally indicated at 103 may be provided, accessible from the outside of the door and effective upon a lever 104 by way of a shaft 105, the end of the lever being engageable with a downwardly extending arm on the bell crank 98, to shift and retain the bell crank in position to render the push button 60, shaft 75, and actuator 54a ineffective for tripping. Thus locking operation of the lock means 103 would, Fig. 2, shift the lever 104 clockwise to move the bell crank 98 counterclockwise and slide the member 101 to the left, shifting the arm 102 to render the detent actuator 54a ineffective upon the detent 54 for tripping operation.

With reference now to Figs. 6 to 9 of the drawings, the arrangement is generally as before with the exception that the push button 60a is associated with the door handle 107 to be depressed by the thumb of the operator. The parts appear in locked position wherein neither operation of the push button 60a nor the shaft 75 will trip the detent and release the door from the latching effect of the latch arm 10 or the opening effect of the spring 40. In Figs. 6 and 8 the push button 60a is shown in depressed position in full lines (and in extended position in dot and dash lines) and the actuator 54a is seen in its corresponding idled position. The dot and dash line position of arm 79d in Fig. 6 indicates its position after shaft 75 has been actuated.

It may be noted in connection wtih the two forms of the invention just described, which essentially constitute a single form, the arm 102 of the member 101 constitutes a transmitting member arranged for operator-responsive detent tripping operation wherein it, as an actuable member has actuation by the detent actuator 54a, and is also arranged for selective disposition to provide similar but idling operation of the detent actuating member, ineffective upon the detent for tripping.

With reference now to the modification of Figs. 10 to 13, the door latch, spring, and detent assembly is combined as a single unit, and the push button, the means for predetermining its tripping effectiveness, and the lock therefor are combined in a second assembly unit; the two units being separately mounted in the door 14, for subsequent cooperation.

120 is a latch member, having the latch arm 100a and throwout arm 110, secured upon the stub shaft 310 at the outside of the free edge of the door, the stub shaft carrying an element 350 on the inside of the door. The member 120 and element 350 are yieldably urged in counterclockwise direction as a unit by the spring 400.

A detent 540 is rotatably mounted at 550. The element 350 and the detent 540 have cooperative shoulders 570 and 560 respectively, whereby when the parts are positioned as in Fig. 12 the detent serves to latch the member 120 against the action of the spring 400. The detent has suitable associated spring means yieldably urging it clockwise Fig. 12, not appearing in the drawing but of function similar to the spring 58 disclosed in connection with Figs. 1 to 9.

A rock shaft as at 750 carrying an arm 790d engageable with a projection at the top of the detent, is arranged to move the detent counterclockwise as indicated by the arrow thereon, for its tripping operation, to unlatch the member 120 to the action of the spring 400. The shaft 750 may be arranged for such operation by any suitable means, such as by a push button located on the inside face of the door as disclosed in the Schonitzer patent above identified.

For similar unlatching operation, by an operator outside of the door as will appear, a lever A, pivoted at B and of limited motion as by the pin C and cooperative slot illustrated, is provided

with a shoulder cooperative at D with a suitable projection on the detent 540, the lever A being movable to the position indicated at broken line, Fig. 12, to move the detent to unlatching position, the detent under the action of its spring serving for return of the lever A to its full line position.

The latch arm 100a and throwout arm 110 of the member 120 cooperate with a keeper pin 18 mounted on the corresponding edge of the wall structure complementary to the door structure, the pin and member having relative movement between fully closed position of the door, as indicated full lines, and released position of the door as indicated in broken lines, wherein the pin is indicated at 18a, all as fully disclosed in the said Schonitzer patent. Briefly, as the door closes and the pin 18 therefor moves relatively from its broken to full line position, the throwout arm 110 is engaged and moves against the spring 400 until the member 120 is latched by the detent 540, the latch arm 100a meanwhile moving downwardly back of the pin to secure the door closed.

It will be apparent that depression of the lever A will move the detent to release the member 120 to the action of the spring 400, so that the door will be unlatched and urged openwise.

For control of the door from the outside, a latch actuating and locking unit having a spring-returned push button generally indicated at 600 and having a plunger E is provided; this unit also, according to this invention, includes means effective between the plunger E and the lever A, for selective disposition to predetermine the tripping effectiveness of operation of the push button 600 and plunger E is manually operable actuating means for effecting movement of detent 540, through the intermediate lever A, from latch restraining to latch released position. Moreover, lock means are provided for accomplishing such selection.

To these ends a support member F and associated latch actuating transmitting member G are arranged for sliding adjustment subject to a crank pin H under control of a lock generally indicated at 1030, the member F being provided with a suitable opening into which the pin H projects for the purpose. The member G is articulately related to the member F to have sliding adjustment therewith under control of the lock, and also to have swinging adjustment relative thereto as indicated Fig. 11; such means as here shown being a spring loop interconnecting the members, but other more conventional hinge arrangement might obviously be employed for the purpose.

The sliding adjustment of the member G is such that it may have the effective position illustrated full lines Fig. 11, where it will be engageable by the plunger E of the push button 600 to be swung upon depression of the push button, or it may have the ineffective position of Fig. 12, wherein it is clear of the plunger path. Also the arrangement is such that when the member G is moved by the plunger E, as from full to broken lines Fig. 11, it will engage the lever A for detent tripping operation thereof.

Thus, by the lock means 1030, the operator may select the disposition of the actuable transmitting member G to predetermine the tripping effectiveness of operation of the push button 600 and plunger E upon the detent 540 and thus upon latch and throwout member 120.

It may be noted, as appears from the drawings, that the door latch member 120, the lever A, the parts effective therebetween and their associated parts are all mounted on the base 320 for assembly as a unit at the free edge of the door. Also, the push button 600, lock 1030, and member G and parts effective therebetween are interconnected as a unitary assembly for mounting at the face of the door. The two units thereafter are cooperative in the manner and for the purposes described.

Certain features of the door control mechanisms herein shown and described are claimed in my copending United States patent application Serial No. 746,521, filed May 7, 1947, and cross-reference is hereby made to said application.

In all three disclosed embodiments of tripper type door control mechanism, it will be noted that each discloses detent and detent trip means associated therewith and including cooperative actuating and actuable members mounted and arranged for operator-responsive detent-tripping operation, wherein the actuable member has actuation by the actuating member, one of the members being also arranged for selective disposition relative to the other, to provide similar but idling operation of the actuating member, ineffective upon the actuable member for detent tripping, the actuating member having associated means providing its automatic return from operated position, and means arranged for selection of such disposition, to predetermine the tripping effectiveness of the actuating member operation.

In order to assist in an understanding of the terms used herein and to more closely associate the terminology of the claims with that of the specification, it is pointed out that, in the embodiment of my invention shown in Figs. 1 to 9, the push button 60 (or 60a) and the actuating member 54a comprise manually operable actuating means for effecting movement of the detent 54 from its latch restraining position (Fig. 1) to its latch released position (Fig. 3). In the embodiment shown in Figs. 10 to 13 the manually operable actuating means for effecting movement of the detent from latch restraining position to latch released position includes the push button 600 and the actuating member or plunger E. In Figs. 1 to 9 the actuable transmitting member 101—102 constitutes means whereby, idling operation of the manually operable actuating means may be permitted without accompanying release of the latch member 12 from door latched position. So also, in Figs. 10 to 13, the actuable transmitting member G constitutes means whereby idling operation of the manually operable actuating means may be permitted, it being understood that where the term "idling" is used herein in connection with the movement of the actuating means or of the actuable transmitting means it is intended to refer to movement thereof which is ineffective to release the latch member from door latched position even though such movement is not entirely free or unopposed and regardless of whether such "idling" movement requires more or less force to be applied by the operator than is required for operating or non-idling movement. In Figs. 1 to 9 the bell crank 98 and the associated mechanism for supporting and operating same comprise a control means for determining the effectiveness of the transmitting member 101—102 to permit idling operation of the manually operable actuating means, while in Figs. 10 to 13 the key controlled lock 1030 with its pin H and member F comprise the control means for

determining the effectiveness of the transmitting member G to permit idling movement of the manually operable actuating means.

From the above description of several embodiments of my invention it will be seen that the manually operable actuating means for effecting movement of the detent may comprise a single part or a series or chain of parts, such as push buttons, handles, shafts, links, levers, etc., which are associated to transmit the effort exerted by the operator to the mechanism. So also, the actuable transmitting means and the selector or control means therefore may each comprise one or a series or chain of coacting parts as required in the particular embodiment of my invention. Thus without departing from the spirit of my invention, variations and modifications may be made in the number and arrangement of parts which are included in the actuating means, the actuable transmitting means, the control means, and also in the various usual units of a tripper type latch mechanism, such as the latch member and its associated parts and the detent and the parts associated directly therewith. I do not therefore wish to be limited to the particular embodiments of my improved door control mechanism herein shown and described but claim as my invention all forms thereof coming within the scope of the appended claims.

What I claim is:

1. In a door control mechanism, a frame structure having a plate portion adapted to face the free edge wall of the door and provided at its inner edge with a flange portion, a latch member pivotally supported on said plate portion, a detent adapted releasably to hold said latch member in door latched position, means for pivotally supporting said detent on said plate portion for movement between a latch restraining position and a latch released position, an actuating member, said actuating member being pivotally supported on said means for pivotally supporting said detent for movement about the same center as said detent and having a part swingable toward said flange portion, means for swinging said actuating member, a shiftable member mounted on said flange portion, means for shifting said shiftable member, and coupling means operatively connecting said actuating member, detent, and shiftable member and adapted to be uncoupled from said detent upon shifting said shiftable member in one direction.

2. In a latch mechanism for a swinging door, a support adapted to be mounted on the door, a latch member mounted on the support to turn about an axis extending longitudinally of the door, a shiftable detent engageable with said member to hold it in one or more latched positions, a swinging detent release member adapted to be actuated from the outside of the door to disengage the detent from said latch member, a common means for pivotally supporting said detent and release member, and manually operable means accessible at the inside of the door for connecting said release member to and disconnecting it from said detent.

3. In a door control mechanism, a support having a plate portion adapted to face the jamb of the door and provided at its inner edge with a flange portion, a latch member pivotally mounted on said plate portion and adapted to have movement between door latched position and door unlatched position, a detent pivotally mounted on said plate portion and adapted releasably to hold said latch member in said door latched position, means for supporting said detent for movement between a latch member restraining position and a latch member released position, an actuating lever pivotally mounted on said plate portion and having a part swingable toward said flange portion, outer manually operable means for swinging said lever, a transmitting link member, means for supporting said transmitting link member for swinging movement, said transmitting link member being operable by said actuating lever and normally operatively coupled to said detent, and inner manually operable means on said flange for moving said transmitting link member into and out of coupled relation with said detent.

4. In a latch mechanism for a swinging door, a support having a plate portion adapted to face the jamb of the door and provided at its inner edge with a flange portion, a latch device pivotally mounted on said plate portion, detent means pivotally mounted on said plate portion for holding said latch device in door latching position, a lever pivotally mounted on said plate portion and having a part swingable toward said flange portion, outer manually operable means for swinging said lever, link means mounted for swinging and shifting movement, operable by said lever and normally operatively coupled to said detent means, and inner manually operable means on said flange portion for shifting said link means into and out of coupled relation with said detent means.

5. In a latch mechanism for a swinging door, a support having a plate portion adapted to face the jamb of the door and provided at its inner edge with a flange portion, a latch device pivotally mounted on said plate portion, detent means pivotally mounted on said plate portion for holding said latch device in door latching position, a lever pivotally mounted on said plate portion and having a part swingable toward said flange portion, means for swinging said lever, a shiftable member supported for sliding movement relative to said flange portion, means for shifting said shiftable member, and coupling means movable by said shiftable members and normally operatively connecting said lever and said detent means and adapted to be uncoupled from the detent means upon shifting the shiftable member in one direction.

6. In a latch mechanism for a swinging door, a support having a plate portion adapted to face the jamb of the door and provided at its inner edge with a flange portion, a latch device pivotally mounted on said plate portion, detent means pivotally mounted on said plate portion for holding said latch device in door latching position, a lever pivotally mounted on said plate portion and having a part swingable toward said flange portion, means for swinging said levers, a shiftable member on said flange portion, and a swingable link extending between said lever and said shiftable member and adapted, upon shifting the shiftable member, to be moved out of and into position to couple together said lever and said detent means.

7. In a door control mechanism, a frame structure having a plate portion adapted to face the free edge wall of the door and provided at its inner edge with a flange portion, a latch member pivotally supported on said plate portion, a detent adapted releasably to hold said latch member in door latched position, means for pivotally supporting said detent on said plate portion for

movement between a latch restraining position and a latch released position, an actuating member pivotally supported on said plate portion and having a part swingable toward said flange portion, means for swinging said actuating member, a shiftable member mounted on said flange portion, means for shifting said shiftable member, and coupling means operatively connecting said actuating member, detent, and shiftable member and adapted to be uncoupled from said detent upon shifting said shiftable member in one direction.

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