Dec. 6, 1960 F. J. McCONNELL 2,962,889

EMERGENCY-EXIT LOCK

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Fig. 1.

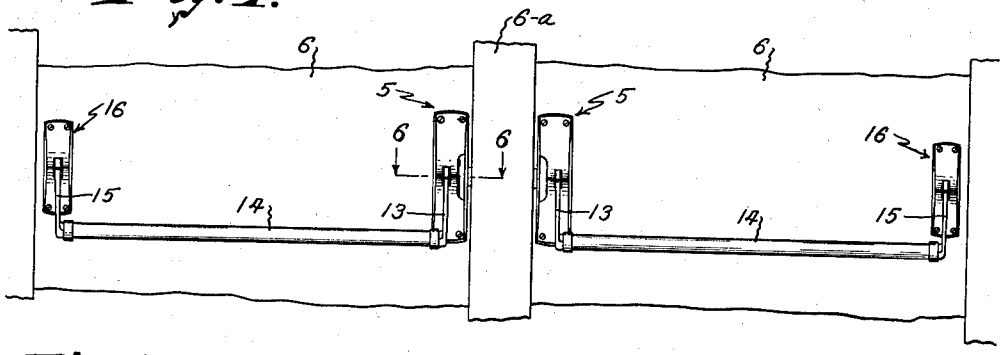


Fig. 2.

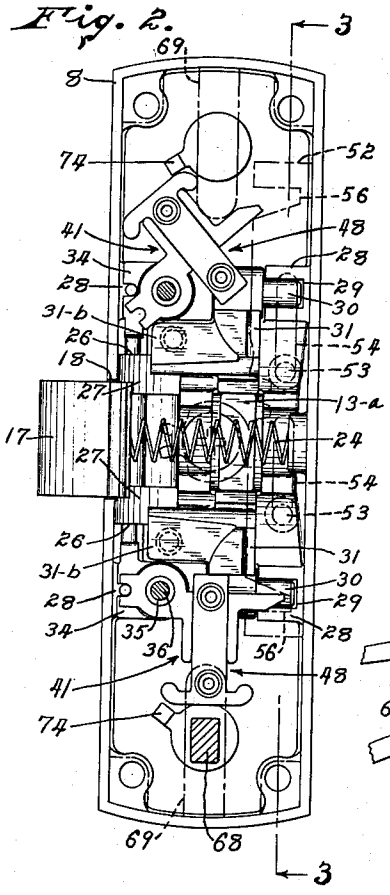


Fig. 3.

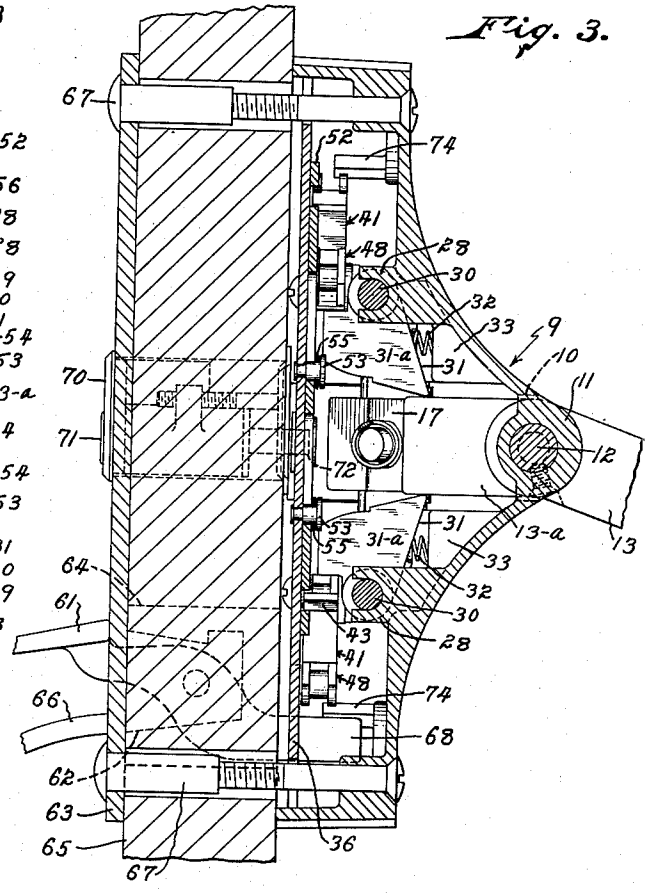


Fig. 4.

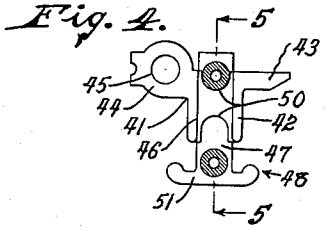
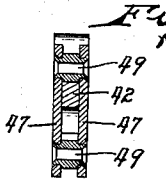


Fig. 5.



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Fig. 6.

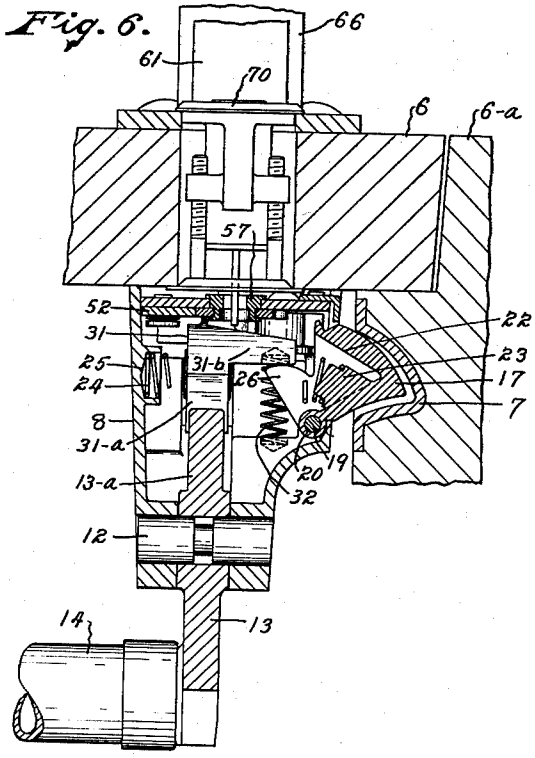


Fig. 8.

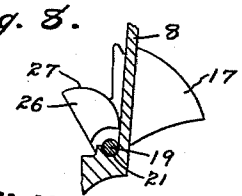


Fig. 9.

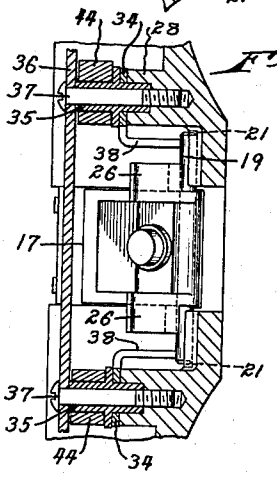


Fig. 10.

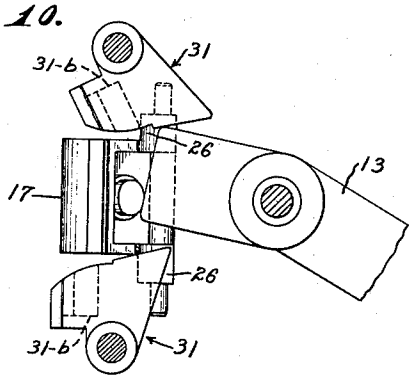


Fig. 7.

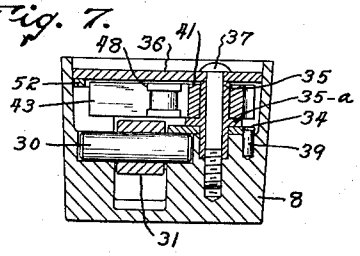
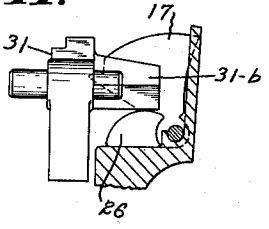


Fig. 11.



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Fig. 12.

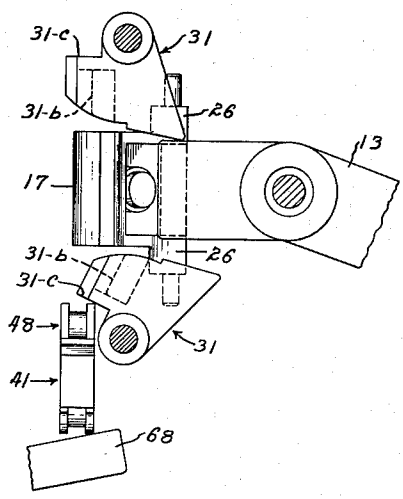


Fig. 13.

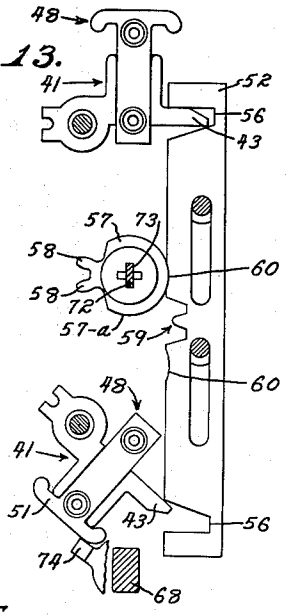


Fig. 14.

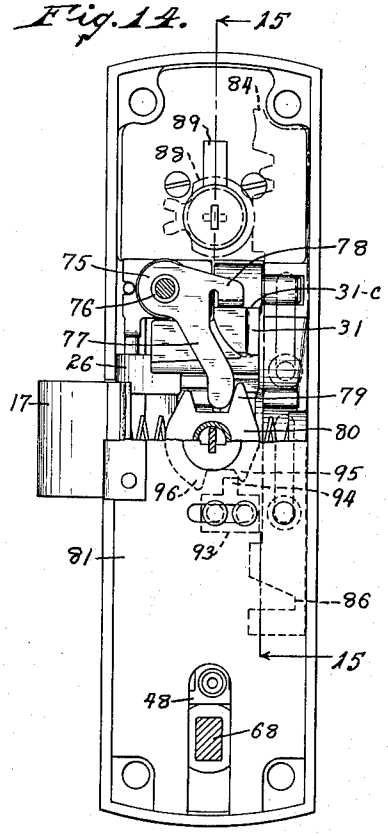
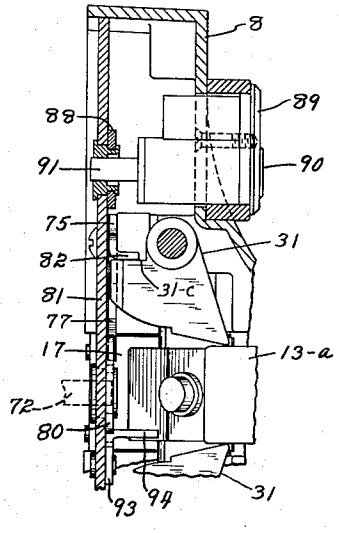


Fig. 15.



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Fig. 16.

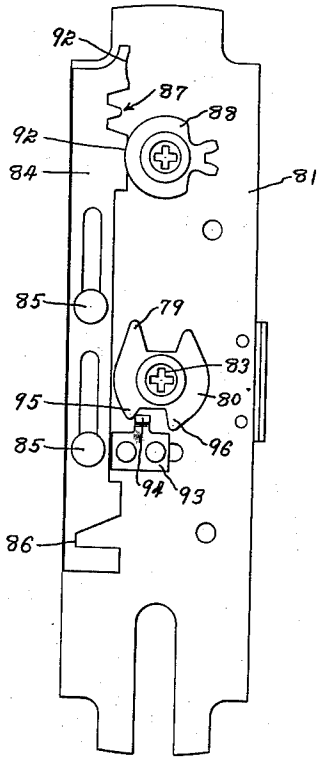


Fig. 17.

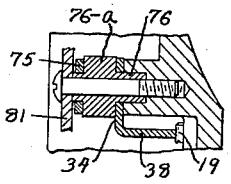
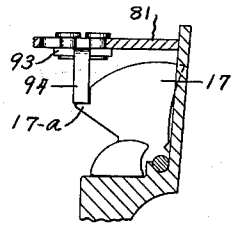


Fig. 18.



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United States Patent Office 2,962,889 Patented Dec. 6, 1960

2,962,889

EMERGENCY-EXIT LOCK

Frank J. McConnell, New Britain, Conn., assignor to The American Hardware Corporation, New Britain, Conn., a corporation of Connecticut

Filed Jan. 23, 1958, Ser. No. 710,684

4 Claims. (Cl. 70—92)

This invention relates to door locks of the type generally referred to in the trade as emergency-exit locks, and more specifically to emergency-exit locks of the rim type having a pivoted latch bolt which projects from the side of the lock case.

Locks of the above described type are most commonly used on outwardly opening exit doors of public buildings, such as schools, hospitals, theaters and the like, where large numbers of people can be expected to gather, to permit quick and easy exit from the building at all times and particularly in cases of emergency such as fire or accident.

The latch bolt retracting mechanism of such locks is, for reasons of safety, operable at all times by means of a panic-bar which extends horizontally across the inner side of the door. The panic-bar is pivotally mounted at one end to the "active" lock case, that is, the lock case which carries the latch bolt and the retracting mechanism therefor, and at its opposite end to an "inactive" or supporting case which is secured to the inner side of the door opposite the active case. Preferably, the latch bolt is retracted by either lifting or depressing the panic-bar so that there can be no mistake made in the operation of the lock which would delay exit from the building. Operation of the mechanism by depression of the panic-bar is particularly important since this will assure automatic retraction of the latch bolt if people should crowd against the inside of the door.

In addition to the basic function which merely provides for panic-bar retraction of the latch bolt from the inside of the door, it is common practice to furnish emergency-exit locks with either manually operated means or key operated means, or a combination of both, for controlling the operation of the latch bolt. The manually operated means may be in the form of a thumbpiece which is located on the outer side of the door and is operable upon depression thereof to retract the latch bolt, and in functions having a thumbpiece, key operated means are usually provided for rendering the thumbpiece inoperable. Such key operated means may be actuated by a cylinder lock on the outer side of the door or by a cylinder lock in the active lock case on the inner side of the door and, in the latter arrangement, separate key operated means operable from the outer side of the door are preferably provided for retracting the latch bolt when the thumbpiece is inoperable. In some functions, only a cylinder lock is provided on the outer side of the door for retracting the latch bolt, but, in any case, it is important to provide an emergency-exit lock which can easily be adapted to a variety of different functions.

In the majority of emergency-exit locks heretofore produced, the latch bolt is connected to an elongated retractor bar which extends across the lock case and is engaged by the retracting mechanism. The presence of the retractor bar necessitated the use of an excessively large lock case, and prior structures have therefore been

cumbersome in size and appearance when applied to the door.

It is an object of the present invention to provide an emergency-exit lock in which the operating mechanism is so arranged that it may be contained in a relatively narrow case.

A further object of the invention is to provide an operating mechanism of particularly novel form which eliminates the necessity of using a retractor bar in connection with the latch bolt and thereby permits mounting of the mechanism in a narrow lock case.

One of the most important objects of the invention is to provide an emergency-exit lock having a latch bolt retracting mechanism which permits reversal of the lock case relatively to the panic-bar, whereby the lock can be used on either right or left hand doors.

Another object of the present invention is to provide a basic latch bolt retracting mechanism for emergency-exit locks adapted for panic-bar operation alone and to which other components may be added to obtain a variety of different functions.

An additional object of the invention is to provide an emergency-exit lock in which the latch bolt may be retracted by a thumbpiece from the outer side of the door, and in which means are provided for rendering said thumbpiece inoperable when it is desired to prevent retraction of the latch bolt thereby.

Yet another object of the invention is to provide key operated means operable from either the inner or the outer side of the door for selectively rendering the thumbpiece operable and inoperable to retract the latch bolt.

Further objects and advantages of the present invention will be more clearly understood from the following description and the accompanying drawings in which:

Fig. 1 is a fragmentary elevational view of a pair of outwardly opening exit doors as seen from the inside, each having mounted thereon an emergency-exit lock embodying the present invention.

Fig. 2 is an enlarged elevational view of the lock shown on the right hand door of Fig. 1, as seen from the back side; the cover plate for the lock and the parts carried thereby being shown in broken lines.

Fig. 3 is a sectional side view taken substantially on line 3—3 of Fig. 2 and illustrating the lock mounted on the door.

Fig. 4 is an elevational view, partly in vertical section, illustrating one of the parts of the lock mechanism.

Fig. 5 is a sectional side view taken on line 5—5 of Fig. 4.

Fig. 6 is a sectional plan view, taken substantially on line 6—6 of Fig. 1, showing the lock installed on a door.

Fig. 7 is a sectional plan view illustrating the mounting means for the rollbacks of the lock.

Fig. 8 is a fragmentary sectional plan view illustrating the mounting means for the latch bolt of the lock.

Fig. 9 is a fragmentary sectional side view further illustrating said mounting means.

Fig. 10 is a side view illustrating the manner in which the latch bolt is retracted upon depression of the panic-bar.

Fig. 11 is a fragmentary sectional plan view further illustrating the retraction of the latch bolt.

Fig. 12 is a side view illustrating the manner in which the latch bolt is retracted by operation of the thumbpiece.

Fig. 13 is an elevational view, looking at the back of the lock as in Fig. 2, illustrating the condition of the mechanism when the thumbpiece is rendered inoperable.

Fig. 14 is a view of a modified form of lock as seen from the back. In this view, the upper portion of the

cover plate has been removed, but the parts carried thereby are shown in broken lines.

Fig. 15 is a fragmentary sectional side view of the lock shown in Fig. 14, taken substantially on line **15—15** thereof.

Fig. 16 is a view illustrating the inside of the cover plate for the modified lock shown in Figs. 14 and 15.

Fig. 17 is a fragmentary sectional side view illustrating the mounting means for the crank member of the lock illustrated in Fig. 14.

Fig. 18 is a fragmentary sectional plan view illustrating the operation of the latch bolt holdback means incorporated in said modified lock.

Briefly stated, my invention contemplates an emergency-exit lock having a pivoted latch bolt that projects from the side of the lock case and is provided at its opposite sides with cam lugs that are engaged by unique rollback members mounted in the lock case at opposite sides of the bolt and one of which is operable to retract the bolt when the panic-bar is either depressed or lifted. The rollback members are mounted to pivot about axes extending parallel to the pivotal axis of the operating lever connected to the panic-bar and perpendicular to the pivotal axis of the latch bolt, and each of the rollback members has a lateral arm which extends over and engages the adjacent cam lug on the latch bolt. This "overlapping" relationship of the parts is such that the mechanism can be housed in a very narrow lock case in comparison with other lock mechanisms. The rollback members are also arranged so that those functions not having an inside cylinder lock can be reversed relatively to the panic-bar whereby the same lock can be mounted on both a right hand and a left hand door.

My invention further contemplates mechanism for retracting the latch bolt by means of a depressible thumbpiece mounted on the exterior of the door. In the form shown, such mechanism includes an intermediate actuating member that is slidably mounted on a pivoted carrier and is normally disposed between the thumbpiece and the respective rollback member for retracting actuation of the rollback member upon depression of the thumbpiece. Suitable mechanism is also provided for moving the carrier member to a position wherein the intermediate actuating member is removed from between the thumbpiece and the rollback when it is desired to render the thumbpiece inoperable so that there is no longer the necessary cooperation between these elements and the thumbpiece merely moves idly upon actuation from the outer side of the door.

Additional mechanism may also be provided for retracting the latch bolt by key operated means from the outer side of the door when the thumbpiece is inoperable.

In Fig. 1 of the drawings, I have illustrated locks **5—5** of the present invention mounted on a pair of outwardly swinging exit doors **6—6** having a mullion **6–*a*** therebetween provided on each of its opposite sides with a conventional strike-keeper **7** (see Fig. 6) that is adapted to receive the latch bolt of the respective lock. The locks shown in Fig. 1 are identical, but can be applied to both right and left hand doors because of the particular construction of the lock mechanism provided by my invention.

Each of said locks includes an elongated case **8** having an outwardly flaring projection **9** provided with an opening **10** therethrough forming a pair of spaced ears **11—11**. Said ears contain coaxial openings which receive a pivot pin **12** that supports an operating lever **13** for pivotal movement about an axis extending transversely of the case. The said operating lever is connected at its outer end to one end of a panic-bar **14** that extends horizontally across the door and is connected at its opposite end to a similar lever **15** that is pivotally carried by a supporting case **16** that is fastened to the door. Said operating lever **13** has a finger portion **13–*a*** which projects into the lock case and is adapted to actuate the latch bolt retracting mechanism as will be hereinafter described. The operating levers **13** and **15** are yieldingly held in their normal, or central, positions by spring means contained in the inactive case **16**. This structure may be of the conventional type and therefore is not shown.

The lock is provided with a latch bolt **17** of the so-called "Pullman" type which normally projects through an opening **18** in the side wall of the lock case. Said latch bolt is pivotally mounted on a pin **19** (see Figs. 6, 8 and 9) that is disposed longitudinally with respect to the lock case and extends through an opening **20** in the bolt. The opposite ends of said pin are seated in pockets **21—21** formed in the lock case at the opposite sides of the opening **18** as best illustrated in Figs. 8 and 9. The inner side of the bolt is provided with a recess **22** from the bottom of which extends a positioning stud **23** that receives one end of a compression spring **24**; the opposite end of said spring being received in a recess **25** in the opposite side wall of the lock case. Said spring biases the latch bolt into projected position as illustrated in Figs. 2 and 6.

The latch bolt is provided on its opposite sides with identical cam lugs **26—26** which extend longitudinally from the main body of the bolt and inwardly to the opposite side of the pivot pin **19** and are provided with rearwardly facing, curved, cam surfaces **27—27**. As shown in Fig. 8, said cam lugs engage the side wall of the lock housing and thus provide stop means limiting movement of the bolt to its projected position under the influence of the compression spring **24**.

In the interior of the lock case at opposite sides of the latch bolt, there are formed pairs of spaced bosses **28—28** which project rearwardly from the front wall of the case and contain aligned, transversely extending recesses **29—29**. Said recesses receive the opposite ends of shafts **30—30** which pivotally support opposed rollback members **31—31**, each of which has a flat, somewhat wedge-shaped body portion **31–*a*** lying substantially in the same plane as the finger **13–*a*** on the operating lever **13** and extending into engagement with the adjacent edge of said finger. The said body portions are provided with transverse holes which receive the shafts **30—30** and the rollbacks are thus mounted for pivotal movement about axes extending parallel to the pivotal axis of the operating lever **13** and perpendicular to the pivotal axis of the latch bolt.

Each of the rollbacks **31—31** has an arm **31–*b*** which extends laterally from the body portion thereof and overlies the curved cam surface of its respective cam lug **26** on the latch bolt. The body portion of each rollback is also provided with a rearwardly extending projection having an outwardly facing abutment surface **31–*c*** which lies substantially parallel to the pivotal axis of the rollback and is utilized in a manner to be hereinafter described. The rollbacks are pressed into engagement with the finger **13–*a*** on the operating lever **13** by compression springs **32—32** which are disposed between the lateral arms **31–*b*—31–*b*** of the rollbacks and platforms **33—33** formed in the lock case, said rollbacks normally occupying the positions best shown in Figs. 2, 3 and 6 of the drawings.

The shafts **30—30** which carry the rollback members are held in position by retaining plates **34—34** which overlie the bosses **28—28** on the latch bolt side of the lock case. It will be seen from Fig. 7 that the depth of the recesses **29** is substantially equal to the diameter of the shafts **30** and that the retaining plates **34—34** engage the tops of the shafts and thus retain them in the recesses. The retaining plates themselves are held in position by tubular spacers **35—35** which extend therethrough and are mounted in holes in the bosses **28—28**. The spacers are provided intermediate their ends with flanges **35–*a*—35–*a*** which overlie the retaining plates **34—34**, and said spacers also provide a support for the cover plate **36** of the lock. The cover plate, spacers and retaining plates

are all fastened to the lock case by screws 37—37 which extend through the cover plate and the spacers and are threaded into holes in the bosses 28—28.

Each of the retaining plates 34—34 is provided with a finger 38 which engages the adjacent end of the pivot pin 19 for the latch bolt and retains it in its seat 21 as shown in Fig. 9. The retaining plates are properly located with respect to said pivot pin by positioning pins 39—39 which project from the bosses 28—28 into notches in the edges of said plates.

The mechanism thus far described is common to all contemplated functions of my novel emergency-exit locks and permits retraction of the latch bolt by panic bar operation only.

Referring now to Fig. 10 of the drawings, in which I have shown only the operating parts of the lock affected during panic-bar retraction of the latch bolt, it will be understood that when the panic bar is depressed, or moved toward the door, the operating lever 13 will pivot in a clockwise direction about its pivot pin 12. The finger 13–*a* on said operating lever will thus move upwardly and urge the upper rollback member 31 in a counterclockwise direction. As the rollback moves about its pivot, the lateral arm 31–*b* thereon will press against the curved surface of the adjacent cam lug 26 on the latch bolt and will swing the latch bolt toward retracted position. During retraction of the bolt, the curved surface of the cam lug merely slides under the arm 31–*b*, and when the cam lugs engage the platforms 33—33, which function as stops as shown in Fig. 11, further movement of the bolt is prevented.

When the panic-bar is released, the operating lever 13 is returned to its normal, or central, position by the spring means contained in the inactive case 16, and the upper rollback and the latch bolt are simultaneously returned to normal position by their respective springs 32 and 24.

If the panic bar is lifted instead of being depressed, the latch bolt will be moved to retracted position by the lower rollback member 31 in the same manner as above described.

It will be understood that the curved surfaces on the cam lugs 26—26 provide for smooth operation of the latch bolt during its retracting movement and that the point of engagement of said curved surface by the lateral arm of the operating rollback is at all times inwardly of the pivotal axis of the latch bolt so that a substantial moment is developed. This, together with the mechanical advantage gained through the rollbacks, allows the bolt to be retracted even when only light pressure is applied against the panic-bar.

Since the mechanism is the same on both sides of the latch bolt, the lock case may be reversed relatively to the operating lever 13, thus making it possible to apply the lock case to either right or left hand doors as illustrated in Fig. 1.

As outlined generally above, my improved lock mechanism is adapted for operation from the outer side of the door by manually operated means such as a thumbpiece, and in some functions including a thumbpiece, outside key operated means may also be provided for selectively rendering the thumbpiece operable and inoperable to retract the latch bolt. In order to retain the reversible characteristics of these functions, I provide identical means for operating each of the rollbacks 31—31.

In the form of the mechanism illustrated in Figs. 2 through 13, such means includes a pair of carrier members 41—41, one of which is mounted on each of the tubular spacers 35—35 for pivotal movement about an axis extending perpendicular to the pivotal axis of the adjacent rollback. Each of said members 41—41 includes a body portion 42 having an arm 43 projecting laterally from one side thereof and a hub 44 at its opposite side containing a transverse hole 45 which receives the tubular spacer, said hub being confined between the flange 35–*a* on its respective spacer and the cover plate 36 of the lock as best shown in Figs. 7 and 9. The body of each member is provided in its opposite sides with longitudinal slots 46—46 which slidably receive identical side-pieces 47—47 of a reciprocable slide 48, the inner end of which is adapted to engage the abutment surface 31–*c* on the adjacent rollback when the carrier member is in operative position. Said side-pieces 47—47 are secured together in spaced relation and held in their respective slots by spacing rivets 49—49 and the required movement of the slide 48 is achieved by forming rivet receiving notches 50—50 in the body portion 42 at the opposite ends of the slots. The side-pieces are provided with lateral extensions at their outer ends forming feet 51—51 thereon for a purpose to be hereinafter described.

The carrier members 41—41 are moved between operative and inoperative positions with respect to the rollbacks 31—31 by a control bar 52 that is slidably mounted on the inside of the cover plate 36 for longitudinal movement with respect to the lock housing. The control bar 52 is supported for sliding movement by headed studs 53—53 which are fastened to the cover plate and extend through elongated slots 54—54 in the control bar. As best seen in Fig. 3, a resilient washer 55 is disposed between the head of each of said studs and the control bar to frictionally hold the bar in selected position and thereby prevent free movement thereof. A notch 56 is formed in each end of the control bar and each of said notches receives the free end of the arm 43 extending from the adjacent carrier member as shown in Figs. 2 and 13.

Said control bar is moved to either of the two positions which it is intended to occupy by means of a pinion 57 that is rotatably mounted in the center of the cover plate 36 of the lock and is disposed flush with the control bar. The pinion is provided with a pair of gear teeth 58—58 that cooperate with a rack 59 formed on the adjacent edge of the control bar to cause movement of the bar upon rotation of the pinion. Recesses 60—60 are formed in the edge of the control bar at opposite sides of the rack, and the control bar and the pinion are so formed that, when the bar is moved to either of its positions, the peripheral circular edge portion 57–*a* of the pinion will rotate into the approaching recess 60 and thereby prevent unintentional movement of the control bar.

The lock mechanism above described is adapted to be actuated from the outside by a thumbpiece 61 which is pivotally mounted on a bracket 62 that is fastened to a faceplate 63 and extends into a hole 64 bored through the door 65. The thumbpiece and the faceplate comprise parts of conventional outside trim which may also include a pull handle 66 that is disposed below the thumb engageable portion of the thumbpiece. The faceplate 63 and the lock housing 8 are secured to the opposite sides of the door by means of bolts 67—67 as clearly illustrated in Fig. 3.

The thumbpiece 61 is provided with an extension 68 which projects through the lower of a pair of slots 69—69 in the cover plate of the lock and under the lower slide member 48 when said slide member is disposed in its normal, or operative, position by the control bar 52 as illustrated in Fig. 2. It will be noted that when the lower carrier member 41 is in operative position, the upper carrier member has been moved by the bar 52 to inoperative position. This is of no consequence since the upper assembly is provided only to permit operation of the lock when the lock housing is reversed and applied to a left hand door.

The lower slide member 48 is gravitally urged to its lowermost position with respect to its carrier member 41, as shown in Fig. 2, so that upon depression of the thumbpiece 61, the extension 68 thereon will engage and force the slide member 48 upwardly. The said slide member will, in turn, urge the lower rollback 31 about its shaft

30 to cause retraction of the latch bolt as illustrated in Fig. 12 of the drawings. It will be noted that retraction of the latch bolt by the thumbpiece occurs independently of the operating lever 13 which is maintained in its normal position by the spring means in the inactive housing 16. It will also be understood that retraction of the latch bolt by movement of the panic bar in either direction occurs independently of the thumbpiece, the thumbpiece being retained in its normal position by a spring, not shown, contained in the bracket 62.

Movement of the control bar 52 from the outside is achieved with a cylinder lock 70. Said cylinder lock is of the conventional type and includes a rotatable key plug 71 having a blade 72 extending therefrom which is received in a slot 73 in the center of the pinion 57. When it is desired to render the thumbpiece inoperable to retract the latch bolt, the pinion is rotated by means of a suitable key to move the control bar 52 downwardly from the position shown in Fig. 2 to the position shown in Fig. 13, thus swinging the lower carrier member 41 to its inoperative position wherein the slide 48 carried thereby is disposed out of the path of the extension 68 on the thumbpiece and operation of the thumbpiece will then merely result in idle movement. Of course, when the lower carrier member 41 is moved to an inoperative position, as shown in Fig. 13, the upper carrier member 41 is moved to its inoperative position, but again this is of no consequence since the upper unit is merely provided to permit reversal of the lock, and the operation of the mechanism when reversed is the same as above described.

The carrier members 41—41 cannot move from operative to inoperative position with the slide members 48—48 extended because the feet 51—51 thereon would strike the sidewall of the lock case before such movement was completed. In order to overcome this difficulty, I provide abutments 74—74 in the lock case adjacent each of the slide members. It will be seen, from Figs. 2, 3 and 13, that these abutments are engaged by the feet on the front side pieces 47—47 of the slide members as they are carried to inoperative position and cam the slide members inwardly with respect to their carrier members.

In Figs. 14 through 17 of the drawings, I have illustrated the above described lock as modified to permit retraction of the latch bolt by key operated means from the outside of the door when the thumbpiece has been rendered inoperable. Except for the modifications shown, the mechanism of this lock is the same as that previously described.

As shown in Fig. 14, the numeral 75 denotes a crank for operating the upper rollback. Said crank is pivotally mounted on a tubular spacer 76 which is similar to the spacer 35 previously described, but is provided with a flange 76–*a* of greater thickness which properly locates the crank 75 as shown in Fig. 17. Said crank has a pair of diverging arms 77 and 78. The arm 77 extends over the rollback 31 and terminates adjacent an abutment 79 formed on a cam member 80 that is rotatably mounted on the inside of the cover plate 81 of the lock. The arm 78 is provided with a perpendicular foot 82 at its end which engages the abutment surface 31–*c* on the upper rollback.

When the lock is installed on the door, the blade 72, indicated in dotted lines in Fig. 15, extending from the key plug 71 of the cylinder lock 70 on the outer side of the door, is disposed in a slot 83 in the cam member 80 so that rotation of the key plug is imparted to the cam member. Therefore, if the thumbpiece has been rendered inoperable, the latch bolt may be retracted by rotating the key plug 71 in a counter-clockwise direction as viewed in Fig. 14. This will rotate the cam member 80 and thereby operate the crank 75 which will, in turn, pivot the upper rollback 31 and thus retract the latch bolt.

In the modified lock, the mechanism for enabling and disabling the thumbpiece includes a control bar 84 which is slidably secured to the cover plate 81 by headed studs 85—85 in the same manner as the control bar 52 of the first lock. The control bar 84 is provided at its lower end with a notch 86, which receives the arm 43 extending from the carrier member 41, and at its upper end with a rack 87 that is engaged by a pinion 88 which is rotatably mounted on the cover plate. The pinion 88 is controlled by a cylinder lock 89 that is mounted on the lock case 8 and has a rotatable key plug 90 connected to the pinion 88 by a blade 91 and accessible from the inner side of the door. The control bar 84 is provided with recesses 92—92 for the reception of the peripheral edge of the pinion 88 and its operation will be understood from the above description of the control bar 52.

In the lock illustrated in Fig. 14, I have also provided holdback means for retaining the latch bolt 17 in fully retracted position. Such means include a detent 93 that is mounted for transverse sliding movement with respect to the cover plate 81 and is provided with a finger 94 that is normally disposed adjacent an abutment 95 on the cam member 80 and extends inwardly into the lock case. The end of said finger is adapted to engage a rib 17–*a* formed on the latch bolt 17 at the inner end of its curved face, but is normally out of the way of said rib.

When it is desired to prevent latching of the door, the latch bolt is manually depressed to fully retracted position, and the key plug 71 on the outer side of the door is rotated in a clockwise direction as viewed in Fig. 14. The abutment 95 on the cam member 80 will then move the detent 93 transversely on the cover plate 81 to position the end of the finger 94 thereon in the path of the rib 17–*a*, as shown in Fig. 18, whereby the latch bolt will be maintained in retracted position. The cam member 80 is provided with a separate abutment 96 which, upon rotation of the cam member in the opposite direction, will return the detent to normal position to release the latch bolt.

I claim:

1. An emergency-exit lock including a case, a latch bolt pivotally mounted in said case for movement between projected and retracted positions about an axis extending longitudinally thereof, a rollback mounted in said case for pivotal movement about an axis extending transversely thereof and adapted to retract the latch bolt, inside manually operable means for actuating said rollback including an operating lever pivotally mounted on said case for movement about an axis extending parallel to the pivotal axis of said rollback, outside manually operable means for actuating said rollback comprising a thumbpiece mounted to pivot about an axis parallel to the pivotal axis of said rollback and having an operating extension aligned with an abutment on said rollback, a carrier member pivotally mounted in said case for movement in a plane extending transversely thereof, a slide movably carried by said carrier member, said carrier member being movable to a first position wherein said slide is disposed between said extension and said abutment on the rollback to permit latch bolt retracting actuation of the rollback by said thumbpiece, and a second position wherein said slide is disposed out of the path of said extension whereby said thumbpiece is inoperable to retract the latch bolt, and outside key operated means for moving said carrier member to either of its said positions.

2. An emergency-exit lock including a case, a latch bolt pivotally mounted in said case for movement between projected and retracted positions, said latch bolt including a main body portion normally projecting from the case and cam lugs extending longitudinally from said main body portion and inwardly to the opposite side of said axis, a pair of opposed rollbacks mounted in said case for pivotal movement about axes extending transversely thereof and each having a portion engageable with its respective cam lug for retracting the latch bolt, a panic-bar operated lever pivotally mounted on said case for movement about an axis extending parallel to the pivotal axes of said rollbacks and having a finger portion extending therebetween whereby, when said panic-bar is de-

pressed, the rollback above said finger portion is actuated, and when said panic-bar is raised, the rollback below said finger portion is operated, a thumbpiece mounted for pivotal movement about an axis extending parallel to the pivotal axes of said rollbacks and accessible for manual operation at the outer side of the door, said thumbpiece having an extension aligned with an abutment on one of said rollbacks, a carrier member pivotally mounted in said case adjacent said one rollback, a slide movably carried by said carrier member, said carrier member being movable from a first position wherein said slide is disposed between said extension and said abutment to permit actuation of the rollback by said thumbpiece, and a second position wherein said slide is disposed out of the path of said extension, and key operated means for moving said carrier member to either of its said positions.

3. An emergency-exit lock including a case having a cover plate, a latch bolt pivotally mounted in said case and movable relatively thereto between projected and retracted positions, said latch bolt having an abutment thereon facing said cover plate when the latch bolt is in retracted position, a cam member rotatably mounted on said cover plate, a detent slidable on said cover plate and moveable by said cam member from a first position clear of said abutment to a second position in the path of said abutment to thereby permit selective retention of the latch bolt in retracted position, and outside key operated means for rotating said cam member.

4. An emergency exit lock including a case, a latch bolt mounted in said case and movable relatively thereto between projected and retracted positions, inside manually operable means including a rollback operable to retract said latch bolt, outside manually operable means for actuating said rollback including a pivotally mounted thumbpiece having an extension aligned with said rollback, a carrier member pivotally mounted in said case adjacent said rollback, an intermediate slide member mounted on said carrier member for sliding movement relatively thereto an amount sufficient to cause retracting actuation of said rollback, said carrier member being movable from a first position wherein said slide member is disposed between said extension and said rollback to permit actuation of said rollback by said thumbpiece to a secondary position wherein said slide member is disposed out of the path of said extension, a control bar having an operative connection with said carrier member and adapted to move said carrier member to either of its said positions, and key operated means for moving said control bar including a pinion rotatably mounted on said lock case and a rack on said control bar engageable by said pinion, said pinion being adapted for key operation from the outer side of the door.

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