Sept. 21, 1965 W. E. ATKINSON 3,206,953

PUSH BUTTON LOCK

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Fig. 1.

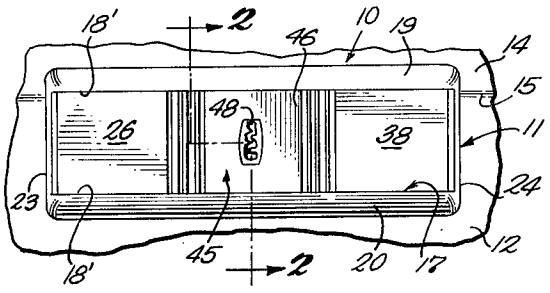


Fig. 2.

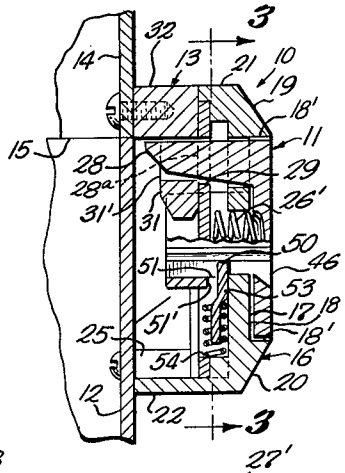


Fig. 3.

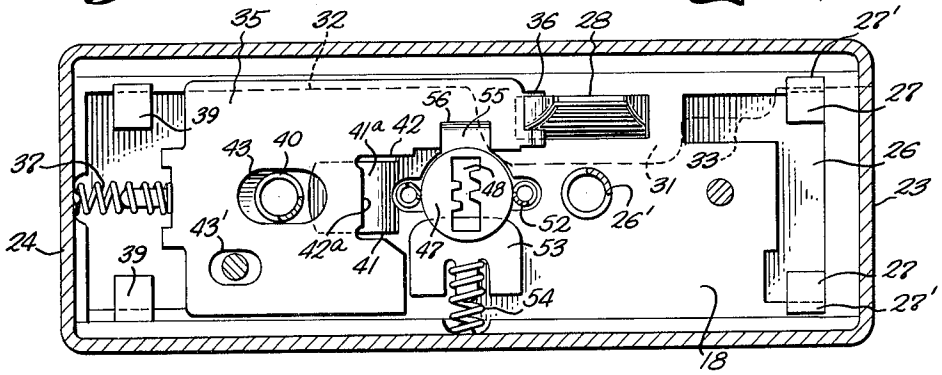


Fig. 4.

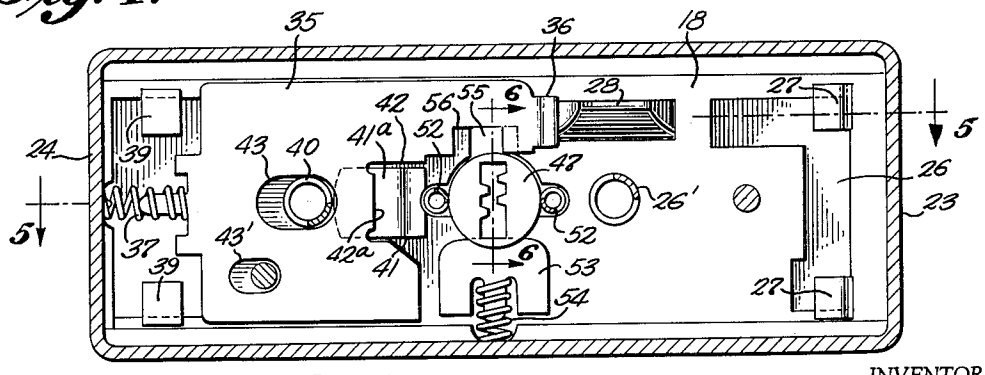
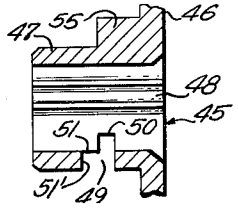


Fig. 6.



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Fig. 5.

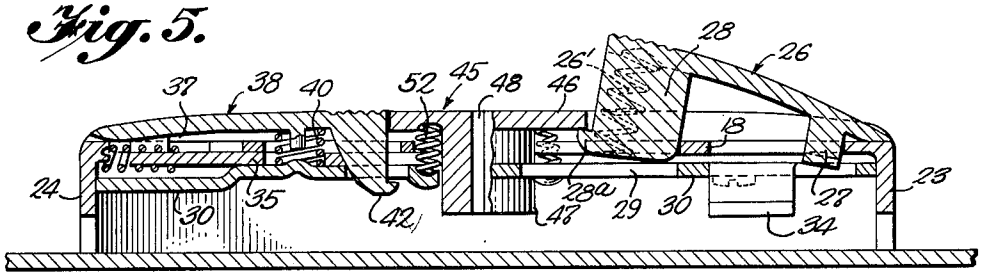


Fig. 7.

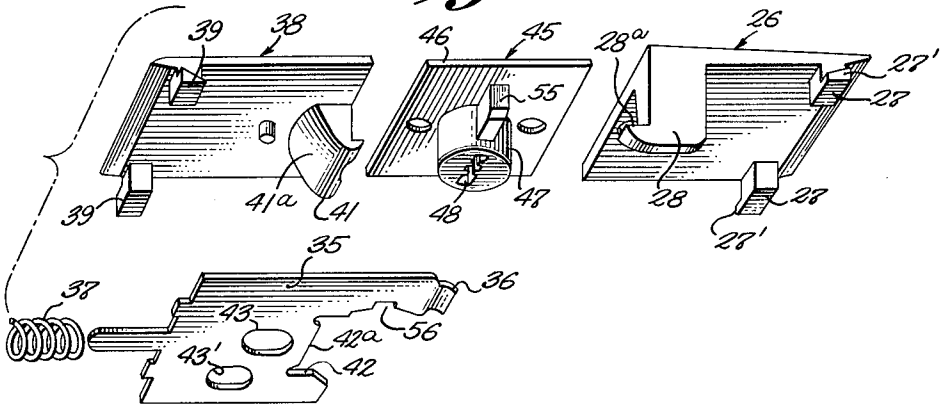


Fig. 8.

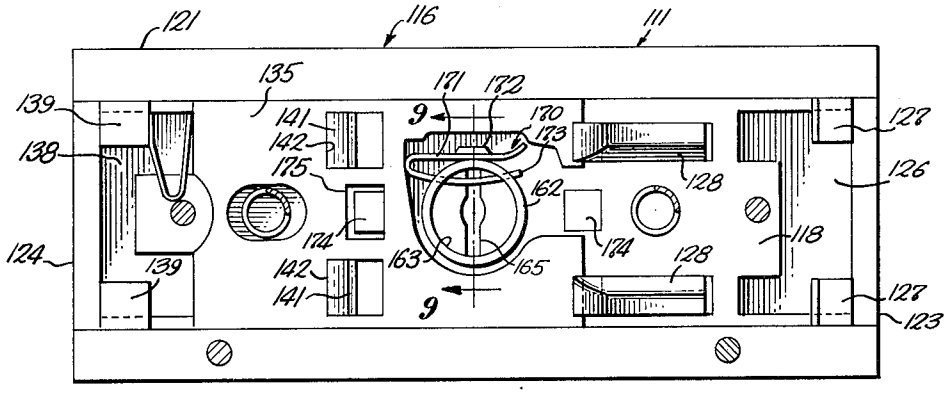
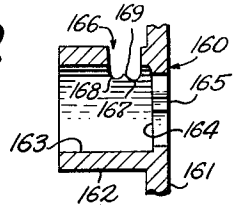


Fig. 9.



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3,206,953

PUSH BUTTON LOCK

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Filed July 3, 1963, Ser. No. 293,242
12 Claims. (Cl. 70—70)

The present invention relates in general to a combined latch and lock structure espeically adapted for application to containers or receptacles having separable parts to be releasably secured in closed position, and more particularly to a combined latch and lock structure for luggage cases and similar containers having a cover section hinged to a body section, wherein a plurality of manually actuated buttons are incorporated in the construction to facilitate manual latching and locking of the mechanism and to permit key operation or manual operation.

Heretofore, it has been the usual practice in the design and construction of combined latch and lock mechanisms for luggage cases and the like to provide a spring biased bolt on one of the separable container sections which is urged into latching relation with a keeper on the other separable case section whenever the sections are moved to closed relationship. A movable finger piece of some sort was sometimes provided in such prior devices to permit the operator to overcome the spring bias and release the latch. If it was desired to lock or unlock the mechanism, a key would have to be inserted in the keyway and rotated in a proper direction to shift a locking bolt or similar mechanism into locking or unlocking relation to the latch bolt.

An object of the present invention is the provision of a combined latch and lock structure which is simple and compact in construction, attractive in appearance and reliable in operation, and which includes a plurality of manually operable push buttons operable in a novel manner to control the lock.

Another object of the present invention is the provision of a combined latch and lock structure which includes a plurality of manually operable push buttons, one of which may be pushed to place the structure in latched condition, another which may be pushed when the structure is in latched but unlocked position to release the mechanism to unlatched condition, and a third one of which places the mechanism in a locked condition when the mechanism is in latched position.

Another object of the present invention is the provision of a novel combined latch and lock structure, wherein the structure may be locked in a latch condition by depression of a selected locking push button without necessitating the use of a key.

Another object of the present invention is the provision of a novel combined latch and lock structure of the type described in the preceding paragraph, wherein the mechanism may be unlocked by insertion of a key in a keyway without requiring turning of the key.

Other objects, advantages and capabilities of the present invention will become apparent from the following detailed description, taken in conjunction with the accompanying drawings illustrating two preferred embodiments of the invention.

In the drawings:

FIGURE 1 is a front elevation view of a combined latch and lock mechanism constructed in accordance with the present invention and shown in latching condition on a portion of a receptacle;

FIGURE 2 is a vertical transverse section view to an enlarged scale taken along the line 2—2 of FIGURE 1;

FIGURE 3 is a vertical longitudinal section view taken along the plane indicated by the line 3—3 of FIGURE 2 lying immediately forwardly of the rear cover plate, illustrating the parts in latched and locked condition;

FIGURE 4 is a section view taken along the same plane as FIGURE 3, but illustrating the parts in unlatched position;

FIGURE 5 is a horizontal longitudinal section view taken along the line 5—5 of FIGURE 4 and illustrating the parts in unlatched condition;

FIGURE 6 is a fragmentary section view of the lock button, taken along the line 6—6 of FIGURE 4;

FIGURE 7 is an exploded perspective view of the bolt plate and actuating buttons of the latch and lock mechanism of FIGURE 1;

FIGURE 8 is a rear view of a modified latch and lock construction embodying the present invention, with the rear cover plate removed; and

FIGURE 9 is a fragmentary section view of the lock button, taken along the line 9—9 of FIGURE 8.

Referring to the drawings, wherein like reference characters designate corresponding parts throughout the several figures, the combined latch and lock structure of the present invention is indicated generally by the reference character 10 and comprises a latch section 11, which may, for example, be mounted on a tray or body portion 12 of a luggage case, and a keeper section 13 which may be mounted on the separable cover section 14 of the luggage case. Such latch and keeper sections are usually mounted on the front wall of their respective receptacle sections adjacent the plane of separation between the receptacle body and cover, indicated by reference character 15, with the latch section lapping over the receptacle cover portion occupied by the keeper 13.

The latch section 11 comprises a rectangular, inwardly opening, laterally elongated, hollow shell 16 having a front formed by a laterally extending, forwardly opening channel 17 extending throughout the major dimension of the shell in substantial parallelism with the plane of separation 15, the channel 17 being defined by a web portion 18 and channel sides 18′ bounded above and below by front border strip portions 19, 20. The shell 16 additionally includes longitudinal top and bottom walls 21, 22 and left and right end walls 23, 24 as viewed in FIGURE 1. Bored and internally threaded bosses 25 may be formed, for example, along the bottom wall 22 to receive mounting screws extending through the front wall of the luggage case.

Supported for pivotal movement adjacent end 23 of the channel 17 of the latch section 11 is a latch button 26 having inwardly projecting pivot lugs 27 at the upper and lower corners of the outer end thereof projecting through accommodating openings in the web 18 of the channel 17 and having oppositely projecting lips 27′ projecting beyond the adjacent edges of the accommodating openings to fulcrum the push button 26 for pivotal movement about its outer end. The openings for the lugs 27 are shaped so that the buttons can be introduced and withdrawn from the rear. The inner end of the push button 26 has a latch hook or catch 28 thereon projecting through another suitable accommodating aperture in the channel web 18 and having a hook shoulder 28*a* thereon.

The catch 28 of the latch button 26 is designed to be projected through an aperture 29 in a rear cover plate 30 removably secured to the shell 16 to form a rear closure for the latching and locking mechanism within the shell, and to be received in the keeper aperture 31′ corresponding substantially to the cross section of the catch portion 28 which projects inwardly of the rear cover plate 30 and formed in a depending staple formation or loop 31 integrally formed with a keeper bar 32. The keeper bar 32 may also have a thin guide or web 33 depending

from the bar, and, for example, adjoining staple **31**, adapted to project into a trough formed by a bent tab **34** bent rearwardly from the rear cover plate **30** to restrain the keeper and latch sections against separation in a direction perpendicular to the plane of the surfaces on which the latch and keeper sections are mounted.

When the latching button **26** is depressed fully into the channel **17**, a slidable latch plate **35** disposed between the channel web **18** and the rear cover plate **30** snaps into a latching position behind the shoulder **28***a* of the catch **28** to restrain the mechanism in latched condition. This sliding latch plate **35** may be of the particular shape illustrated in FIGURES 3–7 wherein an extension **36** projects into partially lapping relation to the aperture **29** in cover plate **30** adjacent the edge of the catch **28**. The latch plate **35** is resiliently urged by spring **37** in a direction to urge the extension **36** into locking relation with the shoulder **28***a* of the catch **28** to restrain the same against outward pivoting movement of the latch button **26** under the influence of its return spring **26'**.

A second or release button **38** is provided adjacent the opposite lateral end of the shell **16** of the latch section and is constructed similarly to the first described latch button **26** in its outward appearance and in the provision of fulcrum forming lugs **39** at the upper and lower corners thereof adjacent the outer end proximate to the end **24** of the shell **16** and projecting into accommodating openings in the channel web **18**. This release button **38** is also resiliently biased to an open or projected position by a return spring **40** and has an inclined camming tongue **41** at its free or inner end extending through an aperture in the channel web **18** and projecting into engagement with a coacting lug **42** of the slidable latch plate **35**. The inclined surface **41***a* of the tongue **41** coacts with the edge **42***a* of the lug **42** on the slidable latch plate **35** when the push button **38** is fully depressed to force the latch plate **35** against the bias of the spring **37** a distance sufficient to retract the extension **36** from behind the shoulder **28***a* of the catch **28** for releasing the latter from latched condition to permit the button **26** to be projected to its unlatched position under influence of its return to spring **26'**. The slidable latch plate **35** is provided with slots as indicated at **43** and **43'**, elongated in the direction of movement of the latch plate **35**, to accommodate the return spring **40** for release button **38** and mounting screw **44** for securing the rear cover plate **30**, to the web portion **18** of the shell **16**.

Disposed at the center of the channel web **18** between the two buttons **26** and **38** is a lock button **45**. The lock button **45** has a rectangular front plate portion **46** and a rearwardly projecting integral cylinder **47** extending through an accommodating aperture in the channel web **18** and the rear cover plate **30**. A keyway **48** extends entirely through the length of the cylinder portion **47** from the front surface of the front plate portion **46**, and the cylinder portion **47** is provided with a stepped notch **49** along the under portion thereof immediately behind the front plate portion **46** having a deep land **50** extending well into the keyway **48** and a shallow land **51** disposed rearwardly of the land **50** and stepped radially outwardly therefrom with respect to the center of the cylinder portion **47**. A pair of springs **52** are disposed between the rear surface of the front plate portion **46** and the front surface of the channel web **18** in flanking relation to the cylinder portion **47** to continuously urge the locking button **45** to a forwardly or outwardly projected position. The outward movement of the locking button **45** responsive to the bias of the springs **52** is restricted by a detent member **53** in the form of a small thin plate or bar of metal which is resiliently biased by a spring **54** to urge its straight upper edge against the shallow land **51** or the deep land **50** of the stepped notch **49**. Detent member **53** normally lies in the shallow land portion of the stepped notch **49** and abuts against the innermost shoulder **51'** of the notch **49** to restrain the locking button **45** at its outwardly projected position.

An integral locking tongue or bolt **55** projects radially from the periphery of the cylinder **47** opposite the stepped notch **49**, but extends axially of the cylinder portion **47** from the front plate portion **46** a sufficiently short distance so that it is spaced forwardly of the slidable latch plate **35** at the outermost position of the locking button **45**. When, however, the slidable latch plate **35** is in latching position with the extension **36** under the shoulder **28***a* of the catch **28**, a bolt receiving notch **56** in the latch plate **35** is rearwardly aligned with the bolt **55** on the lock button **45** to receive the bolt when the locking button is pushed inwardly, and thus lock the latch plate **35** against unlatching movement while the bolt **55** remains in this position. When the locking button **45** is pushed inwardly to project the bolt **55** into the notch **56**, the deep land **50** of the stepped notch **49** in cylinder portion **47** moves over the detent member **53** to receive the detent member which then restrains the locking button **45** in this inwardly pressed position. The locking button **45**, however, may be readily released from this inwardly pressed locking position by insertion of a key into the keyway **48** which corresponds to the cross section of the keyway and which has an inclined leading edge on the portion of the key bit which registers with the detent member **53**. Engagement of the inclined leading edge portion of the key bit with the detent member **53** during insertion of the key into the keyway **48** forces the detent member **53** radially outwardly until its upper edge passes under the shallow land **51**, at which point the locking button **45** is forced to its outermost position by the spring **52**. Thus the latch and lock unit is unlocked by mere insertion of an appropriate key bit into the keyway of the lock button without necessitating turning of the key.

In the operation of the latch and lock mechanism, the mechanism can be readily latched to restrain the cover section of the luggage case or other associated receptacle in closed condition by simply depressing the latch button **26** when the keeper aperture **31'** is in alignment with the catch **28**. The inward movement of the catch **28** through the keeper aperture **31'** cams the extension **36** of the slidable latch plate **35** in a direction towards the spring **37** to a position where the shoulder **28***a* of the catch **28** passes behind the latch plate extension **36**, at which point the latch plate **35** springs back to latching position beneath the catch shoulder **28***a*. The latch may be readily released without the use of a key by then pressing upon the release button **38**, the inward movement of the tongue **41** forcing the latch plate **35** in a direction again compressing the spring **37** and withdrawing the latch plate extension **36** from behind the catch shoulder **28***a* to release the latch button **26** for return to its outwardly projecting position.

Alternately, the latch and lock unit can be locked after the latch button **26** has been depressed by depressing the lock button **45**, which projects the bolt **55** into the notch **56** in the latch plate **35** and shifts the detent member **53** into the deep land portion **50** of the stepped notch **49**. The appropriate key must then be introduced into the keyway **48** of the lock button **45** to release the lock button **45** and unlock the latch plate **35**.

FIGURE 8 illustrates a modified version of the combined latch and lock mechanism wherein the manner of restraining the lock button, herein indicated by reference character **160**, in the projected and inward positions is altered slightly. In this embodiment, the parts corresponding to components of the first described embodiment are indicated by reference characters of the 100 series wherein the last two digits correspond to the reference characters for the first described embodiment. In this modified latch and lock mechanism, the lock button **160** has a rectangular front plate portion **161** and a rearwardly projecting integral cylinder **162** having a hollow bore **163** throughout the axial length of the cylinder por-

tion terminated forwardly by a front wall **164** having a keyway **165** therein. The cylinder portion **162** has a notch **166** along a portion of the wall thereof, for example along the upwardly facing portion, shaped to provide a front seat **167** and a rear seat **168** divided by a slight rise **169**. A spring member **170** coacts with the seats **167, 168** of the notch **166** to resiliently restrain the lock button **160** in either the forwardly projected, unlocking position, or in an inwardly projected, locking position. To this end, the spring **170** is a generally hairpin shaped or recurved spring having an upper leg **171** suitably supported against a shoulder or lug **172** extending rearwardly from the channel web **118**, and a lower leg **173** having a slightly upwardly bowed configuration which is resiliently pressed into the rear seat **168** of notch **166** when the lock button **160** is in the forward or projected position. The lock button **160** also has a pair of lock lugs **174** which project through suitable apertures in the channel web **118** and one of which projects through an aperture of corresponding cross section **175** in the latch plate **135** when the latter is in latching position, and when the lock button **160** has been pressed inwardly to its innermost or locking position wherein the spring **170** is located in the front seat **167** of notch **166**. The latch button **126** of this embodiment is like the latch button **26** of the first embodiment, except that two latch hooks or catches **128** are provided adjacent the upper and lower edges of the latch button to cooperate with corresponding surfaces of the sliding latch plate **135**. Also, the release button **138** is similar to the release button **38** of the first embodiment except that two camming tongues **141** project inwardly from the free edge of the release button **138** and coact with openings **142** in the slidable latch plate **135** to retract the latch plate **135** from latch position upon inward pivotal movement of the release button **138**.

The latch section **111** of the modified form illustrated in FIGURE 8 coacts with a keeper section similar to that illustrated and described in connection with the first embodiment, the catch **128** located adjacent the top wall **121** being adapted to project into a keeper aperture in a depending staple formation similar to the staple formation **31** of keeper bar **32** to prevent separation of the hinged receptacle sections.

While but two preferred embodiments of the present invention have been particularly shown and described, it is apparent that various modifications may be made therein within the spirit and scope of the invention, and it is desired, therefore, that only such limitations be placed on the invention as are imposed by the prior art and set forth in the appended claims.

I claim:

1. A combined latch and lock adapted to be mounted on mounting surfaces of separable parts of a container which surfaces substantially lie in a common plane adjacent a line of separation therebetween comprising a keeper member to be affixed to the surface of one of the separable parts, a latch body member on the surface of the other of said separable parts positioned to overlie the keeper when the container parts are in closed position, a first manually operable push button member supported on said body member for movement in a direction perpendicular to said plane from a normal outwardly projected position to an inward latching position, means responsive to movement of said button member to said latching position to interlock said latch body member with said keeper, catch means for latching said first button member whenever the latter reaches said inward latching position, and a second manually operable push button member supported on said body member spaced from said first push button member along an axis substantially paralleling said common plane for movement in a direction perpendicular to said plane from a normal outwardly projected position to an inward position for releasing said first push button member from said latching position upon inward movement of said second button member toward the common plane of said surfaces.

2. A combined latch and lock adapted to be mounted on mounting surfaces of separable parts of a container which surfaces substantially lie in a common plane adjacent a line of separation therebetween comprising a keeper member to be affixed to the surface of one of the separable parts, a latch body member on the surface of the other of said separable parts positioned to overlie the keeper when the container parts are in closed position, a first manually operable push button member supported on said body member for movement in a direction perpendicular to said plane from a normal outwardly projected position to an inward latching position, means responsive to movement of said button member to said latching position to interlock said latch body member with said keeper, catch means for latching said first button member whenever the latter reaches said inward latching position, a second manually operable push button member supported on said body member spaced from said first push button member along an axis substantially paralleling said line of separation for movement in a direction perpendicular to said plane from a normal outwardly projected position to an inward position for releasing said first push button member from said latching position upon inward movement of said second button member toward the common plane of said surfaces, and a third manually operable button member moveable from a normal outwardly projected, inactive position to an inward locking position in a direction perpendicular to said plane interengageable with said catch means in the latter position to lock the same and prevent releasing of said first push button member.

3. A combined latch and lock adapted to be mounted on mounting surfaces of separable parts of a container which surfaces substantially lie in a common plane adjacent a line of separation therebetween comprising a keeper member to be affixed to the surface of one of the saparable parts, a latch body member on the surface of the other of said separable parts positioned to overlie the keeper when the container parts are in closed position, a first manually operable push button member supported on said body member for movement in a direction perpendicular to said plane from a normal outwardly projected position to an inward latching position, means responsive to movement of said button member to said latching position to interlock said latch body member with said keeper, catch means for latching said first button member whenever the latter reaches said inward latching position, a second manually operable push button member supported on said body member spaced from said first push button member along an axis substantially paralleling said line of separation for movement in a direction perpendicular to said plane from a normal outwardly projected position to an inward position for releasing said first push button member from said latching position upon inward movement of said second button member toward the common plane of said surfaces, and a third manually operable button member moveable from a normal outwardly projected, inactive position to an inward locking position in a direction perpendicular to said plane interengageable with said catch means in the latter position to lock the same and prevent releasing of said first push button member, said third button member having key responsive means for releasing the same from said inward position to return to said inactive position responsive to selective manipulation of a key.

4. In a combination latch and lock, the combination recited in claim 3, wherein said third button member has an outwardly opening keyway therein for receiving a key bit having an inclined leading edge portion, detent means mounted in said body member coactive with said third button member to restrain the same in said inward position when the third button member is so positioned, said detent means having a portion projecting into said

keyway when disposed in restraining relation with said third button member to be engaged by the inclined leading edge portion of said key bit during insertion of the same into said keyway and be forced to a position releasing said third button member from said inward position.

5. In a combination latch and lock, the combination recited in claim 2, wherein said body member is of elongated configuration having its major axis paralleling said line of separation and terminating in opposite end walls substantially perpendicular to said major axis, said third button member being disposed substantially centrally of said latch body member and said first and second button members being disposed in laterally flanking relation to said third button member in alignment along an axis paralleling said line of separation, said first and second button members being pivoted about parallel axis paralleling said common plane and located at said end walls adjacent the edges of said first and second button members disposed remote from said third button.

6. In a combination latch and lock, the combination recited in claim 2, wherein said keeper has a socket opening outwardly toward said body member and covered by the latter when the container is in closed condition, said first button member having a hook-shaped catch tongue which is withdrawn outwardly from coactive relationship with said keeper socket when said first button member occupies said outwardly projected position and which is located in said keeper socket in interlocking relation therewith when said first button member occupies said inward position, said catch means comprising a catch plate within said body member guided for movement in a plane perpendicular to the direction of movement of said catch tongue and resiliently biased to enter into latching engagement with said catch tongue when the first button member reaches said inward latching position, and said second button member having a caming formation thereon engageable with said catch plate to force the same out of latching engagement with said catch tongue when said second button member is moved to said inward position.

7. The combination recited in claim 6, wherein said third button member includes an integral bolt projection located in outwardly spaced relation to said catch plate when said third button member is at said inactive position and disposed to interlock with aligned portions of said catch plate when said catch plate is in latching position relative to said catch tongue and said third button member is at said inward position to lock said catch plate against movement from said latching position responsive to said second button member.

8. A combined latch and lock mechanism adapted to be mounted on coplanar front surfaces of separable parts of a luggage receptacle or the like adjacent a line of separation between the separable parts, comprising a keeper member to be affixed to one of the front surfaces adjacent said line of separation having an outwardly opening socket, a latch assembly adapted to be fixed to the other of said front surfaces including a hollow, substantially rectangular body member with its long sides paralleling said line of separation and positioned to overlie the keeper socket when the receptacle parts are in closed position, said body member having an outwardly opening elongated channel paralleling said line of separation extending between opposite ends of the body member, a first push button in said channel adjacent one end thereof biased to a normal outward position and moveable to an inward position, a catch member on said first button spaced from said keeper when the first button is at said outward position and projectable into said keeper socket to interlock the receptacle parts against opening movement when said first button occupies said inward position, a slidable catch plate supported for movement in said body member in a plane paralleling said front surfaces and biased to enter latching engagement with said catch member when the first button reaches said inward position, and a second push button in said channel adjacent the other end thereof biased to a normal outward position and moveable to an inward position, a camming projection on said second button coactive with a surface portion of said catch plate upon inward movement of said second button to withdraw said catch from latching engagement with said catch member of said first button.

9. A combined latch and lock mechanism adapted to be mounted on coplanar front surfaces of separable parts of a luggage receptacle or the like adjacent a line of separation between the separable parts, comprising a keeper member to be affixed to one of the front surfaces adjacent said line of separation having an outwardly opening socket, a latch assembly adapted to be fixed to the other of said front surfaces including a hollow, substantially rectangular body member with its long sides paralleling said line of separation and positioned to overlie the keeper socket when the receptacle parts are in closed position, said body member having an outwardly opening elongated channel paralleling said line of separation extending between opposite ends of the body member, a first push button in said channel adjacent one end thereof pivoted for movement about the edge thereof remote from the center of the body member biased to a normal outward position and movable to an inward position, a catch member on the free edge portion of said first button spaced from said keeper when the first button is at said outward position and projectable into said keeper socket to interlock the receptacle parts against opening movement when said first button occupies said inward position, a slidable catch plate supported for movement in said body member in a plane paralleling said front surfaces and biased to enter latching engagement with said catch member when the first button reaches said inward position, and a second push button in said channel adjacent the other end thereof pivoted for movement about the edge thereof remote from the center of the body member biased to a normal outward position and moveable to an inward position, a camming projection on the free edge portion of said second button coactive with a surface portion of said catch plate upon inward movement of said second button to withdraw said catch plate from latching engagement with said catch member of said first button.

10. A combined latch and lock mechanism adapted to be mounted on coplanar front surfaces of separable parts of a luggage receptacle or the like adjacent a line of separation between the separable parts, comprising a keeper member to be affixed to one of the front surfaces adjacent said line of separation having an outwardly opening socket, a latch assembly adapted to be fixed to the other of said front surfaces including a hollow, substantially rectangular body member with its long sides paralleling said line of separation and positioned to overlie the keeper socket when the receptacle parts are in closed position, said body member having an outwardly opening elongated channel paralleling said line of separation extending between opposite ends of the body member, a first push button in said channel adjacent one end thereof biased to a normal outward position, and moveable to an inward position, a catch member on said first button spaced from said keeper when the first button is at said outward position and projectable into said keeper socket to interlock the receptacle parts against opening movement when said first button occupies said inward position, a slidable catch plate supported for movement in said body member in a plane paralleling said front surfaces and biased to enter latching engagement with said catch member when the first button reaches said inward position, a second push button in said channel adjacent the other end thereof biased to a normal outward position and moveable to an inward position, a camming projection on said second button coactive with a surface portion of said catch plate upon inward movement of said second button to withdraw said catch plate from latching engagement with said catch member of said first button, a third push button supported

in said channel between said first and second buttons for movement along an axis perpendicular to the plane of said front surfaces between an outward inactive position and an inward locking position, said third button having a locking lug thereon spaced forwardly from the plane of said catch plate when said third button is in inactive position and located in the plane of said catch plate when the third button is in locking position, and said catch plate having a recess for receiving said locking lug therein to lock the catch plate against withdrawal from latching engagement with said catch member.

11. A combined latch and lock mechanism adapted to be mounted on coplanar front surfaces of separable parts of a luggage receptacle or the like adjacent a line of separation between the separable parts, comprising a keeper member to be affixed to one of the front surfaces adjacent said line of separation having an outwardly opening socket, a latch assembly adapted to be fixed to the other of said front surfaces including a hollow, substantially rectangular body member with its long sides paralleling said line of separation and positioned to overlie the keeper socket when the receptacle parts are in closed position, said body member having an outwardly opening elongated channel paralleling said line of separation extending between opposite ends of the body member, a first push button in said channel adjacent one end thereof biased to a normal outward position and moveable to an inward position, a catch member on said first button spaced from said keeper when the first button is at said outward position and projectable into said keeper socket to interlock the receptacle parts against opening movement when said first button occupies said inward position, a slidable catch plate supported for movement in said body member in a plane paralleling said front surfaces and biased to enter latching engagement with said catch member when the first button reaches said inward position, a second push button in said channel adjacent the other end thereof biased to a normal outward position and moveable to an inward position, a camming projection on said second button coactive with a surface portion of said catch plate upon inward movement of said second button to withdraw said catch plate from latching engagement with said catch member of said first button, a third push button supported in said channel between said first and second buttons for movement along an axis perpendicular to the plane of said front surfaces between an outward inactive position and an inward locking position, said third button having a locking lug thereon spaced forwardly from the plane of said catch plate when said third button is in inactive position and located in the plane of said catch plate when the third button is in locking position, said catch plate having a recess for receiving said locking lug therein to lock the catch plate against withdrawal from latching engagement with said catch member, and said third button having an outwardly opening keyway therein for receiving a key and a peripheral recess located internally of said body member and communicating with said keyway, and a detent member projecting into said peripheral recess to a position to be engaged by the key, said detent member coacting with said peripheral recess to restrain said third button in said inward locking position when moved thereto and being activated by the key to release the third button for return to outward inactive position.

12. A combined latch and lock mechanism adapted to be mounted on coplanar front surfaces of separable parts of a luggage receptacle or the like adjacent a line of separation between the separable parts, comprising a keeper member to be affixed to one of the front surfaces adjacent said line of separation having an outwardly opening socket, a latch assembly adapted to be fixed to the other of said front surfaces including a hollow, substantially rectangular body member with its long sides paralleling said line of separation and positioned to overlie the keeper socket when the receptacle parts are in closed position, said body member having an outwardly opening elongated channel paralleling said line of separation extending between opposite ends of the body member, a first push button in said channel adjacent one end thereof biased to a normal outward position and moveable to an inward position, a catch member on said first button spaced from said keeper when the first button is at said outward position and projectable into said keeper socket to interlock the receptacle parts against opening movement when said first button occupies said inward position, a slidable catch plate supported for movement in said body member in a plane paralleling said front surfaces and biased to enter latching engagement with said catch member when the first button reaches said inward position, a second push button in said channel adjacent the other end thereof biased to a normal outward position and moveable to an inward position, a camming projection on said second button coactive with a surface portion of said catch plate upon inward movement of said second button to withdraw said catch plate from latching engagement with said catch member of said first button, a third push button supported in said channel between said first and second buttons for movement along an axis perpendicular to the plane of said front surfaces between an outward inactive position and an inward locking position, said third button having a locking lug thereon spaced forwardly from the plane of said catch plate when said third button is in inactive position and located in the plane of said catch plate when the third button is in locking position, said catch plate having a recess for receiving said locking lug therein to lock the catch plate against withdrawal from latching engagement with said catch member, and said third button having an outwardly opening keyway therein for receiving a key having an inclined leading edge and a peripheral recess located internally of said body member and communicating with said keyway, and a detent member projecting into said peripheral recess to a position to be engaged by the inclined leading edge portion of said key, said detent member coacting with said peripheral recess to restrain said third button in said inward locking position when moved thereto and being activated by the key during insertion of the same in said keyway without rotation to release the third button for return to outward inactive position.

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