United States Patent [19]

Walters

[11] **3,711,894**

[45] **Jan. 23, 1973**

[54] LOCKING BAR ASSEMBLY

[75] Inventor: **Russell W. Walters**, Whitehall, Pa.

[73] Assignee: **BMR Security Products Corporation**, Reading, Pa.

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[52] **U.S. Cl.** **16/144,** 70/85, 70/91

[51] **Int. Cl.** **E05d 11/10,** E05b 65/44, E05b 65/02

[58] **Field of Search** .....16/144, 147; 70/81, 85, 91, 70/79, 106, 144, 367, 162; 232/7, 12; 312/215, 216, 303; 24/230 SC

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Primary Examiner—Donald A. Griffin

Attorney—Maleson, Kimmelman & Ratner and Allan Ratner

[57] **ABSTRACT**

A locking bar assembly to restrain displacement between relatively moveable elements. The assembly comprises a pair of moveable members rigidly attached to the elements being restained and a locking mechanism inserted therein to actuate a locking pin into and out of a detent formed within one of the members to lock and unlock the moveable elements. An extension pin formed on a surface of one of the moveable members is inserted into a longitudinal slot machined into the locking mechanism. The relative positioning between the slot, extension pin and detent provides for axial alignment between the locking pin and detent substantially facing the element surfaces to be restrained. Translation of the locking pin into and out of the detent is controlled by a standard key actuated cylinder lock.

19 Claims, 16 Drawing Figures

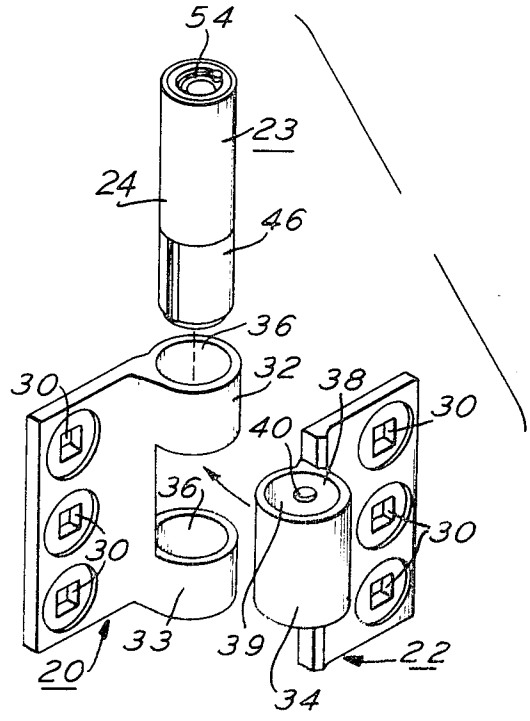


FIG. 1

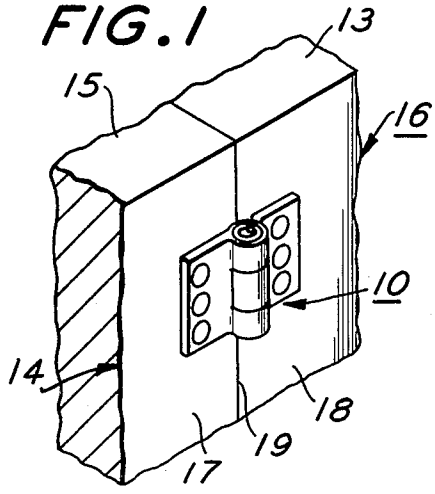


FIG. 2

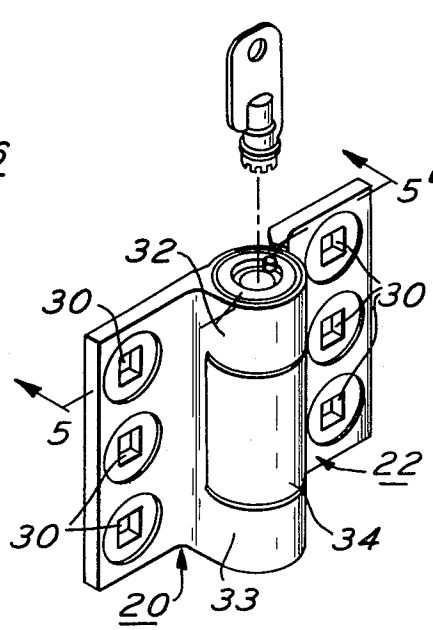


FIG. 3

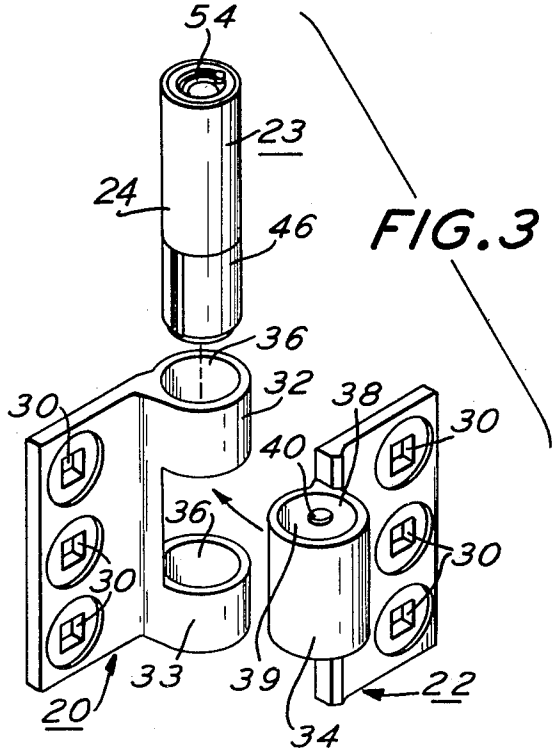
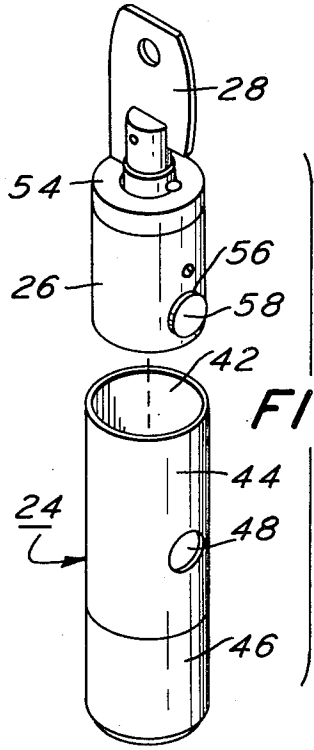


FIG. 4



INVENTOR
RUSSELL W. WALTERS

BY
Maleson, Kimmelman & Ratner

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FIG. 5

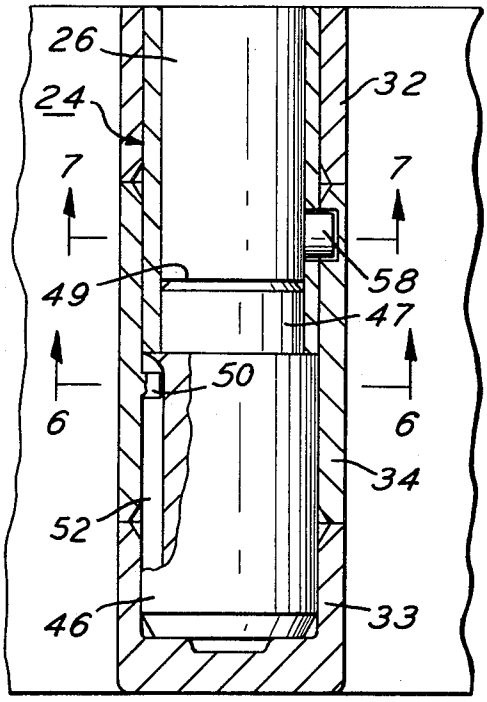


FIG. 6

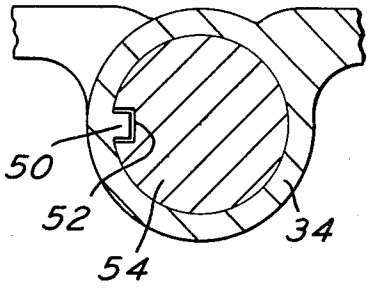


FIG. 7

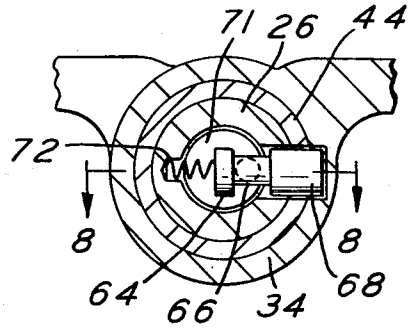
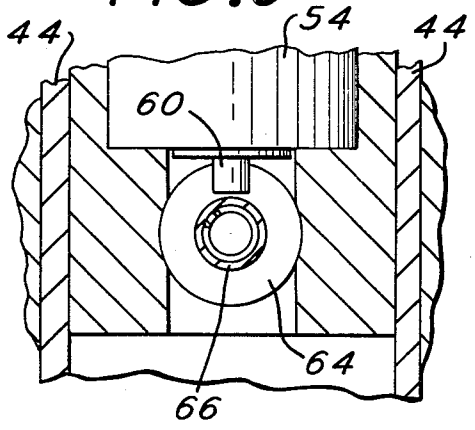


FIG. 9



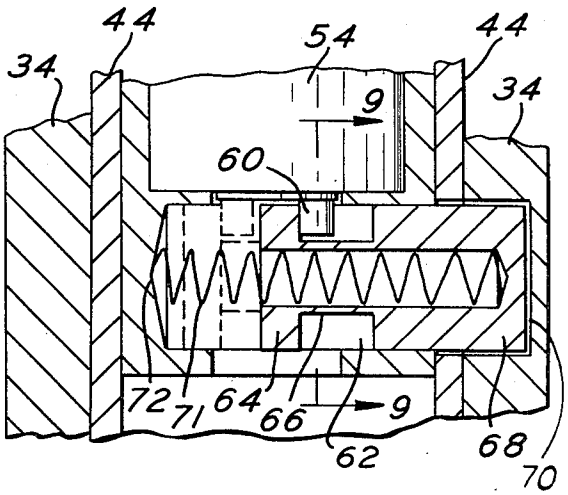


FIG. 10

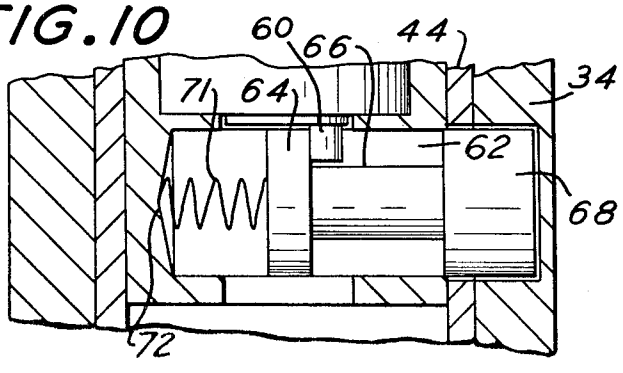
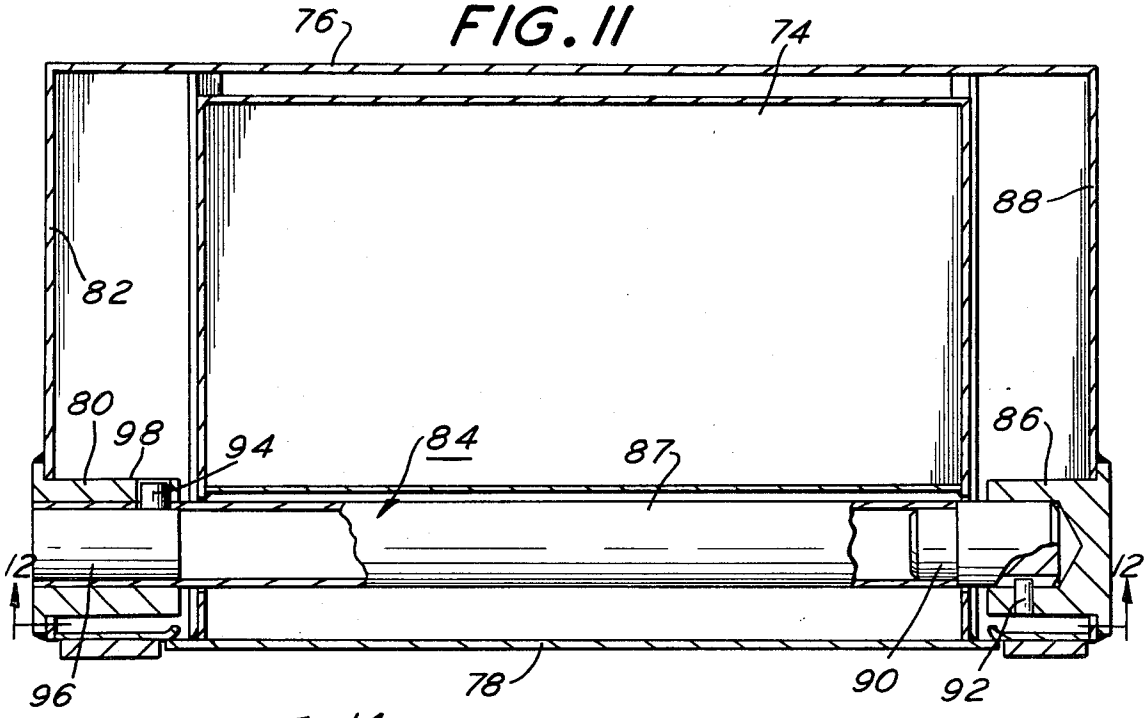


FIG. 8

INVENTOR
RUSSELL W. WALTERS
BY
Malesan, Kimmelman & Ratner

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FIG. 11



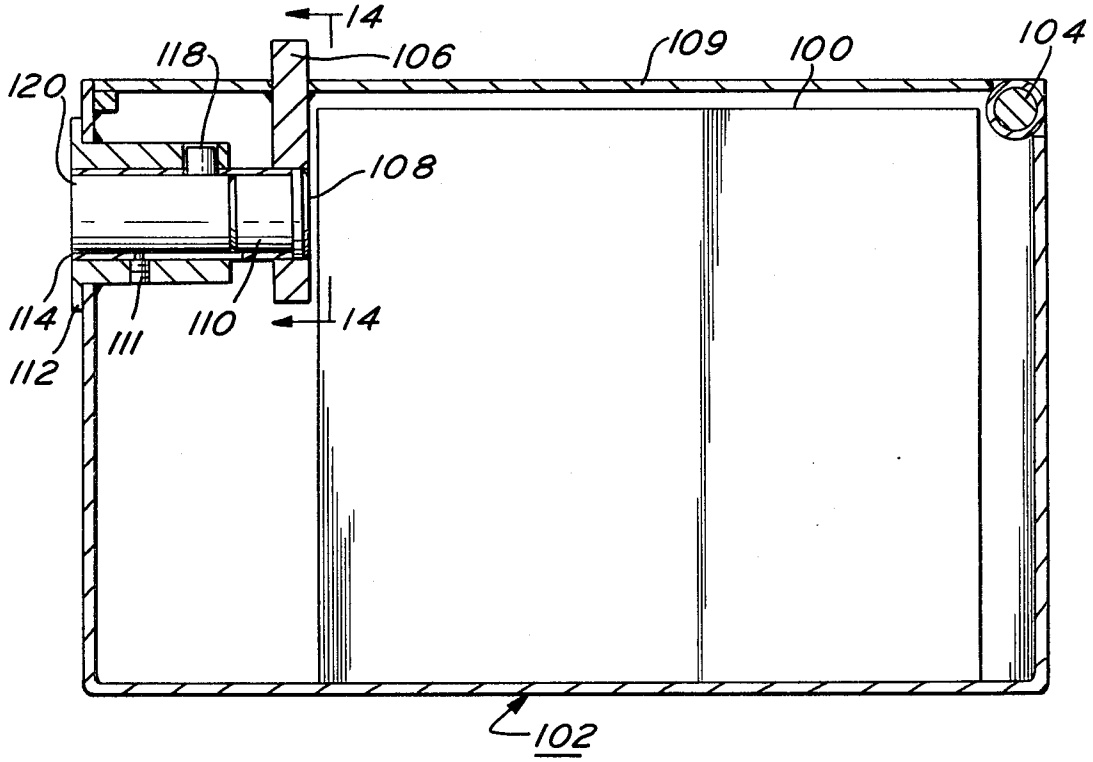


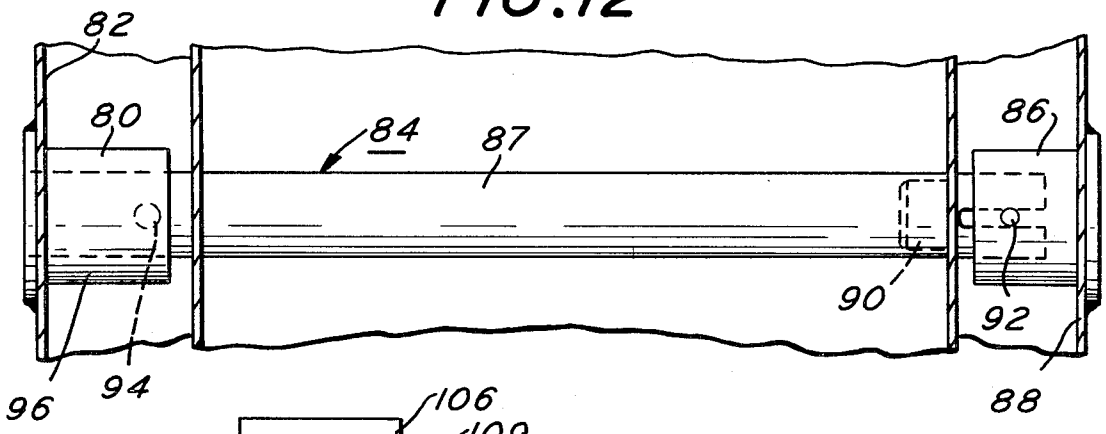
FIG. 13

INVENTOR
RUSSELL W. WALTERS

BY
Maleson, Kimmelman & Ratner

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FIG. 12



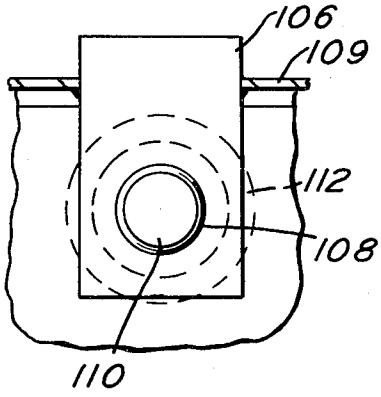


FIG. 14

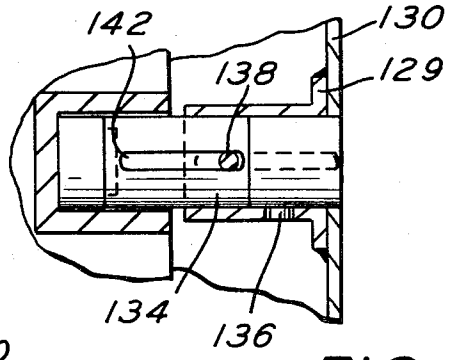


FIG. 16

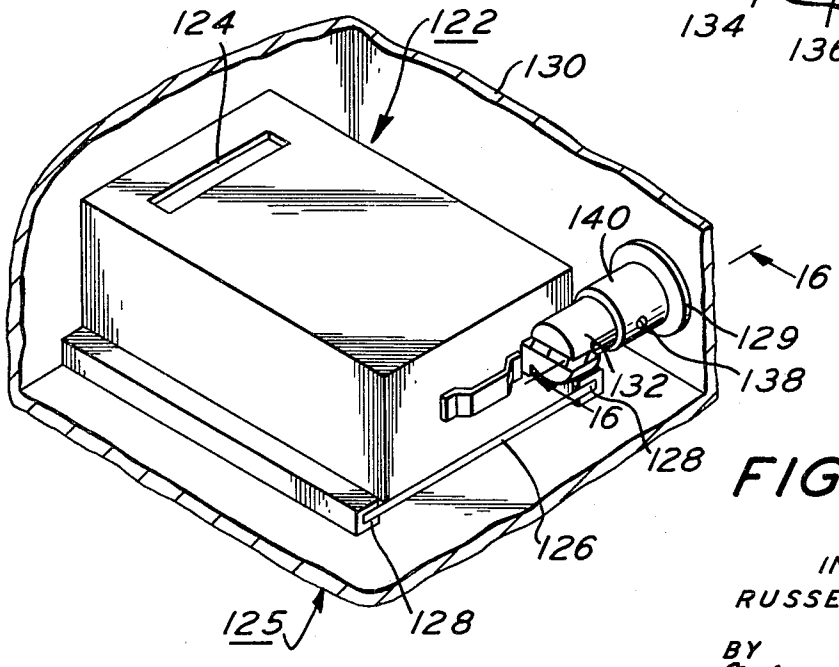


FIG. 15

INVENTOR
RUSSELL W. WALTERS

BY
Maleson, Kimmelman & Ratner

ATTORNEYS

LOCKING BAR ASSEMBLY

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to the field of locking systems. In particular, this invention relates to an improved bar locking assembly which is substantially impervious to external manipulation.

2. Prior Art

Locking bars for restraining the movement of a plurality of elements using tubular locking mechanisms to control a locking pin are known in the art. However, the prior art provides for a slot machined around the circumference of the moveable member locking mechanism insert into which the locking pin is moved. By externally rotating the locking mechanism, the locking pin may be oriented away from the face of the surfaces which are to be restrained. A drill or other means may be used to form a through opening from the exterior surfaces into the slot. Application of compressive force on the locking pin through the opening will cause the pin to retract into the locking mechanism and allow the mechanism to be easily removed from the moveable members. Further, in previous art, to insert the locking mechanism within the moveable members, a key actuated cylinder lock had to be moved to an unlocked position to retract the locking pin into the lock mechanism for insertion within the moveable members. Therefore, key actuation of the locking mechanism was necessary when placing the mechanism into the moveable members. Additionally, locking bar assemblies having extended locking mechanisms to provide restraint of a receptacle by blocking the exit path from a container, as well as locking bars to forceably restrain movement of an enclosure wall have not been found in the prior art.

SUMMARY OF THE INVENTION

A locking bar assembly which comprises a plurality of relatively moveable members having respective bores passing therethrough. One of the moveable members has a detent formed in a predetermined segment of the moveable members and adjacent to the bore. Locking and unlocking bolt means which has a translatable locking pin is slideably inserted through the bores in a specific orientation with respect to the detent to allow translation of the locking pin into and out of the detect facing the surfaces which are to be restrained.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of the locking bar assembly in a vertical mount between moveable elements;

FIG. 2 is a perspective view of the locking bar assembly in an assembled configuration;

FIG. 3 is an exploded perspective view of the locking bar components;

FIG. 4 is an exploded view of the locking mechanism;

FIG. 5 is a cross-sectional view of the locking bar assembly taken along the section line 5—5 of FIG. 2;

FIG. 6 is a plan cross-sectional view of the locking bar assembly taken along the sectional line 6—6 of FIG. 5;

FIG. 7 is a plan cross-sectional view showing placement of a locking pin within the locking bar assembly taken along the sectional line 7—7 of FIG. 5;

FIG. 8 is an elevation cross-sectional view of the locking pin placement within the assembly taken along the sectional line 8—8 of FIG. 7;

FIG. 9 is an elevation cross-sectional view of the locking pin placement and an actuating rod member taken along the section line 9—9 of FIG. 8;

FIG. 10 is an elevation cross-sectional view of the locking pin placement within an embodiment of the locking bar assembly;

FIG. 11 is a plan view partially in section of an embodiment of the assembly having an elongated locking bolt to block a frontal opening of an enclosed frame;

FIG. 12 is an elevation view of the locking bar assembly taken along the section line 12—12 of FIG. 11;

FIG. 13 is an elevation section view of an embodiment of the locking bar assembly to restrain movement of an upper wall of an enclosed housing by insertion of the locking bolt into a strike rigidly secured to the upper wall;

FIG. 14 is a side elevation view of the locking mechanism inserted within the strike taken along section line 14—14 of FIG. 13;

FIG. 15 is a perspective view of an embodiment of the locking bar assembly secured to a rigid frame to prevent exit of a box having one exit and entrance path; and,

FIG. 16 is a section view of the embodiment shown in FIG. 15 taken along the section line 16—16 of FIG. 15.

DISCLOSURE OF THE PREFERRED EMBODIMENTS

Referring to FIG. 1 there is illustrated the preferred embodiment of a locking bar assembly or bar lock 10 to restrain displacement between relatively moveable elements 14 and 16. As shown, assembly 10 is rigidly secured in a vertical mount to frontal surfaces 17 and 18 of respective elements 14 and 16 at the vertical element interface 19. In similar fashion, bar lock 10 may be horizontally top mounted on surfaces 13 and 15 in the event moveable elements 14 and 16 are bottom hinge mounted. Additionally, locking bar assembly 10 is adaptable to provide restraint forces in maintaining relatively fixed displacement between double sliding or swinging doors as well as restriction of motion to drawers within an enclosure, and in general, to prevent relative motion between any moveable elements of a system to be placed in some fixed relation to each other.

As shown in FIGS. 2 and 3, the preferred embodiment of locking bar assembly 10 comprises moveable members or plates 20, 22 and locking bolt mechanism 23 which is inserted within members 20, 22 to permit relative rotation but no displacement between respective members of assembly 10. Moveable members 20 and 22 are rigidly fastened to opposing surfaces of relatively moveable elements 14 and 16 by bolts or screws fastened through holes 30 drilled, machined, or formed in moveable members 20 and 22. Moveable member 20 has a pair of axially aligned lugs 32, 33, formed in one piece construction, and longitudinally displaced from each other. Axial bore 36 passing through lug 32 and partially passing into lug 33 is of sufficient diameter to

allow slideable insertion of locking bolt mechanism 23. Lower lug 33 having bore 36 passing partially therethrough is cup-shaped to provide a stop or seat for locking mechanism 23 upon insertion within moveable members 20 and 22 to prevent through passage of mechanism 23 from assembly 10 upon insertion.

Cylindrical lug member 34 formed on moveable member 22 has a lateral length substantially equal to the longitudinal displacement between lugs 32 and 33 on member 20 in order to provide a slideable contact interface between lugs 32, 33 and 34 on respective annuli when members 20 and 22 are axially aligned. Axial bore 38 passing through lug 34 has substantially the same diameter as axial bores 36 passing through lugs 32, 33 to provide a through bore of constant internal diameter when members 20 and 22 are placed in an axially aligned interfacing position. In this manner, moveable members or plates 20 and 22 may be rigidly secured to elements 14, 16 and interfaced to allow insertion of locking mechanism 23 through bores 36 and 38, thereby providing a restraint to movement between elements 14 and 16.

Cylindrical lug 34 in moveable member 22 has a detent 40 formed therein adjacent to axial bore 38 and substantially orthogonal to the longitudinal axis of bores 36 and 38. Detent 40 is formed within wall 39 of lug 34 adjacent to arial bore 38 and being discontinuous with respect to a transverse contour line of wall 39. Angular orientation of the singular detent 40, as shown in FIG. 3, is positioned to face members 20 and 22 and substantially directed toward elements 14 and 16 or any other surfaces to which members 20, 22 may be attached. Specific placement of detent 40 and positioned at a predetermined angular orientation within wall 39 of lug 34 in the manner shown and described provides a locking apparatus that is impervious to external manipulations which may move locking mechanism 23 to an unlocked position thereby permitting slideable retraction of mechanism 23 from bores 36 and 38.

Locking bolt mechanism or assembly 23 illustrated in FIGS. 3 and 4 comprises cylindrical tube 26 containing a cylinder lock 54 and locking bolt 24 to slideably receive tube 26. Locking assembly 23 is slidably insertable within bores 36 and 38 of members 20 and 22. Locking bolt 24 as shown in FIG. 4 includes tubular element 44 having a centrally bored passage 42 of constant internal diameter passing therethrough along the longitudinal axis, and cylindrical base member 46 of solid one piece construction, having an external diameter substantially equal to the external diameter of tubular member 44. Referring to FIG. 5, lateral surface 47 of base member 46 is tapered to upper surface 49 having a diameter slightly less than that of internally bored passage 42. Tapering in this way allows base member 46 to be force fit into element 44. Once constructed, locking bolt 24 is cup-shaped, having a longitudinally extended cylindrical base 46. Locking bolt opening 48 formed in, and extending through the lateral wall of tubular element 44 is aligned with detent 40 on lug 34 of moveable member 22. Specific angular orientation of locking bolt opening 48 with detent 40 is accomplished, as shown in FIG. 6, by extension element 50 formed in a predetermined angular displacement on lug 34 to slideable contact groove or slot 52 longitudinally formed within cylindrical base member 46 of locking bar 24. The relative positioning of slot 52, bolt opening 48 and extension element 50 is such as to permit axial alignment between locking bolt opening 48 and detent 40 in lug 34 when locking bolt 24 is inserted through bores 36 and 38 of moveable members 20 and 22.

Cylindrical tube 26, of diameter sufficient to allow slideable insertion within centrally bored passage 42 of locking bolt 24 contains the lock-unlock mechanism. Cylinder lock 54 as shown in FIG. 4 is internally secured within tube 26 on one end thereof. Cylinder lock 54 is actuated by insertion and rotation of key 28, being standard in operation and not part of the invention concept as detailed by this invention. Tube passage 56 is formed in a lateral surface and passes through a lateral wall of tube 26. Passage 56 is of substantially the same diameter but slightly in excess of locking pin 58 to allow translation of pin 58 through tube passage 56 relative to the lateral wall of cylindrical tube 26 whether pin 58 is being ejected from tube 26 or retracted from detent 40 located within a portion of wall 39 adjacent to base 38 and being discontinuous with respect to a closed perimeter line of wall 39.

In the assembly of locking mechanism 23 into a one-piece assembly, cylindrical tube 26 is slideably inserted into centrally bored passage 42 within locking bolt 24 until locking pin 58 is axially aligned with locking bolt opening 48 to permit passage of locking pin 58 through opening 48 and finally into a locking position within detent 40 of lug 34. Locking pin 58 is moveable with respect to locking bolt 24 in a direction substantially normal to the longitudinal axis of bolt 24 as shown in FIG. 8. Locking pin 58 is cylindrical and formed in one piece construction having a race or slot 62 machined into a lateral wall thereof. Rear cylinder end 64 and forward cylinder end 68 have substantially the same external diameter and are connected by stem 66 having a diameter less than members 64 and 68, depressed by the annular width of race 62. Locking pin bore 70 having a smaller internal diameter than stem 66 is drilled longitudinally within locking pin 58 from rear cylinder 64 passing into but not through forward cylinder end 68. Internally placed within locking pin bore 70 is helical spring 71 longitudinally inserted to contact forward cylinder end 68 with locking pin bore 70 on one end and on the opposing end in a depression 72 formed within cylindrical tube 26 as shown in FIG. 8. Depression 72 provides a shoulder or placement for spring 71 to prevent movement of spring 71 relative to the internal wall of tube 26. In this manner, helical spring 71 applies a contact force to locking pin 58 in an outward direction with respect to the lateral walls of tube 26. This force has the effect of providing a directionally oriented positioning of locking pin 58 in a direction normal to the longitudinal axis of locking mechanism 23 in an outward manner with respect to the lateral walls of tube 26 and locking bolt 24.

Translation of movement of locking pin 58 with respect to locking bolt 24 and tube 26 is accomplished by actuation of rod member 60 rotated in response to key 28 rotation within cylindrical lock 54. As is seen in FIG. 8, rod member 60 extends into race or slot 62 and contacts rear cylinder end 64. Since spring 71 provides a force in an outward direction, rod member 60 is at all times contacted by rear cylinder end 64.

Rotation of key 28 in cylinder lock 54 provides the means whereby rod member 60 may be rotated to a first locked position or to a second unlocked position. The first locked position of rod member 60 and second unlocked position of rod 60 are shown in FIGS. 8 and 10. When rod member 60 is in a locked position, locking pin 58 extends through tube passage 56, locking bolt opening 48, and into detent 40. Rotation of key 28 within cylinder lock 54 responsively rotates rod member 60 to a second unlocked position where the locking pin 58 is released from detent 40 of lug 34, illustrated by dotted lines in FIGS. 8 and 10.

The dimension of race or slot 62 in a longitudinal direction with respect to locking pin 58 is such that when rod member 60 is in the second locked position and contacting rear cylinder end 64, the longitudinal displacement between rod member 60 and forward cylinder end 68 is less than the extension of forward cylinder end 68 from tubular element 44 of locking bolt 24. When locking mechanism 23, comprising cylinder tube 26 and locking bolt 24 are to be inserted into bores 36 and 38 in members 20 and 22, locking pin 58 cannot be manually forced flush with the external lateral surface of tubular element 44. Therefore, insertion of locking bolt 24 within bores 26 and 28 must be accompanied by insertion of key 28 into cylinder lock 54 and an appropriate rotation of rod member 60 to a second unlocked position as shown in FIG. 8 where locking pin 58 may be manually depressed flush with the external surface of tubular member 44 and then slidably inserted into bores of members 20 and 22.

In an embodiment of the inventive concept as shown in FIG. 10, the longitudinal width of race 62 is extended in order that the displacement between rod member 60 and forward cylinder end 68 when rod member 60 is in a first lock position is such that this distance is equal to the extension of locking pin 58 from tube member 44 of lockfing bolt 24. The increase of the longitudinal race width over that illustrated in FIG. 8 permits locking pin 58 to be manually forced flush with the external surface of tubular member 44 without actuation of cylinder lock 54 to the second unlocked position of rod 60 when locking mechanism 23 is slideably inserted through bores 36 and 38. In this embodiment, an operator may restrain moveable members 20 and 22 by insertion of locking mechanism 23 without the need of any key actuation of cylinder lock 54 as opposed to the preferred embodiment where cylinder lock 54 is actuated to move rod 60 into the second unlocked position and cylindrical tube 26 containing cylinder lock 54 is inserted into locking bolt 24. Upon insertion, tube 26 is angularly rotated until locking bolt opening 48 is aligned with locking pin 58 extending from cylinder tube 26 through passage 56. Locking pin 58 is manually depressed and locking mechanism 23 is inserted into axial bores 36 and 38 within moveable members 20 and 22. Groove or slot 52 in cylindrical base member 46 is positioned to slideably insert within extension element 50 on lug 34 in a manner such that when locking bolt 24 is slideably inserted, locking pin 58 is axially aligned with detent 40. Detent 40 is directionally located adjacent to axial bore 38 and oriented in a direction substantially towards the surface to be restrained. The directional placement of detect 40 now provides a safeguard in locking bar assembly 10 wherein the drilling through the wall of lug member 34 in moveable member 22 will not allow depression of locking pin 58 to provide removal of locking bolt 24.

In another embodiment of the invention, as shown in FIGS. 11 and 12, fare box or receptacle 74 is restrained within enclosed frame 76. Frontal member 78 is slideably or otherwise removable providing frame 76 with a frontal opening to permit removal or insertion of fare box 74. In this configuration elongated locking bolt 84 passing horizontally across the frontal opening contains box 74 within frame 76. Housing or bushing 80 is rigidly attached to forward frame wall 82 having a centrally bored through passage of sufficient diameter to permit slideable entrance of elongated locking bolt 84. Strike 86 having a central passage partially developed in the longitudinal direction to accept entrance of elongated locking bolt 84 is rigidly fastened to rear frame wall 88 and passes therethrough. Tubular member 87 is force fit into base member 90 having a groove in the longitudinal direction to slideably engage extension element 92 of strike 86. Engagement of extension element 92 with the longitudinal groove in base member 90 angularly orients elongated locking bolt member 84 in such manner as to axially align locking pin 94 of locking mechanism 96 with an opening 98 in housing 80. In this manner, box 74 is restrained from movement through the frontal opening when frontal member 78 is removed. Retraction of locking pin 94 from opening 98 and removal of elongated locking bolt 84 provides a passage whereby box 74 may be removed from enclosed frame 76.

In still another embodiment of the invention shown in FIGS. 13 and 14, a box or coin assembly 100 is situated within an enclosed housing 102 having upper wall 109 which may be relatively displaced by rotation around hinge member 104 thereby providing a top opening through which coin assembly 100 may be removed from the interior of housing 102. Strike or tab 106 is rigidly secured by weld or other means to upper wall 109 and passes therethrough. Strike 106 has a through passage 108 of sufficient diameter to accept insertion of locking bolt 110. Bushing 112 having a central passage 114 of sufficient diameter to accept locking bolt 110 and substantially equal in diameter to through passageway 108 of tab 106 is secured to forward housing wall 116 and has an opening passing through a lateral wall to permit entrance of locking pin 118 of locking mechanism 120. Locking bolt 110 is slideably restrained within bushing 112 by set screw 111 inserted through a lateral wall of bushing 112 and extending into a longitudinal slot formed within a lateral wall of bolt 110. In this manner bolt 110 may be slideably moved relative to bushing 112 but not removeable therefrom.

Insertion of locking bolt 110 within through passage 108 of strike 106 provides a restraint to any rotational displacement of upper wall 109 with respect to housing 102. Box 100 is then restrained within housing 102 and cannot be removed. Unlocking of locking mechanism 120 by retraction of locking pin 118 allows removal of locking bolt 110 from strike 106 to provide relative movement capability of upper wall 109 and removal of box 100.

Still another embodiment of the inventive concept is displayed in FIGS. **15** and **16** where cashbox **122** having a coin receptacle opening **124** within a surface of box **122** to accept coins internal to box **122** is slideably attached to rigid frame **125**. Positioning of opening **124** may be on any surface of box **122** convenient for collection of coins. Box base **126** slideably moves within tracks **128** rigidly attached to frame **125** to provide means of insertion and removal of box **122** with respect to rigid frame **124** having one exit and entrance path for cash box **122**.

Bushing **129** having an axial bore passing through it is rigidly attached to frame wall **130** by weld, bolts or other rigid attachment not important to the invention. Locking bolt **132** is slideably insertable through the axial bore of bushing **129** and is of sufficient length to intersect the entrance and exit path of cash box **122**. Locking mechanism **134**, as described in preceeding paragraphs, has locking pin **136** to be inserted within a recess of bushing **129** when locking bolt **132** is extended into the path of cash box **122** thereby preventing removal of box **122** when mechanism **134** is placed in a locked position. Set screw **138** passing through lateral wall **140** of bushing **129** interacts and is slideable within groove **142** which is longitudinally formed in locking bolt **132**. In this manner, locking bolt **132** is slideable with respect to but not removeable from bushing **129**. Groove **142** is of sufficient length to permit insertion and retraction of bolt **132** to and from the entrance and exit path of box **122** when locking pin **136** is in a retracted position with respect to the recess formed within bushing **129**. In similar fashion to other embodiments of the invention where pin **136** is inserted into the recess of bushing **129**, bolt **132** is in a locked position to restrain movement of box **122** with respect to rigid frame **125**.

What is claimed is:

1. A locking bar assembly, comprising:

a. a plurality of interfacing members movable with respect to each other and having respective axially aligned bores passing therethrough, one of said movable members having a detent formed in a predetermined segment of a wall formed by its respective bore, said detent being discontinuous with respect to a transverse contour line of said wall and is directionally formed within a portion of said transverse contour line of said wall in a direction substantially facing and adjacent to at least one surface to which said movable members are rigidly secured;

b. locking and unlocking bolt means having a locking pin translatable through a lateral surface thereof for insertion of said locking pin into said detent when said locking pin is aligned with said predetermined segment of said wall, said bolt means slideably insertable within said bores of said movable members and seated therein; and,

c. orientation means formed on said bolt means and on at least one of said walls of said movable members to orient said bolt means and said locking pin in relation to said detect formed in said predetermined segment of said wall and permit translation of said locking pin into and out of said detent when said bolt means is seated within said bores of said movable members.

2. The apparatus as recited in claim **1** wherein said locking and unlocking bolt means comprises:

a locking bolt slideably insertable through said bores having a longitudinal central passage and an opening in a lateral wall thereof, said opening to be axially aligned with said detent when said locking bolt is inserted within said bores; and,

locking and unlocking means insertable within said central passage of said locking bolt to move said locking pin through said opening in said lateral wall into and out of said detent.

3. The apparatus as recited in claim **2** wherein said orientation means includes:

an extension element extending from a wall of one of said moveable members adjacent to its respective bore and extending therein; and,

a longitudinal groove formed within an external surface of said lateral wall of said locking bolt to slideably engage said extension element when said locking bolt is inserted within said bores.

4. The apparatus as recited in claim **3** wherein said longitudinal groove is particularly positioned with respect to said opening of said lateral wall to permit said opening to be axially aligned with said detent when said locking bolt is inserted through said bores and engages said extension element within said longitudinal groove.

5. The apparatus as recited in claim **4** wherein said locking bolt is tubular in construction.

6. The apparatus as recited in claim **5** wherein said locking bolt comprises:

a tubular member having an external diameter of sufficient dimension to be slideably inserted through said bores; and,

a cylindrical base member of diameter substantially equal to said external diameter of said tubular member having a tapered lateral surface to be force fit within an internal diameter of said tubular member to provide a locking bolt of constant external diameter throughout the longitudinal length.

7. The apparatus as recited in claim **2** wherein said locking and unlocking means comprises:

a cylindrical tube slideably insertable in said longitudinal central passage of said locking bolt, said cylindrical tube having a passage in a lateral wall thereof to permit translation of said locking pin extending therefrom;

a cylinder lock insertable within one end of said cylindrical tube; and,

lock and unlock operation means responsive to said cylinder lock actuation to reciprocally translate said locking pin to a first position through said tube passage, said locking bolt opening, and into said detent, and to a second position wherein said locking pin is retracted from said detent.

8. The apparatus as recited in claim **7** wherein said lock and unlock operation means comprises:

a rod member axially displaced and rotatable to and from said first and second position with respect to the longitudinal axis of said cylindrical tube in response to actuation of said cylinder lock to contact and translate said locking pin to and from said first and second position respectively; and,

a spring to contact said locking pin providing a force in an outward direction with respect to said lateral wall of said cylindrical tube and maintain contact between said rod member and said locking pin.

9. The apparatus as recited in claim 8 wherein said locking pin is cylindrical having a race formed in a lateral wall thereof to provide in one piece construction a forward locking pin cylinder head end and a rear locking pin cylinder head end, said rod member extending longitudinally into said race to contact said rear locking pin cylinder head end.

10. The apparatus as recited in claim 9 wherein said locking pin is centrally bored to provide an insert cavity for said spring.

11. The apparatus as recited in claim 10 wherein said spring is helical, contacting said cylindrical tube in a recess formed in a lateral wall normally displaced to said longitudinal axis and extending into said central bore of said locking pin to contact said locking pin and provide said outward force.

12. The apparatus as recited in claim 11 wherein said locking pin race is sufficiently wide to permit said forward locking pin end in said first position to be manually moved flush with said locking bar external diameter wall to permit said bolt means to be inserted within said bores of said moveable members without rotating said rod member to said second position.

13. A locking bar assembly adapted to restrain a receptacle within a housing having a removable frontal member, said receptacle being removable from said housing through an opening formed when said frontal member is removed from said housing, comprising:

a. a first and second axially aligned members rigidly secured to respective opposing side walls and positioned adjacent to a frontal portion of said housing, said aligned members being axially bored, one of said aligned members having a detent formed in a predetermined segment of a wall formed by its respective bore;

b. locking and unlocking bolt means having a locking pin, said bolt means slideably insertable through said bores of said aligned members and extending therebetween to block said frontal opening of said housing and prevent removal of said receptacle from within said housing, said locking pin movable into and out of said detent formed in said predetermined segment of said wall of one of said aligned members when said bolt means is inserted within said bores of said aligned members; and,

c. orientation means formed on said bolt means and on at least one of said walls of said aligned members to orient said bolt means and said locking pin in relation to said detent formed in said predetermined segment of said wall.

14. The apparatus as recited in claim 13 wherein said locking and unlocking bolt means comprises:

a. an extended locking bolt slideably inserted through said bores of said first and second sligned members, said locking bolt having a longitudinal central passage and an opening in a lateral wall thereof, said orientation means for axially aligning said opening with said detent in said first member when said extended locking bolt is inserted within said bores; and,

b. locking and unlocking means insertable within said central passage of said extended locking bolt to move said locking pin through said opening in said lateral wall into and out of said detent in said first member.

15. The apparatus as recited in claim 14 wherein said orientation means includes a longitudinal slot formed within said lateral wall of said locking bolt adapted to engage an extension member mounted to said second member and extending into said bore of said second member, said engagement of said slot and said extension member defining a predetermined angular orientation with respect to said lateral wall opening for permitting said opening to be axially aligned with said detent in said first member.

16. The locking bar assembly as recited in claim 15 wherein the extended locking bolt comprises:

a tubular member slideably inserted through said bores; and,

a cylindrical base member having a tapered lateral surface to be forced within an internal diameter of said tubular member.

17. The device as recited in claim 14 wherein said locking and unlocking means comprises:

a cylindrical tube slideably insertable in said longitudinal central passage of said extended locking bolt, said cylindrical tube having a through passage in a lateral wall thereof to permit translation of said locking pin extending therefrom;

a cylinder lock insertable within one end of said cylindrical tube; and,

lock and unlock operation means controlled by said cylinder lock to reciprocally translate said locking pin to a first position through said tube passage, said extended locking bolt opening and into said detent of said first member, and to a second position where said locking pin is retracted from said detent in said first member.

18. A locking bar assembly adapted to be secured to a housing having a movable wall, comprising:

a. a first member having an axial bore therethrough forming an inner wall having a detent formed in a predetermined segment of said wall, said detent being discontinuous with respect to a transverse contour line of said wall and said first member being rigidly secured to a stationary wall of said housing;

b. a second member axially bored and rigidly fastened to said movable wall of said housing, said bores of said first and second members being axially aligned when said movable wall is positioned with respect to said housing to form an enclosure;

c. locking and unlocking bolt means having a locking pin movable through a lateral surface thereof for insertion of said locking pin into said detent when said locking pin is aligned with said predetermined segment of said wall, said bolt means insertable through said bores of said axially aligned members; and,

d. orientation means formed on said bolt means and said first member to axially align said locking pin with said detent when said bolt means is inserted within said aligned members.

19. A locking bar assembly adapted to be secured to a housing and restrain a receptacle therein, said recep-

tacle having only one exit path from said housing, comprising:

a. a bushing member having an axial bore therethrough defining an inner wall of said bushing member, said inner wall having a detent formed in a predetermined segment thereof, said bushing member being rigidly secured to a stationary wall of said housing;

b. locking and unlocking bolt means having a locking pin for insertion into said detent of said inner wall of said bushing member when said locking pin is aligned with said predetermined segment of said wall, said bolt means slideably insertable through said bore of said bushing member and retractable into and out of said exit path of said receptacle for capturing and releasing said receptacle respectively,; and,

c. orientation means formed on said bolt means and said bushing member to orient said bolt means and said locking pin in relation to said detent formed in said predetermined segment of said wall.

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