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United States Patent	12392194
Kind Code	B1
Date of Patent	August 19, 2025
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Gated barrier with lift lock

Abstract

The present lift lock includes a slide having feet and a slot between the feet, where such slide further includes an interior generally full length wall for acting as a stop, and where such slide further includes gripping ribs that increase in width from the front end of the slide to the rear end of the slide.

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Family ID: **1000008106622**

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Appl. No.: **18/827823**

Filed: **September 08, 2024**

Related U.S. Application Data

continuation parent-doc US 18377822 20231008 US 12084913 child-doc US 18827823
continuation parent-doc US 18108648 20230212 US 11781376 20231010 child-doc US 18377822
continuation parent-doc US 17517613 20211102 US 11578529 20230214 child-doc US 18108648

Publication Classification

Int. Cl.: **E06B9/04** (20060101); **E06B3/52** (20060101); **E06B11/02** (20060101); E06B9/00 (20060101)

U.S. Cl.:

CPC **E06B9/04** (20130101); **E06B3/52** (20130101); **E06B11/02** (20130101); E06B2009/002 (20130101)

Field of Classification Search

CPC: E06B (11/02); E06B (2009/002); E06B (9/04); E06B (9/02); E06B (7/32); E06B (3/52); E05C (1/006); E05C (1/04); E05B (65/0007); E05B (65/0014); E05D (15/581)

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Primary Examiner: Rephann; Justin B

Background/Summary

(1) This application is a continuation of U.S. patent application Ser. No. 18/377,822 filed Oct. 8, 2023 (U.S. Pat. No. 12,084,913 issued Sep. 10, 2024) and claims the benefit thereof under 35 U.S.C. § 120, which application is a continuation of U.S. patent application Ser. No. 18/108,648 filed Feb. 12, 2023 (U.S. Pat. No. 11,781,376 issued Oct. 10, 2023) and claims the benefit thereof under 35 U.S.C. § 120, which application is a continuation of U.S. patent application Ser. No. 17/517,613 filed Nov. 2, 2021 (U.S. Pat. No. 11,578,529 issued Feb. 14, 2023) and claims the benefit thereof under 35 U.S.C. § 120, all of which applications are hereby incorporated by reference their entireties into this application.

FIELD OF THE INVENTION

(1) The present invention relates to a residential home barrier, particularly to a gate in the residential home barrier, and specifically to a gate that is swingable in the residential home barrier on a first axis and raiseable and lowerable in the residential home barrier on the first axis.

BACKGROUND OF THE INVENTION

(2) A residential home barrier is a structure that may be placed at a location in a home or about an exterior of the home to restrict access to certain areas. For example, a residential home barrier may be placed at the top of a set of stairs to prevent a toddler from falling down the set of stairs. Or a residential home barrier may be placed in a fence about a swimming pool. Or a residential home barrier may be placed between a dining room and a kitchen to permit a caretaker to move freely in the kitchen without a dog underneath his or her feet.

(3) It is preferable that a residential home barrier may be opened and closed easily by an older child, teenager, or adult, but not by a toddler, even one possessing extraordinary effort and talent. To a toddler, it is preferred that the residential home barrier presents an extreme challenge.

(4) It is preferably that two or even three step operations must be performed prior to the step of swinging open a gate in a residential home barrier. At the same time, such two or three step operation cannot be unduly burdensome to the older child, teenager, or adult.

SUMMARY OF THE INVENTION

(5) A feature of the present invention is the provision in a gated barrier of a first combination, where the first combination includes: a) a frame, the frame having an upper end portion and a lower end portion; b) a gate engaged to the frame such that the gate is swingable relative to the frame about a first axis; c) the gate being liftable relative to the frame such that the gate is liftable on the first axis; d) the gate having a proximal end and a distal free end; e) the proximal end of the gate being disposed between the upper end portion and the lower end portion of the frame, the proximal end of the gate being pivotally engaged to the frame for the swinging of the gate relative to the frame; f) a slide on the gate, the slide having first and second positions; g) the slide in the first position being disposed on the first axis and between the proximal end of the gate and the upper end portion of the frame such that the proximal end of the gate is not liftable to the upper end portion of the frame; h) the slide being slideable away from the first axis to the second position, the second position being an out-of-the-way position such that the proximal end of the gate is liftable to be adjacent to the upper end portion of the frame; i) the first axis being defined by a pivot member engaged to the frame; j) wherein the slide includes a slot for receiving the pivot member, the slot including a neck having a width less than a diameter of the pivot member, the slot including an opening inwardly of the neck and in communication with the neck, the opening being equal to or slightly larger than the diameter of the pivot member, such that the pivot member snaps into the opening through the neck when the slide is pushed into the first position; and k) wherein the slide includes a front wall and feet projecting forwardly of the front wall, the feet forming said slot.

(6) Another feature of the present invention is the provision in a gated barrier of a second combination, where the second combination includes: a) a frame, the frame having an upper end portion and a lower end portion; b) a gate engaged to the frame such that the gate is swingable relative to the frame about a first axis; c) the gate being liftable relative to the frame such that the

gate is liftable on the first axis; d) the gate having a proximal end and a distal free end; e) the proximal end of the gate being disposed between the upper end portion and the lower end portion of the frame, the proximal end of the gate being pivotally engaged to the frame for the swinging of the gate relative to the frame; f) a slide on the gate, the slide having first and second positions; g) the slide in the first position being disposed on the first axis and between the proximal end of the gate and the upper end portion of the frame such that the proximal end of the gate is not liftable to the upper end portion of the frame; h) the slide being slideable away from the first axis to the second position, the second position being an out-of-the-way position such that the proximal end of the gate is liftable to be adjacent to the upper end portion of the frame; i) a slide mount between the slide and the gate, the slide mount having a closed end; j) the slide being slideable to and away from the first axis on the slide mount; and k) wherein the slide includes an interior wall that extends from a location adjacent to a ceiling of the slide to a location adjacent to a bottom of the slide, the interior wall abutting the closed end of the slide mount and working as a stop for the slide to stop sliding of the slide when the slide is slid away from the first axis.

(7) Another feature of the present invention is the provision in a gated barrier of a third combination, where the third combination includes: a) a frame, the frame having an upper end portion and a lower end portion; b) a gate engaged to the frame such that the gate is swingable relative to the frame about a first axis; c) the gate being liftable relative to the frame such that the gate is liftable on the first axis; d) the gate having a proximal end and a distal free end; e) the proximal end of the gate being disposed between the upper end portion and the lower end portion of the frame, the proximal end of the gate being pivotally engaged to the frame for the swinging of the gate relative to the frame; f) a slide on the gate, the slide having first and second positions; g) the slide in the first position being disposed on the first axis and between the proximal end of the gate and the upper end portion of the frame such that the proximal end of the gate is not liftable to the upper end portion of the frame; h) the slide being slideable away from the first axis to the second position, the second position being an out-of-the-way position such that the proximal end of the gate is liftable to be adjacent to the upper end portion of the frame; i) wherein the slide includes first and second sides, wherein the slide includes first and second ends, wherein each of the first and second sides includes an outer face, and wherein each of the outer faces includes a set of vertically extending ribs to provide a better grip by fingers, the vertically extending ribs being spaced apart from each other, each of the vertically extending ribs including an inner end where said vertically extending rib is engaged to the slide, each of the vertically extending ribs including an outer end, a distance from the inner end of said vertically extending rib to the outer end of said vertically extending rib being a length; j) wherein the vertically extending ribs on the first side of the slide increase in length as the vertically extending ribs extend from the first end to the second end; and k) wherein the vertically extending ribs on the second side of the slide increase in length as the vertically extending ribs extend from the first end to the second end.

(8) An advantage of the first combination is a slot that requires less resistance as the slide is slid on to and off the pivot member. The less resistance is provided by lowering the height of the slot from extending up and down the slide to being located only at a bottom portion of the slide.

(9) Another advantage of the first combination is that the slot stands out more visually. A new user of the gate more quickly recognizes how the slide works.

(10) An advantage of the second combination is a strong intermediate or interior wall or stop that utilizes the height of the slide for abutting the closed end of the slide mount.

(11) Another advantage of the second combination is that the strong intermediate or interior wall or stop serves double duty. The interior wall works not only as a stop but also holds side walls of the slide together so as to resist spreading of such side walls as the slide is slid onto the slide mount.

(12) An advantage of the third combination is that the ribs of increasing length provide an easier pinch of the fingers for the user.

(13) Another advantage of the third combination is that the ribs of increasing length provide a more

aesthetic slide.
(14) Another advantage of the third combination is that the ribs of increasing length provide a more ergonomic fit between the fingers and thumb of one hand since, when the fingers and thumb are pressed together, there is an oblique tapering apart of the finger skin surfaces and the thumb skin surfaces back toward the palm of the hand.

Description

BRIEF DESCRIPTION OF THE DRAWINGS
(1) FIG. **1** is a front elevation view of the present gated barrier showing the lift lock in the upper right hand corner of the gate of the gated barrier, where the lift lock is in the first and locked position and the right hand gate is closed, locked against swinging, and latched to the left hand gate.
(2) FIG. **2** is a front elevation view of the present gated barrier showing the lift lock in the upper right hand corner of the gate of the gated barrier, where the lift lock is in the second, unlocked, and out-of-the-way position and the right hand gate is closed, locked against swinging, and unlatched to the left hand gate.
(3) FIG. **3** is a front elevation view of the present gated barrier showing the lift lock in the upper right hand corner of the gate of the gated barrier, where the lift lock is in the second, unlocked, and out-of-the-way position, and the right hand gate has been lifted such that the inverted U-shaped catch has cleared the lowermost frame member of the barrier and the right hand gate is ready to be swung.
(4) FIG. **4** is a front elevation view of the present gated barrier showing the lift lock in the upper right hand corner of the gate of the gated barrier, where the lift lock is in the second, unlocked, and out-of-the-way position, and the right hand gate that has been lifted has been swung to an open position.
(5) FIG. **5**A is a perspective view of the lift lock of FIG. **1**, where the lift lock is in the first and locked position.
(6) FIG. **5**B is a perspective view of the lift lock of FIG. **2** where the lift lock is in the second, unlocked, and out-of-the-way position.
(7) FIG. **5**C is a perspective view of the lift lock of FIG. **3** where the lift lock is in the second, unlocked, and out-of-the-way position, and the right hand gate has been lifted.
(8) FIG. **5**D is a perspective view of the lift lock of FIG. **4** where the lift lock is in the second, unlocked, and out-of-the-way position, and the right hand gate that has been lifted has been swung to an open position.
(9) FIG. **6** is a perspective, partially disassembled view of the lift lock of FIG. **1**.
(10) FIG. **7** is a section view of the lift lock of FIG. **1**.
(11) FIG. **8**A is a perspective view of the slide of the lift lock of FIG. **1**.
(12) FIG. **8**B is a top view of the slide of the lift lock of FIG. **8**A.
(13) FIG. **8**C is a side view of the slide of the lift lock of FIG. **8**A.
(14) FIG. **8**D is a distal or inner end view of the slide of the lift lock of FIG. **8**A.
(15) FIG. **9**A is a perspective view of the corner piece that replaces the conventional corner connection of a gate frame and that extends from an upper gate frame member to an end gate frame member of the gate of FIG. **1**.
(16) FIG. **9**B is a top view of the corner piece of FIG. **9**A.
(17) FIG. **9**C is a side view of the corner piece of FIG. **9**A.
(18) FIG. **9**D is a distal or inner end view of the corner piece of FIG. **9**A.
(19) FIG. **10**A is a perspective view of an upper end frame portion of the gated barrier of FIG. **1**.
(20) FIG. **10**B is a side view of the upper end frame portion of FIG. **10**A.

(21) FIG. **10**C is an outer end view of the upper end frame portion of FIG. **10**A.
(22) FIG. **10**D is a bottom view of the upper end frame portion of FIG. **10**A.
(23) FIG. **11** is a perspective view of another embodiment of the slide of the lift lock of FIG. **1** where outer surfaces of the slide are roughened by the inclusion of ribs for a better manual grip.
(24) FIG. **12**A is a perspective view of another embodiment of the slide of the lift lock of FIG. **1**.
(25) FIG. **12**B is a perspective view of the embodiment of the slide of FIG. **12**A.
(26) FIG. **13**A is a top view of the slide of FIG. **12**A.
(27) FIG. **13**B is a bottom view of the slide of FIG. **12**A.
(28) FIG. **13**C is an elevation view of the slide of FIG. **12**A.
(29) FIG. **14**A is a rear end view of the slide of FIG. **12**A.
(30) FIG. **14**B is a front end view of the slide of FIG. **12**B.
(31) FIG. **15**A is a detail view of a portion of FIG. **1**, where such portion includes a lock between the first and second gates.
(32) FIG. **15**B is a view similar to FIG. **15**A, and shows the lock beginning to swing from one gate to the other gate.
(33) FIG. **15**C is a view similar to FIG. **15**A, and shows the lock having been fully swung to the other gate.

DESCRIPTION

(34) As shown in FIG. **1**, a gated barrier **10** is indicated by reference number **10**. Gated barrier **10** includes a generally U-shaped barrier frame **12** having a first gate **14** and a second gate **16**. Gated barrier **10** further includes an upper latch apparatus **18**, a lower latch apparatus **20**, and an inverted U-shaped catch **22**. Gated barrier **10** further includes a lift lock apparatus **24** engaged between the frame **12** and the first gate **14**.
(35) Barrier frame **12** includes a first frame end portion **26** and a second frame end portion **28**. Each of the frame end portions **26**, **28** are L-shaped. Frame end portions **26**, **28** include respective generally vertical tubular standards **30**, **32** and generally horizontal or transverse lowermost tubular frame member portions **34**, **36**. Frame member portions **34**, **36** are engaged by an inverted U-shaped piece **38** such that frame member portions **34**, **36** are essentially one-piece, such that frame end portions **26**, **28** are essentially one-piece, and such that barrier frame **12** is essentially one-piece. Inverted U-shaped piece **38** is pinned to lowermost frame member portions **34**, **36** and confronts the front, rear, and top faces of the lowermost frame member portions **34**, **36**. Lowermost frame member portions **34**, **36** and inverted U-shaped piece **38** as a whole can be referred to as a lowermost frame member of the barrier frame **12**. Frame end portions **26**, **28** further include respective upper end frame portions **40**, **42** and respective lower base connectors or lower end frame portions **44**, **46**.
(36) Standards **30**, **32** are rectangular in section and joined at a right angle to their respective lowermost horizontal frame member portions **34**, **36**. Frame member portions **34**, **36** may be square or rectangular in section. The inner ends of lowermost horizontal frame member portions **34**, **36** abut each other and may or may not be joined to each other. If joined, such inner ends may be joined by a male/female connection. Such a male/female connection may supplement the connection provided by the inverted U-shaped piece **38**, or if desired the male/female connection may replace the inverted U-shaped piece **38**.
(37) Lowermost frame member portion **34** is set in a straight line with lowermost frame member portion **36**. Lowermost frame member portions, **34**, **36**, standards **30**, **32**, barrier frame **12** as a whole are disposed in a common plane and define a plane.
(38) Upper end frame portion **40** and base connector **44** work in combination as a connection to a fence or other structure. Upper end frame portion **42** and base connector **46** work in combination as a connection to a fence or other structure.
(39) Upper end portion **40** of first end frame portion **26** is shown in FIGS. **10**A, **10**B, **10**C, and **10**D. Upper end portion **40** is integral and one-piece. Upper end portion **40** includes a base **48**.

Base **48** is parallelepiped in shape and depends from a body **50** of the upper end portion **40**. Base **48** includes a through hole **52** extending from front to back therein for receiving a pin connector **54** holding upper end portion **40** to the standard **30**. Standard **30** is tubular and includes an upper open end for receiving the base **48** therein. A lower edge **56** of the body **50** abuts the upper end of the standard **30** to stop further sliding of the base **48** into the standard **30**. Base **48** is friction fit into the standard **30** and is placed therein in the proper orientation with the help of an elongate bar shaped key **58** that may slide into a vertical oriented slot on the inside of the standard **30**. To aid in the friction fit, the front and back sides of base **58** include a set of horizontally extending protrusions **60** and the inner side of base **58** includes a set of laterally extending protrusions **62**.

(40) Upper end portion **40** includes a connection **64** extending integrally outwardly from the body **50** for connection to a structure such as fencing. Connection **64** is spaced from the base **48**. Connection **64** includes a disk shaped portion **66** having on a bottom side a set of annular teeth **68** extending for 360 degrees. Connection **64** further includes a downwardly extending cylinder **70** that is coaxial with the disk shaped portion **66** and set of annular teeth **68**. Connection **64** may engage a structure having an elongate member with a top portion that engages one or more of the teeth **68** and cylinder **70** and with a bottom portion that engages one or more of a bottom disk shaped portion **72** of base connector **44** and a cylinder **74** of base connector **44**. Bottom disk shaped portion **72**, cylinder **74**, disk shaped portion **66**, cylinder **70**, and the set of annular teeth **68** are coaxial with each other. Such axis of the bottom disk shaped portion **72**, cylinder **74**, disk shaped portion **66**, cylinder **70**, and set of annular teeth **68** is placed forwardly of a plane defined by the barrier frame **12**. Disk shaped portions **66**, **72** are forwardly offset from such plane defined by the barrier frame **12**.

(41) Upper end portion **40** includes a connection **76** extending inwardly from the body **50**. Connection **76** is disposed at a greater elevation than connection **64**. Body **50** includes an oblique edge **78** that provides height to the body **50**. Connection **76** includes a pivot receptor **80**. Pivot receptor **80** includes a curved edge **82**. Opposing the curved edge **82** are a set of three tabs **84**. Pivot receptor **80** receives pivot or tube **86** shown in FIG. **6**. Tabs **84** are resilient and flex slightly when pivot **86** is captured by a friction fit between curved edge **82** and the distal ends of the three tabs **84**. The distal ends of the tabs **84** and curved edge **82** define a circle that has a diameter equal to or slightly less than a diameter of pivot **86**. Pivot **86** is a tube that runs from the upper end portion **40** to lowermost frame member portion **34**, where the lower end of pivot **86** engages an opening in the top of the lowermost frame member portion **34**.

(42) Upper end portion **40** includes a set of two internal, spaced apart, parallel, vertically extending, and transversely extending ribs **88** that extend from connection **76**, through body **50** and into connection **64** to maximize the rigidity of upper end portion **40**.

(43) Connection **76** includes a lower horizontal edge **90** that is set at a right angle to a vertical inner edge **92** of body **50**. Connection **76** includes an upper edge **94** that is parallel to lower horizontal edge **90**. Connection **76** includes a front face **96** that is coplanar with a front face **98** of body **50**. Connection **76** includes a rear face opposite and parallel to front face **96** and body **50** includes a rear face opposite and parallel to front face **98**, with such rear faces being coplanar.

(44) Connection **76** includes an inner end edge **100** that curves or tapers up to the upper edge **94**. Front face **96** and its opposing rear face curves or tapers up to upper edge **94**. Front face **98** and its opposing rear face curve or taper to the oblique edge **78** of base **50**. Front face **96** leads into front face **98**, and their respective opposing faces lead into each other.

(45) Body **50** includes an upper face **102** that is flat and coplanar with an upper face of disk shaped portion **66**. Oblique edge **78** rises from upper face **102** to upper edge **94**.

(46) The lower edge **90** of connection **76** runs parallel to upper face **102** of base **50**. The lower edge **90** is disposed at a greater altitude than upper face **102** and the upper face of disk shaped portion **66**.

(47) Upper end frame portion **42** is disposed opposite of upper end frame portion **40**. Upper end

frame portion **42** includes body **50**, connection **76**, and base **48**.
(48) Upper end frame portion **42** includes an outwardly extending upper connection **104** that is disk shaped. An upper face of the upper connection **104** includes a set of annular arranged teeth **106**. Upper connection **104** and lower base connector **46** engage a structure such as fencing therebetween. Lower base connector **46** includes a disk **108** and a cylinder **110** that engage such structure such as fencing.
(49) Lower base connector **44** includes an integral plug portion that engages a tubular open end of lower frame end portion **34**. Lower base connector **46** includes an integral plug portion that engages a tubular open end of lower frame end portion **36**.
(50) Gate **16** includes an uppermost horizontally extending frame member **112**, a lowermost horizontally extending frame member **114**, an outer end vertically extending frame member **116**, and an inner end vertically extending frame member **118**. A set of eight vertically extending inside frame members **120** extend to and between the uppermost and lowermost horizontally extending frame members **112**, **114**. Frame members **120** are spaced apart equidistantly from each other. That is, any two immediately adjacent frame members **120** are spaced apart by the same distance as any other two immediately adjacent frame members **120**. Frame members **116**, **118**, **120** are tubular. When gate **16** is closed, gate **16** is in a common plane with U-shaped barrier frame **12**. Gate **16** is in a common plane with gate **14** when gates **14** and **16** are closed. Gate **16** defines a plane. Gate **14** defines a plane.
(51) Gate **16** includes its respective pivot or tube **86** that extends from pivot receptor **80** in connection **76**, through vertical frame member **116**, to an opening in the top side of lowermost frame member **36**, and into the tubular lowermost frame member **36**. Gate **16** swings on the axis defined by pivot **86**. Gate **16** swings forwardly and rearwardly until the gate **16** makes contact with end frame portion **28**.
(52) Gate **16** includes all portions of latch apparatus **18** except for a latch receiver **122** that is disposed on gate **14**. Latch apparatus **18** includes a body **124**. Body **124** engages upper frame member **112**, the innermost vertical frame member **120**, and inner end vertical member **118**. Latch apparatus **18** includes a button **126** that, when depressed, retracts a latch **128** from the latch receiver **122**. When button **126** is released, latch **128** automatically extends from latch body **124** so as to engage latch receiver **122**. Latch apparatus **18** is engaged to gate **16** at the top inner corner portion of gate **16**.
(53) As shown in FIGS. **1**, **2**, **3**, **4**, **15**A, **15**B, and **15**C, a connector apparatus or lower latch apparatus **20** is engaged to gate **16** at the bottom inner corner portion of gate **16**. Connector apparatus **20** includes an inverted T-shaped plastic piece **132** that is engaged to the bottom end of vertical frame member **118** and that is further engaged to the inner end of lowermost horizontal frame member **114**. Bottom end of vertical frame member **118** and inner end of lowermost horizontal frame member **114** may or may not be engaged to each other within the inverted T-shaped plastic piece **132**. If such ends are not engaged to each other, such ends are adjacent to and spaced from each other, where such ends refer to the bottom end of vertical frame member **118** and the inner end of lowermost horizontal frame member **114** of gate **16**. Inverted T-shaped piece **132** has three ends. A first end receives and engages the bottom end of vertical frame member **118**. A second end receives and engages the inner end of lowermost horizontal frame member **114**. A third end extends in a straight line from such second end and extends beyond the inner reach of vertical frame member **118** and toward gate **14**. This third end includes a pivot **134** and a front pivoting arm **136**. A rear pivoting arm **136** is engaged to the pivot **134** on the rear side of the inverted T-shaped piece **132**. Front and rear pivoting arms **136** and pivot **134** may pivot as one piece. That is, when front pivoting arm **136** is pivoted, the pivot **134** and rear pivot arm **136** follow such action simultaneously and also pivot. Likewise, when rear pivot arm **136** is turned, pivot **134** and front pivot arm **136** are also simultaneously and immediately turned. Each of front and rear arms **136** is friction fit with the front and rear sides of the T-shaped piece **132** such that each of the front and

rear arms **136** can be locked in a horizontal out-of-the-way position, that is out of the way from gate **14**.

(54) As shown in FIGS. **15**B and **15**C, each of the front and rear pivot arms **136** can be turned horizontally inwardly to extend horizontally to engage front and rear sides of gate **14** such that a swinging of gate **16** is minimized by an engagement of the lower inside corner portions of gates **14**, **16** with each other. FIG. **15**B shows the pivot arms **136** in the process of being swung from the position shown in FIG. **15**A to the position shown in FIG. **15**C. FIG. **15**C shows the preferred engagement of the pivot arms **136** with gate **14**. If front and rear pivot arms **136** are one piece or are independent of each other, both arms **136** may be turned to a horizontal location to engage gate **14**. If front and rear pivot arms **136** are independent of each other, one or both arms **136** may be pivoted to a horizontal location to engage a respective side of gate **14** such that only one direction of swing (i.e., only one forward or rear direction of swing) may be controlled where only one of the front and rear pivot arms **136** is turned 180 degrees to confront the respective front or rear side of gate **14**. Arms **136** may be fixed at such an operating horizontal location, where such arms **136** engage gate **14**, by a friction fit with T-shaped piece **132** or by a friction fit with gate **14**. If arms **136** are turned downwardly and vertically, such as inadvertently turned downwardly and vertically, the arms **136** are sufficiently short to clear the top side of inverted U-shaped piece **38** such that gate **16** can swing both forwardly and rearwardly when the arms **136** are turned downwardly and vertically.

(55) Each of the front and rear pivot arms **136** may, if desired, be lengthened to be of sufficient length to extend beyond the top side of inverted U-shaped piece **38** a sufficient distance to cover a portion of the front and rear sides of the inverted U-shaped piece **38** so as to minimize front and back swinging of gate **16** when the front and rear pivot arms **136** are turned down and vertically. If desired, front and rear pivot arms **136** and pivot **134** may be manufactured such that front and rear pivot arms **136** pivot independent of the other pivot arm **136** such that instead of regulating both forward and rear swinging of gate **16**, only one direction of swing (i.e., only one forward or rear direction of swing) may be controlled where only one of the front and rear pivot arms **136** is turned down to confront the respective front or rear side of inverted U-shaped piece **38**. Each of front and rear arms **136** is friction fit with the front and rear sides of the T-shaped piece **132** such that each of the front and rear arms **136** can be locked in a horizontal out-of-the-way position from inverted U-shaped piece **38**.

(56) Gate **14** includes an uppermost horizontally or transversely extending frame member **138**, a lowermost horizontally extending or transversely extending frame member **140**, an outermost or proximal vertically extending end frame member **142**, and an innermost or distal vertically extending end frame member **144**. Gate **14** further includes a set of eight vertically extending inside frame members **146** disposed between vertical end frame members **142**, **144**. Vertical frame members **146** are disposed equidistance from each other such that two immediately adjacent vertical frame members **146** are set the same distance apart as any other two immediately adjacent vertical frame members **146**. Frame members **138**, **140**, **142**, **144**, **146** are tubular. When gate **14** is closed, gate **14** is in a common plane with U-shaped barrier frame **12**.

(57) Gate **14** includes its respective pivot or tube **86** that extends from pivot receptor **80** in connection **76**, through vertical frame member **142**, to an opening in the top side of lowermost frame member **34**, and into the tubular lowermost frame member **34**. Gate **14** swings on the axis defined by pivot **86**. Gate **14** swings forwardly and rearwardly until the gate **14** makes contact with end frame portion **26**.

(58) Uppermost horizontal frame member **138** includes a tubular outer end that includes latch receptor **122** that receives latch **128** of latch apparatus **18**.

(59) Lowermost horizontal frame member **140** includes inverted U-shaped catch **22** that includes front and rear plates or plate sections **148**. Front and rear plates **148** confront the front and rear sides of lowermost horizontal frame member **34** when gate **14** is in the down position. When gate

14 is lifted up, the bottom edges of front and rear plates **148** clear the top face of lowermost horizontal frame member **34** such that gate **14** can be swung to the front or to the rear of lowermost horizontal frame member **34**. When gate **14** is in the down position and front and rear plates **148** confront the front and rear sides of the lowermost horizontal frame member **34**, a swinging of gate **14** to each of the front or rear of lowermost horizontal frame member **34** is minimized. Inverted U-shaped catch **22** is engaged to lowermost horizontal frame member **140** and includes a width about equal to the width between two adjacent vertical frame members **146**.

(60) Gate **14** includes lift lock apparatus **24**. Lift lock apparatus **24** includes a base or piece **150** extending downwardly from uppermost horizontal member **138** of gate **14** and inwardly from outermost end vertical member **142** of gate **14**. The outer or proximal end of uppermost horizontal member **138** and the upper end of outermost or proximal end vertical member **142** terminate short of each other, are adjacent to each other, and are spaced from each other. The axis of uppermost horizontal member **138** intersects the axis of outermost or proximal end vertical member **142**.

(61) Base **150** includes an integral upper and horizontal receptor portion or slide mount **152** for receiving the outer end of uppermost horizontal member **138**. Receptor portion **152** includes an open end **154** that receives the outer or proximal end of uppermost horizontal member **138**. Base **150** includes a closed end **156** that is opposite of open end **154**. Closed end **156** is curved. A horizontal section of closed end **156** defines a round segment having an axis. Base **150** further includes a top or ceiling **158** and a pair of opposing walls or sides **160**, **162**. Base **150** further includes a floor or bottom **164** having a cut-out **166** for receiving the vertical frame member **146** that is adjacent to outermost end frame member **142**. When receptor portion **152** is slid onto the outer end of uppermost horizontal member **138**, the edge of the floor **164** forming cut-out **166** stops such sliding. Closed end **156** may also stop such sliding. Receptor portion **152** receives with a friction fit the outer or proximal end of uppermost horizontal member **138**. The transitions between the sides **160**, **162** and the top **158** may be tapered or include a radius. The transitions between the sides **160**, **162** and the closed end **156** may be tapered or include a radius. A transition **157** between the top **158** and the closed end **156** is tapered or includes a radius. A horizontal section of transition **157** defines a curved or round segment having an axis. The transition between side **160** and floor **164** is a right angle and the transition between side **162** is a right angle.

(62) Base **150** includes an integral lower and vertical receptor portion **168** for receiving the upper end of the outermost or proximal end vertical frame member **142** with a friction fit. Receptor portion **168** includes a top **170**, a rear side **172**, a front side **174**, an outer end wall **176**, an inner end wall **178**, and an open bottom **180**. Top **170** is opposite to the open bottom **180**. When the upper end of the outermost or proximal end vertical frame member **142** is pushed or slid into the receptor portion **168**, such upper end is pushed into the open bottom **180** and such sliding is stopped by the top **170**. Top **170** includes an opening **283** for pivot **86**. Sides **172**, **174**, and end wall **176** taper into top **170**. Sides **172**, **174** taper into outer end wall **176**. Sides **172**, **174** taper into inner end wall **176**.

(63) A pair of integral vertical plate sections **184**, **186** join the upper and lower receptor portions **152**, **168**. Plate sections **184**, **186** define respective parallel planes. Plate section **184** is a rear plate section and plate section **186** is a front plate section. Rear plate section **184** is inset inwardly from rear side **172**. Front plate section **186** is inset inwardly from front side **174**. Plate sections **184**, **186** extend inwardly from the inner end wall **178** and join up integrally with the bottom or floor **164** of receptor portion **152**. Rear plate section **184** is inset inwardly from rear side **160** of receptor portion **152**. Front plate section **186** is inset inwardly from front side **162** of receptor portion **152**. Such insets expose longitudinal sections of floor **164** and form a first right angled track **185** between plate section **184** and floor **164** and a second right angled track **187** between plate section **186** and floor **164**. Tracks **185**, **187** run the longitudinal length of sides **160**, **162**, respectively.

(64) An integral L-shaped piece **188** joins plate sections **184**, **186**. Integral L-shaped piece **188** runs from the top **170** of receptor portion **168** to the closed end **156** of receptor portion **152**. A horizontal section of L-shaped piece **188** defines a plane with top **170** of receptor portion **168**. A vertical

section of L-shaped piece **188** takes on the round shape of and shares an axis with closed end **156**. Plate section **184** connects to end wall **178**, the horizontal section of L-shaped piece **188**, the vertical section of L-shaped piece **188**, closed end **156**, and floor **164**. Plate section **186** connects to end wall **178**, the horizontal section of L-shaped piece **188**, the vertical section of L-shaped piece **188**, closed end **156**, and floor **164**. Each of the plate sections **186** includes a lower straight horizontal edge **190** that tapers into a straight oblique edge **192** running inwardly and upwardly that tapers into the floor **164** of the receptor portion **152**.

(65) Lift lock apparatus **24** includes a slide **194** that engages upper receptor portion or slide mount **152**. Slide **194** includes a rear side **196**, a front side **198**, a two level top **200**, a first end wall **202**, and a second end wall **204**. Slide **194** further includes a rear inset floor portion or rear runner **206** and a front inset floor portion or front runner **208**. Rear runner **206** runs longitudinally the length of the rear side **196** and is inset inwardly from the rear side **196**. Front runner **208** runs longitudinally the length of the front side **198** and is inset inwardly from the front side **198**. Rear runner **206** engages track **185** of the slide mount **152**. Front runner **208** engages track **197** of the slide mount **152**. The inside face of rear wall **196** of slide **194** abuts and slides against the outside face of rear wall **160** of slide mount **152**. The inside face of front wall **198** of slide **194** abuts and slides against the outside face of front wall **162** of slide mount **152**.

(66) Top **200** of slide **194** includes two levels. Ceiling portion **210** is disposed at a higher level than ceiling portion **212**. Ceiling portion **210** tapers downwardly into ceiling portion **212** through a transition **214**. A horizontal section of transition **214** defines a curved or round segment having an axis. The inner surface of transition **214** is a stop that abuts against the outside surface of transition **157** of slide mount **152** to define the innermost limit of an inwardly sliding of slide **194**, i.e., in the direction toward gate **16** when gate **16** is in the closed position. The outer surface of ceiling portion **210** includes indicia molded thereon in raised fashion showing which direction slide **194** is slid to unlock the lift lock apparatus **24** and thus permit gate **14** to be lifted and which direction slide **194** is slid to lock the lift lock apparatus **24** and thus lock the gate **14** against being lifted. Shape A represents a closed lock. Shape B represents an open lock. Shape C is a double arrow showing the direction of sliding. Gate **14** is prevented from being lifted when the slide **194** is slid to the closed direction in the direction of shape A. Gate **14** is liftable when slide **194** is slid to the open position in the direction of shape B, provided latch apparatus **18** is open.

(67) Lower ceiling portion **212** includes a snap cut-out **216** for snappingly receiving therein pivot **86**. Cut-out **216** includes a resilient neck **218** having a width slightly less than the diameter of pivot **86** and a circular opening **220** having a diameter about the diameter of pivot **86**. From the resilient neck **218** outwardly, snap cut-out **216** is flared or widened or tapered to form a guide to better draw in pivot tube **86** to the neck **218** and circular opening **220**. From the resilient neck **218** inwardly, snap cut-out **216** is flared and starts to form the circular opening **220**.

(68) End walls **202**, **204** extend inwardly from sides **196**, **198**, respectively, and provide integral support to the lower ceiling portion **212** at about the location where cut-out **216** is formed.

(69) Slide **194** includes an inner end opening **222** formed by vertical inner edges of sides **196**, **198** and horizontal inner edge of upper ceiling portion **210**. Slide **194** includes an outer end opening **224** formed by the vertical inner edges of end walls **202**, **204**.

(70) Slide **194** is resilient and snaps in place over the slide mount **152**. Side walls **196**, **198** are resiliently expandable relative to each other. Slide **194** is in the nature of a resilient clip with rails or runners **206**, **208** that are resiliently seated into respective tracks **185**, **187**.

(71) When slide **194** is in the locked position where the snap cu-out **216** has engaged pivot tube **86**, the lower ceiling portion **212** of slide **194** is adjacent to or confronts the lower edge **90** of upper end frame portion **40**. If an attempt is made to lift gate **14**, the upper end of outermost or proximal end frame member **142** places pressure on top **170** of piece **150**, which pressure is transmitted through piece **150** to the ceiling portions **212**, **210** of the slide **194**, which pressure is transmitted to the lower edge **90** of upper frame end portion **40**. Even under such pressure, slide **194** may be

manually slid to the unlocked out-of-the-way position. The slide **194** is then held at the unlocked position by a friction fit between inside surfaces of the slide **194** and exterior surfaces of the slide mount **152**.

(72) As shown in FIG. **1**, gates **14** and **16** are closed. The slide **194** of the lift lock apparatus **24** is in the locked or closed position. Latch apparatus **18** is in the latched position such that gates **14**, **16** are engaged at the upper and inner corner positions. FIG. **1** shows front and rear arms **136** in the unengaged and out-of-the-way horizontal position. However, if desired, one or more of the front and rear arms **136** may abut vertical inner member **144** of gate **14**. Further, if desired, where arms **136** are selected so as to be of a greater length, one or more of the front and rear arms **136** may abut inverted U-shaped piece **38**. Still further, inverted U-shaped catch **22** remains confronting the front and rear sides of lowermost horizontal frame member **34** of the barrier frame **12**. The FIG. **1** position of the lift lock apparatus **24** is shown in detail in FIG. **5**A.

(73) FIG. **2** shows that the slide **194** of the lift lock apparatus **24** has been slid to the open position where the inner surface of transition or stop **241** of the slide **194** abuts the transition or stop **157** of the slide mount or upper receptor portion **152**. FIG. **2** shows that the button **126** of latch apparatus **18** has been depressed to retract latch **128** from latch receptor **122**. FIG. **2** shows that the arms **136** remain in their retracted out-of-the-way positions. FIG. **2** shows that the inverted U-shaped catch **22** remains confronting the front and rear sides of lowermost horizontal frame member **34** of the barrier frame **12**. In FIG. **2**, the gate **14** is in position to be lifted. The FIG. **2** position of the lift lock apparatus **24** is shown in detail in FIG. **5**B.

(74) FIG. **3** shows that gate **14** has been lifted. The lower receptor portion **168** now confronts or abuts the lower surface or edge **90** of the upper end frame portion **40**. FIG. **3** shows that, with slide **194** having been slid to the unlocked and out-of-the-way position, slide **194** can attain an elevated position where the front end walls **202**, **204** of the slide **194** are disposed opposite of and adjacent to innermost end edge **100** of the upper end frame portion **40**. FIG. **3** shows that the arms **136** remain in their retracted out-of-the-way positions. FIG. **3** shows that the lower edges of the plates **148** of the inverted U-shaped catch **22** have cleared the top face of the lowermost horizontal support member **34** of the barrier frame **12**. FIG. **3** shows that the lower end of the outermost end vertical support member **142** of the gate **14** is now spaced from the top of lowermost horizontal frame member **34** such that pivot tube **86** is exposed to the naked eye. FIG. **3** shows that the gate **14** is ready to be swung from a closed position to an open position. The FIG. **3** position of the lift lock apparatus **24** is shown in detail in FIG. **5**C.

(75) FIG. **4** shows a lifted and open gate **14**. Since gate **14** has been lifted, the U-shaped catch **22** and its plates **148** can clear the top face of lowermost horizontal frame member **34** of barrier frame **12** and gate **14** can swing as a whole to either the front or rear of the barrier frame **12**. FIG. **4** shows the gate **14** having been swung to the rear of the barrier frame **12**. When gate **14** is swung, slide **194** pivots about the innermost end edge **100** of the upper end frame portion **40** and remains disposed opposite of and adjacent to the innermost end edge **100** of the upper end frame portion **40**. FIG. **4** shows that the lower end of the outermost end vertical support member **142** of the gate **14** remains spaced from the top of lowermost horizontal frame member **34** such that pivot tube **86** remains exposed to the naked eye. FIG. **4** shows that the lower receptor portion **168** remains confronting and abutting the lower surface or edge **90** of the upper end frame portion **40** when the gate **14** is in the lifted and swung position. The FIG. **4** position of the lift lock apparatus **24** is shown in detail in FIG. **5**D.

(76) As to gate **16**, in FIG. **1** gate **16** is locked against swinging by the latch **128** of the latch apparatus **18** being in the extended position and engaging latch receptor **122** of the gate **14**. After button **126** is depressed to retract latch **128** from the latch receptor **122** of gate **14**, gate **16** may be swung either forwardly or rearwardly of the lowermost horizontal frame member **36** provided that arms **136** engage neither gate **14** nor inverted U-shaped piece **38**. FIGS. **2**, **3**, and **4** show the same position for gate **16** and gate **16** may be swung in the position shown in these FIGS. **2**, **3**, and **4**.

(77) In operation, slide **194** prevents the gate **14** from being lifted. Latch apparatus **126** also prevents the gate **14** from being lifted when latch **128** is engaged in latch receiver **122**. If an attempt is made to lift gate **14** when slide **194** is in the locked position and engaged to pivot tube **86**, the upper end of outermost vertical frame member **142** brings pressure to bear against receptor portion **168**. Receptor portion **168** is one-piece with receptor portion or slide mount **152**, so that such pressure is transmitted to upper ceiling portion **210**, which pressure is transmitted to lower ceiling portion **212**, which pressure is transmitted to the lower edge **90** of the upper end frame portion **40**, such that gate **14** is not liftable. In other words, when an attempt is made to lift gate **14** when slide **194** is in the locked position, the upper end of outermost vertical frame member **142** brings pressure upon piece **150** upon which the slide **194** is mounted such that there is no vertical movement between the slide **194** and piece **150**. Since slide **194** and piece **150** have no relative vertical movement, the lift lock apparatus **24** acts as a block between the outermost vertical frame member **142** and the upper end frame portion **40**.
(78) To open gate **14**, slide **194** is slid from the locked position, where slide **194** is snapped to pivot tube **86**, to the unlocked out-of-the-way position where slide **194** is spaced from pivot tube **86**, where the outer end of slide **194** clears the inner end **100** of the upper end frame portion **40**, and where the transition or stop **214** of slide **194** hits the transition or stop **157** of the slide mount **152**. Then button **126** of the latch apparatus **18** is pressed to retract latch **128**. Then, if arms **136** are engaged to frame **14**, arms **136** are disengaged. The next step is to lift gate **14** so that the U-shaped catch **22** clears the lowermost horizontal frame member **34**. Since slide **194** is in the out-of-the-way position, gate **14** can be lifted.
(79) After gate **14** has been lifted a sufficient distance such that inverted U-shaped catch **22** clears the top of the lowermost horizontal frame member **34**, gate **14** is swung either forwardly or rearwardly.
(80) After gate **14** has been lifted and swung, gate **14** can be lowered such that the bottom end of outermost vertical frame member **142** can abut the top of lowermost frame member **34**. In the swung out and lowered position, slide **194** can be slid back into the locked position if desired such that, even though gate **14** is not in a common plane with the barrier frame **12**, gate **14** can still be placed in a nonliftable position where slide **194** is locked to pivot tube **86** so as to prevent the gate **14** from being lifted.
(81) To return the gate **14** to the closed position where the gate **14** is in a common plane with the barrier frame **12**, the slide **194** is slid to the unlocked position, then the gate **14** is lifted such that the inverted U-shaped piece **22** clears the top of the lowermost horizontal frame member **34**, then the gate **14** is swung back to be in a common plane with the barrier frame **12**, then the gate **14** is lowered such that the inverted U-shaped piece **22** captures the lowermost horizontal frame member **24**, then slide **194** is slid back into the locked position if desired. During the swinging back of gate **14** to the common plane with the barrier frame **14**, the latch **128** of the latch apparatus **18** automatically snaps back into engagement with the latch receptor **122**.
(82) FIG. **11** shows a perspective view of another embodiment of the slide **194**. The slide **194** of FIG. **11** includes a set of vertical spaced apart ribs **226** on each of the outer faces of sides **196**, **198**. The ribs **226** provide a roughened surface to the sides **196**, **198** for a better manual grip by fingers to slide the slide **194**. The bottom of the ribs **226** are disposed adjacent to the runners **206**, **208**. The tops of four of the ribs **226** are adjacent to ceiling portion **210**. The tops of three of the ribs **226** are spaced from ceiling portion **212** and such three rib tops are disposed relative to each other in an oblique fashion. The ribs **226** on side **206** have the same pattern and structure as the ribs **226** on side **208**. On each of the sides **196**, **198**, the ribs **226** extend for substantially the length of each of such sides **196**, **198**. The terminal ribs **226** are spaced from the ends of the slide **194**. Ribs **226** project from the otherwise generally flat surface of sides **196**, **198**.
(83) Lift lock apparatus **24** includes another embodiment of slide **194**. This is slide **194**A shown in FIGS. **12**A, **12**B, **13**A, **13**B, **13**C, **14**A, and **14**B.

(84) Slide **194**A engages upper receptor portion or slide mount **152**. Slide **194**A includes a rear side **196**A, a front side **198**A, a two level top **200**A, a first end wall **202**A, and a second end wall **204**A. Slide **194**A further includes a rear inset floor portion or rear runner **206**A and a front inset floor portion or front runner **208**A. Rear runner **206**A runs longitudinally the length of the rear side **196**A and is inset inwardly from the rear side **196**A. Front runner **208**A runs longitudinally the length of the front side **198**A and is inset inwardly from the front side **198**A. Rear runner **206**A engages track **185** of the slide mount **152**. Front runner **208**A engages track **197** of the slide mount **152**. The inside face of rear wall **196**A of slide **194**A abuts and slides against the outside face of rear wall **160** of slide mount **152**. The inside face of front wall **198**A of slide **194**A abuts and slides against the outside face of front wall **162** of slide mount **152**.
(85) Top **200**A of slide **194**A includes two levels. Ceiling portion **210**A is disposed at a higher level than ceiling portion **212**A. Ceiling portion **210**A tapers downwardly into ceiling portion **212**A through a transition **214**A. A horizontal section of transition **214**A defines a curved or round segment having an axis. The inner surface of transition **214**A is a stop that abuts against the outside surface of transition **157** of slide mount **152** to define the innermost limit of an inwardly sliding of slide **194**A, i.e., in the direction toward gate **16** when gate **16** is in the closed position.
(86) The outer surface of ceiling portion **210**A includes indicia molded thereon in raised fashion showing which direction slide **194**A is slid to unlock the lift lock apparatus **24** and thus permit gate **14** to be lifted and which direction slide **194**A is slid to lock the lift lock apparatus **24** and thus lock the gate **14** against being lifted. Shape A represents a closed lock. Shape B represents an open lock. Shape C is a double arrow showing the direction of sliding. Gate **14** is prevented from being lifted when the slide **194**A is slid to the closed direction in the direction of shape A. Gate **14** is liftable when slide **194**A is slid to the open position in the direction of shape B, provided latch apparatus **18** is open.
(87) Lower ceiling portion **212**A includes a snap cut-out **216**A for snappingly receiving therein pivot **86**. Cut-out **216**A includes a resilient neck **218**A having a width slightly less than the diameter of pivot **86** and a circular opening **220**A having a diameter about the diameter of pivot **86**. From the resilient neck **218**A outwardly, snap cut-out **216**A is flared or widened or tapered to form a guide to better draw in pivot tube **86** to the neck **218**A and circular opening **220**A. From the resilient neck **218**A inwardly, snap cut-out **216**A is flared and starts to form the circular opening **220**A.
(88) Slide **194**A includes an intermediate or interior curved wall **221**A extending downwardly from and being coextensive with the transition **214**A. Intermediate or interior curved wall **221**A extends from a location adjacent to a ceiling of slide **194**A to a location adjacent to a bottom of slide **194**A. Intermediate curved wall **221**A extends to and between the inner surfaces of rear side **196**A and front side **198**A. Intermediate curved wall **221**A extends downwardly from transition **214**A to a lower edge portion **223**A. Intermediate curved wall **221**A is a stop that abuts closed end **156** of the slide mount **152** that complements the inner surface of the transition **214**A, which inner surface is a stop that abuts the outside surface of transition **157** of slide mount **152**. Intermediate curved wall **221**A and the inner surface of transition **214**A define the innermost limit of an inwardly sliding of slide **194**A, where such inward sliding is in the direction toward gate **16** when gate **16** is in the closed position.
(89) Slide **194**A includes an inner end opening **222**A formed by vertical inner edges of sides **196**A, **198**A and horizontal inner edge of upper ceiling portion **210**A. Slide **194**A includes the first end wall **202**A that extends between vertical outer edges of sides **196**A, **198**A. First end wall **202**A or front end wall **202**A includes a pair of laterally extending outer end wall portions **225**A that extends inwardly from vertically outer edges of sides **196**A, **198**A to a cylindrically shaped receptor **227**A that is coextensive with circular opening **220**A.
(90) Whereas slide **194** includes a cut-out or receptor **216** that runs vertically along from the bottom of the slide **194** to the top of lower ceiling portion **212**, the cut-out or receptor **216**A of slide

194A are formed by feet **229**A and **231**A. Feet **229**A, **231**A project forwardly of laterally extending outer end wall portions **225**A from bottom portions of outer end wall portions **225**A. Receptor or cut-out **216**A of slide **194**A is lesser in height than cut-out or receptor **216** of slide **194** and therefore has less surface area and provides less resistance when snapped on and off pivot tube **86**. Each of the feet **229**A, **231**A includes an upper flat platform **237**A.

(91) When the cut-out or receptor **216**A receives pivot tube **86** such that the pivot tube **86** is engaged by the circular opening **220**A, pivot tube **86** is also received in the cylindrically shaped receptor **227**A.

(92) Runners **206**A and **208**A include vertical sub walls **233**A and **235**A respectively that are inset from respective walls **196**A, **198**A. Sub walls **233**A and **235**A are vertically oriented and run from the rear of the slide **194**A to feet **229**A and **231**A, respectively. Sub walls **233**A, **235**A and feet **229**A, **231**A share a common bottom horizontally oriented surface. The inner vertically oriented surfaces of sub walls **233**A, **235**A slide on plate sections **184**, **186** that join the upper and lower receptor portions **152**, **168**.

(93) Slide **194**A is resilient and snaps in place over the slide mount **152**. Side walls **196**A, **198**A are resiliently expandable relative to each other. Slide **194**A is in the nature of a resilient clip with rails or runners **206**A, **208**A that are resiliently seated into respective tracks **185**, **187**.

(94) When slide **194**A is in the locked position where the snap cut-out **216**A has engaged pivot tube **86**, the lower ceiling portion **212**A of slide **194**A is adjacent to or confronts the lower edge **90** of upper end frame portion **40**. If an attempt is made to lift gate **14**, the upper end of outermost or proximal end frame member **142** places pressure on top **170** of piece **150**, which pressure is transmitted through piece **150** to the ceiling portions **212**A, **210**A of the slide **194**A, which pressure is transmitted to the lower edge **90** of upper frame end portion **40**. Even under such pressure, slide **194**A may be manually slid to the unlocked out-of-the-way position. The slide **194**A is then held at the unlocked position by a friction fit between inside surfaces of the slide **194**A and exterior surfaces of the slide mount **152**.

(95) Slide **194**A includes a set of vertical spaced apart ribs **226**A on each of the outer faces of sides **196**A, **198**A. The ribs **226**A provide a roughened surface to the sides **196**A, **198**A for a better manual grip by fingers to slide the slide **194**A. The bottom of the ribs **226**A are disposed adjacent to the runners **206**A, **208**A. The tops of five of the ribs **226**A are spaced from and adjacent to upper ceiling portion **210**A. The top of one of the ribs **226**A is spaced from and adjacent to lower ceiling portion **212**A. The ribs **226**A on side **206**A have the same pattern and structure as the ribs **226**A on side **208**A. On each of the sides **196**A, **198**A, the ribs **226**A extend for substantially the length of each of such sides **196**A, **198**A after subtracting the height of the sub walls **233**A, **235**A and the spacing from their respective ceiling portions **210**A, **212**A. The distal terminal rib **226**A is adjacent to the distal end of the slide **194**A. Proximal terminal rib **226**A is disposed just forwardly of the transition **214**A. Ribs **226**A project from the otherwise generally flat surface of sides **196**A, **198**A. From each of the top and bottom views shown in FIGS. **13**A, **13**B, respectively, it can be seen that the widths of the ribs **226**A increase from the proximal end of the slide **194**A to the distal end of the slide **194**A. The widths of the ribs **226**A may also be referred to as lengths of the ribs **226**A. The proximalmost first rib **226**A has a width or length less than its adjacent second rib **226**A, which has a width or length less than the distally adjacent third rib **226**A, which has a width or length less than the distally adjacent fourth rib **226**A, which has a width or length less than its distally adjacent fifth rib **226**A, which has a width or length less than its distally adjacent sixth rib **226**A, which sixth rib **226**A is the distalmost rib **226**A.

(96) Slide **194**A includes a number of curved junctions or radii. A curved junction **239**A extends from side **196**A to upper ceiling portion **210**A. A curved junction **241**A extends from side **198**A to upper ceiling portion **210**A. A curved junction **243**A extends from side **196**A to lower ceiling portion **212**A. A curved junction **245**A extends from side **198**A to lower ceiling portion **212**A. A curved junction **247**A extends from side **196**A to one outer end wall **225**A. A curved junction **249**A

extends from side **198**A to the other outer end wall **225**A. Transition **214**A is a curved junction running downwardly from upper ceiling portion **210**A to lower ceiling portion **212**A. A curved junction **251**A extends from lower ceiling portion **212**A to one outer end wall **225**A. A curved junction **253**A extends from lower ceiling portion **212**A to the other outer end wall **225**A.
(97) Slide **194**A is integral and one-piece.
(98) Thus since the invention disclosed herein may be embodied in other specific forms without departing from the spirit or general characteristics thereof, some of which forms have been indicated, the embodiments described herein are to be considered in all respects illustrative and not restrictive. The scope of the invention is to be indicated by the appended claims, rather than by the foregoing description, and all changes which come within the meaning and range of equivalents of the claims are intended to be embraced therein.

Claims

1. A gated barrier comprising: a) a first swinging gate having a first lowermost horizontally extending support member with a first innermost end; b) the first swinging gate having a first innermost vertically extending support member with a first lowermost end; c) a second swinging gate having a second lowermost horizontally extending support member with a second innermost end; d) the second swinging gate having a second innermost vertically extending support member with a second lowermost end; e) the first innermost end of the first lowermost horizontally extending support member being adjacent to the first lowermost end of the first innermost vertically extending support member; f) the second innermost end of the second lowermost horizontally extending support member being engaged to the second lowermost end of the second innermost vertically extending support member; g) an inverted T-shaped piece having first, second, and third ends, the first end receiving and engaging the first lowermost end of the first innermost vertically extending support member, the second end receiving and engaging the first innermost end of the first lowermost horizontally extending support member, and the third end i) extending away from the second end, ii) extending beyond an innermost face of the first innermost vertically extending support member, iii) extending toward the second innermost end of the second lowermost horizontally extending support member, and iv) extending to be adjacent to the second innermost end of the second lowermost horizontally extending support member; h) the third end of the inverted T-shaped piece having front and rear sides and front and rear pivot arms engaged respectively to the front and rear sides; i) the front and rear pivot arms being pivotable to a horizontal out-of-the-way position that permits the first and second swinging gates to be swung relative to each other; and j) the front and rear pivot arms being pivotable to front and rear sides of one of the second innermost end of the second lowermost horizontally extending support member and second lowermost end of the second innermost vertically extending support member to minimize the first and second swinging gates swinging relative to each other.