June 21, 1966 R. A. BENOIT ETAL 3,256,534

CONTROL DEVICE FOR ADJUSTABLE BEDS

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Fig. 6

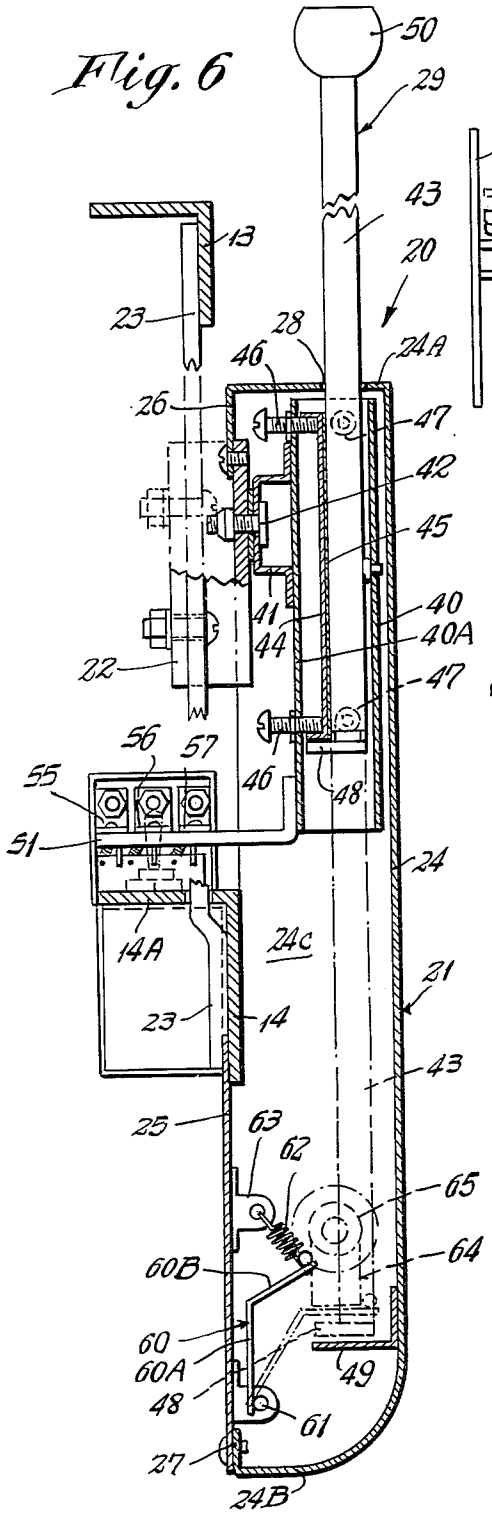


Fig. 1

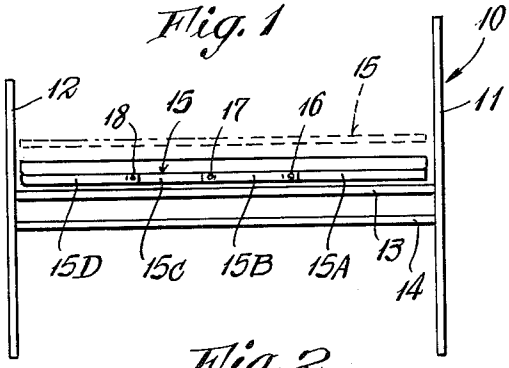


Fig. 2

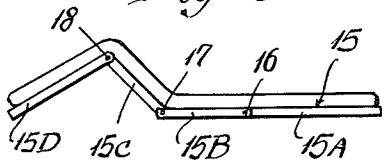


Fig. 3

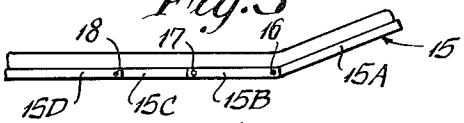


Fig. 4

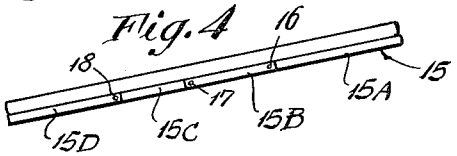
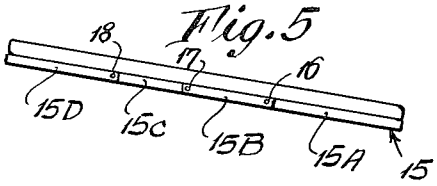


Fig. 5



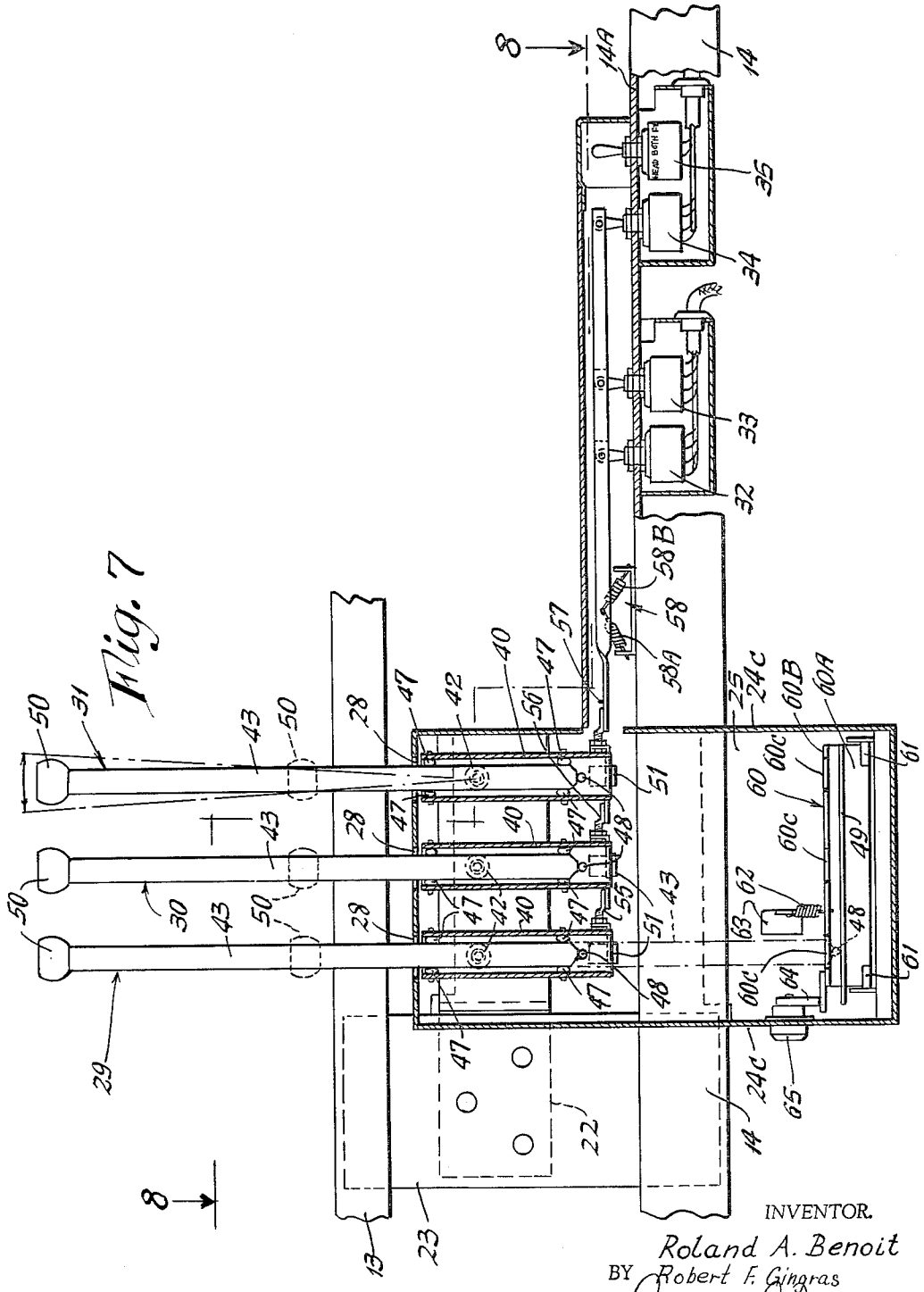
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CONTROL DEVICE FOR ADJUSTABLE BEDS

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Fig. 7



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CONTROL DEVICE FOR ADJUSTABLE BEDS

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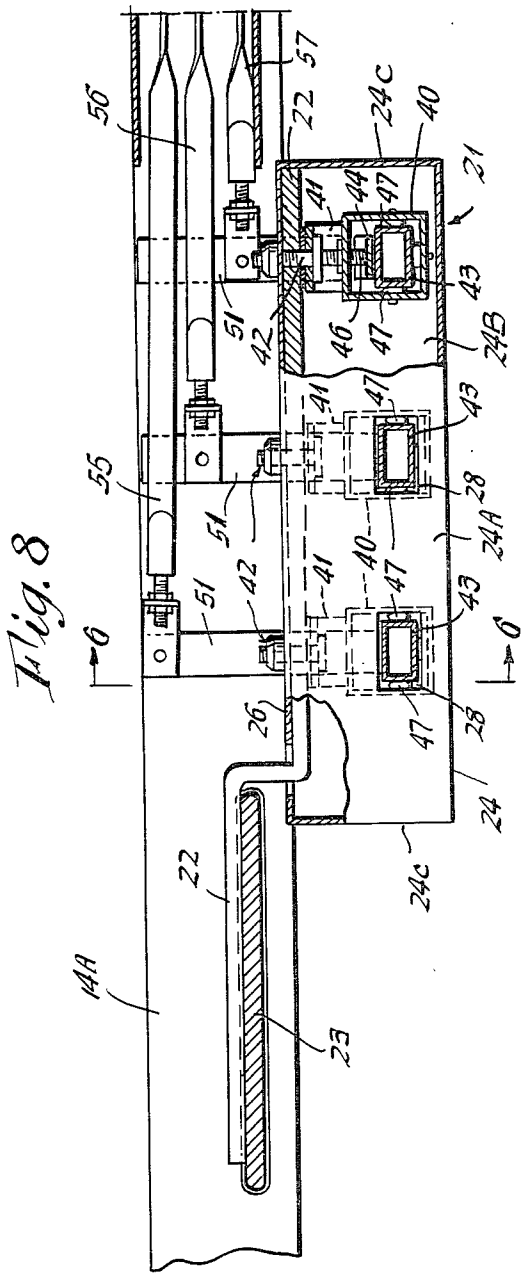


Fig. 8

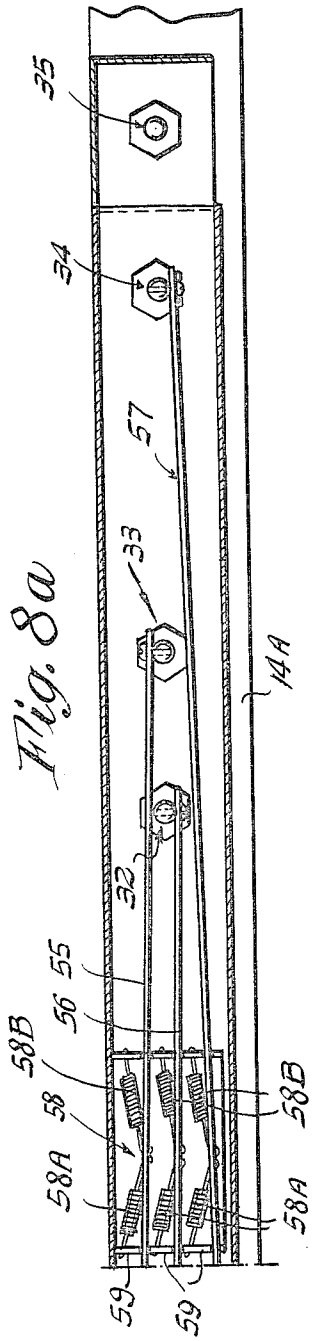


Fig. 8a

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3,256,534

CONTROL DEVICE FOR ADJUSTABLE BEDS

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Filed Apr. 5, 1963, Ser. No. 270,859
13 Claims. (Cl. 5—66)

This invention relates in general to adjustable beds and more specifically to a control device for regulating the adjusted position of such beds.

Adjustable beds, and in particular hospital beds, are constructed so that the position of the mattress support and mattress thereon can be adjusted to suit the particular comfort of the person or patient lying in the bed. Generally, such beds are provided with a bed frame on which the mattress support can be raised or lowered parallel to or tilted with respect to a horizontal datum plane. Such mattress supports are also formed of hinged sections which are connected so that the head and foot sections thereof may be tilted relative to an intermediate section for elevating one's head or feet. The foot section further folds to elevate the patient's knees. Each of such adjustments is usually made by an independently operated power means which may be either mechanically, electrically or fluidly actuated upon the actuation of an appropriate control means connected in circuit therewith.

Heretofore, the operating means of the known control devices for effecting the operation of the respective power means to effect a given adjustment were, for reasons of safety and for convenience of treating the person in bed, located below the level of the mattress. For this reason the operating means of the known control devices were only awkwardly accessible. If the operating means of the known controls were permanently located so as to extend above the mattress to render them readily accessible to the operator, they would interfere with the care and treatment of the patient, as well as with the making up of the beds by a nurse or others. Also, the permanent location of the control operating means above the level of the mattress, while rendered readily accessible, interferred with the movement of the patient in and out of the bed. The permanent disposition of the control operating means above the mattress for ready accessibility presents the further hazard of accidental actuation by a nurse, visitor or bed patient. For some bedridden cases such accidental or unintentional movement of the control operating means resulting in an unwarranted change in the adjusted position of the bed could cause the patient considerable harm. Consequently, for reasons of safety the operating means of the known control devices were all located so as to be disposed below the surface of the mattress, even though access thereto was rendered relatively difficult and awkward.

Therefore, an object of this invention is to provide an improved control device with the flexibility of having the operating levers thereof movable or shiftable between an extended operative position whereby they are conveniently accessible and retractable inoperative positions wherein they are out of the way and free from interference with the care and treatment of the patient.

Another object is to provide a control device adapted for use on adjustable beds in which accidental actuation of the control device is prohibited.

Another object is to provide an improved control device for adjustable beds that can be readily adapted or incorporated into existing beds with a minimum of modification or alteration of the bed construction.

Another object is to provide a control device for use on adjustable beds which is relatively simple in structure, relatively inexpensive to install, and which is positive in operation.

Another object is to provide for locking the control device so as to prohibit unauthorized operation thereof.

In accordance with this invention the control device for controlling the operation of the power means which control the adjusted positions of a mattress support to one's comfort comprises a mounting device or control box which can be readily attached to the under structure o side frame of an adjustable hospital bed or the like. Within the box are a plurality of pivotally mounted control lever means, one for controlling each of the respective power operated means for effecting the various adjusted positions of the bed. Each of the levers are constructed of relatively slidably mounted or nested sections which can be readily extended to operative position to a point above the mattress and which can be retracted to an inoperative position to a point below the mattress. Frictional holding means are provided to retain the respective sections of the individual control levers in their respective operative extended positions. Means for adjusting the force of the holding means is also provided. Each of the lever means in turn is operatively connected by a linkage means to an appropriate switch means connected in circuit with the power operated means controlled thereby. Accordingly, the appropriate switch means is readily energized by the movement of shifting of the associated lever means laterally. Locking means are provided for positively securing the respective lever means in their inoperative retracted position so as to prohibit any accidental or unintentionally operation of the lever means when stowed in their retracted positions.

Therefore, a feature of this invention resides in the provision of a control means for use in conjunction with adjustable bed structures which include a series of lever means, each of which is constructed of nested or telescoping members than can be extended between operative and inoperative positions wherein they are rendered readily accessible and convenient to use in the operative position thereof, and inaccessible and free from interference with the care and treatment of the patient in the inoperative position thereof.

Another feature resides in the provision of a frictional holding means for maintaining the respective lever sections in operative position and whereby the lever sections may be retracted or stowed merely by overcoming the frictional force maintaining the respective lever sections in their extended positions.

Another feature resides in the provision of a means for adjusting the force for which the frictional engaging means maintained the lever sections in their respective extended positions.

Another feature resides in a locking means by which the control levers are rendered immobile in the retracted positions of the levers.

Other features and advantages will become more readily apparent when considered in view of the drawings and description in which:

FIG. 1 is a diagrammatical side elevation view of an adjustable bed structure illustrating the high and low horizontal position of the mattress support;

FIG. 2 is a schematic representation of the mattress support showing the hinged foot section thereof in an adjusted knee elevated position;

FIG. 3 is a schematic showing of the mattress support adjusted with the head end section in elevated adjusted position;

FIG. 4 is a schematic illustration of the mattress support inclined to a horizontal with the head end portion up;

FIG. 5 illustrates schematically the position of the mattress support in tilted position with respect to the horizontal with the head end positioned down;

FIG. 6 illustrates a vertical end sectional view of the control device in accordance with this invention taken along line 6—6 of FIG. 8;

FIG. 7 is a front elevation view of the control device of the instant invention having parts thereof shown in section;

FIGS. 8 and 8*a* are respective half plan views of the control device taken along line 8—8 of FIG. 7 wherein FIG. 8 constitutes the left half of the plan view, and FIG. 8*a* constitutes the right half of the plan view.

Referring to the drawings, FIGS. 1 to 5 illustrate an adjustable bed **10** in the various adjusted positions of which such beds are susceptible. Generally, the adjustable bed **10** of the type disclosed is popularly used as hospital or sick bed and it is comprised generally of a head frame and foot frame **11**, **12** respectively, interconnected by horizontally disposed side frame members, e.g. angle structural members **13** and **14** or the like. Supported on the bed frame described is a mattress support **15**. In adjustable beds, of the type herein illustrated, the mattress support **15** is formed of a plurality of hinged sections as shown in FIGS. 1 to 5. The mattress support **15** illustrated comprises four hinged sections **15A**, **15B**, **15C**, **15D** connected together about pivot points **16**, **17** and **18**. Not shown, but as is well understood by those skilled in the art, are independently operated means operatively associated with the mattress support **15** for adjusting the same in any of its respective positions. For example, as shown in FIG. 1 the mattress support can be adjusted vertically with the support **15** maintained parallel to the horizontal between a high and low position as indicated in FIG. 1, or any other horizontal position immediate therebetween. In FIG. 2 the foot sections **15C** and **15D** are adjusted to a knee raised position with the head end portion **15A** horizontally disposed. In FIG. 3 the mattress support **15** is adjusted with the head end portion **15A** thereof elevated with respect to the horizontal plane of the mattress support. In FIG. 4 the mattress support **15** is adjusted to a tilted position in which the head end portion **15A** of the mattress support is raised above the foot end portion **15D**. And in FIG. 5 the mattress support **15** is adjusted in a tilted position in which the head end portion is disposed below the foot end portion. Of course, it will be understood that various combinations of the respective adjusted positions are readily obtained by appropriate operation of respective control means which control the operation of the independent power means (not shown).

In accordance with this invention the control device **20** for controlling the respective power means is secured to the side frame of the bed. Essentially, the control device **20** comprises a control box **21** which is connected by means of a Z-shaped bracket **22** to a vertical plate **23** connected between the side frame members **13** and **14**, preferably adjacent to the foot end of the bed. The control box **21** comprises essentially a front plate **24** and a connected rear cover section **25**. The front plate **24** comprises a formed piece having circumferentially extending inturned flange portions to define a top wall **24A**, a bottom wall **24B** and connected side walls **24C**, the top and bottom wall portions **24A**, **24B** being provided with inturned lip portions **26**, **27** respectively. The top wall **24A** is also provided with cut-outs **28** through which the respective control lever means **29**, **30** and **31** extend.

As shown in FIGS. 1 and 6, the rear cover or wall **25** of the box extends between the inturned flange or lip **27** of the lower wall portion **24B** and the lowermost angle member **14** of the bed side frame. The upper inturned lip or flange **26** of the control box **21** connects to the Z-shaped bracket **22** by which the box **21** is supported on the bed frame.

Located to one side of the control box **21** on the flange **14A** of the lower angled member **14** of the side frame are the respective switches **32**, **33**, **34** which control the operation of the respective power means to effect the various adjustments or combination thereof as illustrated in FIGS. 1 to 5. For example, switch **32** is connected to the power operated means which control the flexing of the foot portions **15C**, **15D** of the mattress support **15** to adjust the various knee elevated positions. Switch **33** is connected in circuit with a power operated means which controls the elevation of the head section **15A** of the mattress support. Switch **34** activates the power operated means for vertically adjusting the high and low positions of the mattress support **15**. Connected in circuit with the high-low switch **34** is a three position selector switch **35** which is utilized to determine the inclination of the mattress, i.e. whether the head or foot end is to be inclined up or down, or be maintained horizontal. As shown, switch **35** is marked "head," "both" or "foot." This means that with the selector switch positioned in the "head" position, the actuation of the high-low switch **34** will cause the mattress support **15** to tilt in a position indicated in FIG. 4. With the selector switch **35** positioned in the "both" position the mattress support **15** will rise vertically and parallel to the horizontal plane upon actuation of the high-low switch, as illustrated in FIG. 1. With the selector switch **35** positioned in the "foot" position, actuation of the high-low switch **34** will cause the mattress support **15** to assume an adjusted position illustrated in FIG. 5. The power means and switch means for controlling the position of such mattress supports are well known, and need not be further described since this invention has to do with the control for actuating the respective switch means.

In accordance with this invention the switch means, that is the knee, head, and high-low switches are operatively connected with unique control lever means **29**, **30**, **31** which are adapted to be moved between operative extended position, and retracted inoperative position. One such lever means is operatively connected to each of the respective switch means.

In accordance with this invention each of the respective lever means **29**, **30**, **31** comprise a pair of nested sections which include a rectangular shaped section or rail **40** which is wholly disposed within the confines of the control box **21**. Connected to the back side **40A** of each of the respective rail sections is a U-shaped spacer bracket **41** by which the respective rail sections **40** are pivotally connected to the Z-shaped support bracket **22** by screw pivot **42**. Thus, it will be noted that each of the respective rail sections **40** is movable about its pivot screw **42** a limited angular amount. Operatively associated with each of the respective rail sections **40** is a slidable lever section **43** which is adapted to be slidably mounted with respect to rail **40** so as to extend between an operative extended position and an inoperative retracted position. As shown in FIGS. 6 and 7, the extended operative position of the slidable lever section **43** is shown in solid line whereas the retracted inoperative position of the respective lever sections is illustrated in a dot-dash line. Thus, it will be readily apparent that the slidable lever sections **43** can be readily moved between operative position wherein the respective levers are rendered readily accessible and inoperative position wherein they are stowed in an out of the way position below the level of the mattress.

In order to determine the position of the slidable lever section **43** with respect to its respective rail sections in the operative position thereof, a frictional engaging means is provided for holding the slidable lever section **43** in its extended position. As shown in FIG. 6, the frictional

holding means comprises a friction plate **44** which has its bearing surface coated with a suitable felt material or other friction restraining surface **45** and which is arranged to bear against the surface of the slidable lever section **43**. The friction plate **44** is maintained in position by a pair of screw means **46** which also function to vary or adjust the force which the friction plate **44** exerts upon the slidable lever member **43**. If desired, suitable friction bearing buttons **47** may be disposed between the side and front walls of the rail member **40** and the slidable lever member **43** so as to insure axial alignment of the slidable lever member **43** with respect to its rail section **40**.

Connected to the lower end of each slidably mounted lever section **43** is a stop **48** which in the retracted position of the slide section **43** is adapted to engage a stop plate **49** fixed to the front wall **24** of the control box **21**. With the construction thus far described it will be readily apparent that the slidable lever section **43** of the respective levers can be readily shifted between the operative and inoperative position merely by overcoming the force exerted by the friction plate **44** on the slidable section of the lever. The arrangement is such that when the respective levers are extended to their operative position, the hand knob **50** connected thereto, they will extend above the surface of the mattress on the mattress support **15** and thus be readily accessible to the operator. When the respective levers **29, 30, 31** are stowed in their retracted position the knob or upper ends **50** of the respective lever are disposed below the level of the mattress, and are thus disposed out of the way and free from interference with the care of the patient.

As shown in FIG. 8 each of the lever rail sections **40** has connected thereto an L-shaped bracket **51** one arm of which is horizontally disposed. In accordance with this invention the "L" bracket **51**, connected to each of the lever rail sections **40**, is operatively connected through a linkage means to one of the switches. For example, the lever means **29** is interconnected by a linkage **55** to head switch **33**. Similarly, the control lever **30** controlling the adjustment of the foot end of the mattress support is interconnected to the knee activating switch **32** by a linkage connection **56**, and the lever means **31** controlling the high-low adjustments is connected to the high-low switch **34** by linkage **57**. The linkage connection comprises a member which connects the bracket **51** of the respective levers to its corresponding switch so that a direct connection is afforded therebetween.

To maintain the respective levers and their connected linkages in neutral position, a toggle spring means **58** is operatively associated with each of the interconnecting linkage members. As shown in FIGS. 7 and 8A, the toggle spring means **58** comprises a pair of angularly disposed coil springs **58A, 58B** which have one end thereof connected to the linkage member, preferably at a common point and have their other ends connected to a bracket **59** fixed to the bed side frame member. Thus, it will be apparent that movement of the respective levers either to the left or to the right, as indicated by arrow in FIG. 7, will cause the lever to be placed under spring tension. Thus, upon release of the lever after the adjusted position effected thereby has been reached, the lever is automatically returned to its neutral position due to the spring action operating thereon.

To secure the respective levers **29, 30, 31** in their retracted inoperative position and to render them immobile so to avoid any accidental operation thereof, a locking means is provided. As seen in FIGS. 6 and 7, the locking means comprises an angularly bent plate **60** to define a locking member having a vertical section **60A** and a laterally offset section **60B**. As shown the locking member is hingedly connected to the rear cover **25** of the control box **21** about a hinged pin **61**. A spring means **62** is connected between a bracket **63** secured to the rear cover box **25** and the lateral offset portion **60B** so as to normally bias the locking plate **60** into unlocked position.

In the illustrated embodiment the operation of the locking plate **60** is disposed so as to be under the influence of a key operated latch means **64**. The latch means **64** is associated with a conventional tumbler type lock **65** whereby displacement of the latch member **64** pivots the locking plate **60** into locked position. Therefore, when the tumbler barrel of the lock **65** is rotated, the latching portion connected thereto will overcome the force of the spring **62** causing the locking plate **60** to pivot in a clockwise direction to a position wherein the offset portion **60B** is horizontally disposed, as indicated in dark lines as viewed in FIG. 6. Accordingly, the offset portion **60B** of the locking plate **60** is provided with notched out portions **60C** having configurations substantially similar to that of the slidable sections of the respective lever means. Thus in the operative or locked position of the locking plate **60**, the notched out portions **60C** will accommodate the respective lever sections **43**. The control lever stop **48** which extends laterally beyond the ends of the lever sections **43** serves to prohibit withdrawal of the lever section **43** from the control box **21** when the locking plate **60** is disposed in operative locked position as seen in FIGS. 6 and 7. Thus with the locking plate **60** disposed in operative position and locked therein under the action of the key lock, it will be apparent that accidental displacement of the operating levers **29, 30, 31** is prohibited. It is to be noted that the tolerances of the notched out portions **60C** of the locking plate **60** which receive the respective lever sections **43** is such that any play therebetween is insufficient to effect operation of the switch means. The operation of the control device is as follows. The locking plate **60** must be first released by insertion of the proper key in the tumbler lock **65**. With the locking plate **60** released, the lever section **43** of the lever controlling the particular adjustment desired is raised to its extended position as indicated in FIG. 7. It will be apparent that either one or all of the control levers **29, 30, 31** may be extended to their operative position depending on which of the particular adjustment is required. Thus, by the appropriate displacement of the respective levers **29, 30, 31** either to the right or left will cause the switch means operatively associated therewith to close the circuit to the particular power operated means which controls the movement of the respective sections of the mattress support **15** or the mattress so that appropriate adjustment can be made. When the proper adjustment has been reached, the control lever is released, and due to the action of the toggle spring **58** operating thereon is returned to its neutral position. After the desired adjustments have been made, each extended lever section **43** is retraced to its stowed position merely by applying a downward force sufficient to overcome the friction of the friction plate **44** operating thereon. With the lever sections **43** disposed in their retracted position, the key may be again rotated to shift the locking plate **60** to locked position and thereby insure that the respective levers are locked and immobile in their retracted inoperative position.

From the foregoing, it will be readily apparent that the operation of the levers **29, 30, 31** is rendered simple and convenient, and that they can be raised to a readily accessible and convenient position to control the desired operation of the bed, and that in their stowed or retracted position the respective levers are disposed entirely clear of the mattress and are free from interference with any activity which is required to be conducted in and around the bed. Also, by stowing the respective levers **29, 30, 31** out of the way, and below the level of the mattress, the transfer of a patient in and out of bed can be readily facilitated without danger of activating the controls associated with adjustable beds. It will be further apparent that the operation of the respective levers is rendered impossible when they are locked in their stowed position, since the locking plate **60** prohibits any displacement of the lever either to the right or left, which is necessary

to actuate the switch means operatively associated therewith.

While the instant invention has been disclosed with reference to a particular embodiment thereof, it is to be appreciated that the invention is not to be taken as limited to all the details thereof as modifications and variations thereof may be made without departing from the spirit and scope of the invention.

We claim:

1. A control device adapted to be connected to a power operated adjustable bed and positioned relative thereto so as to be disposed below the level of the mattress on said bed comprising

(a) control box mounted on the frame of said bed below one level of the mattress,

(b) a telescoping lever means including a first section pivotally connected in said box for movement between operative and inoperative position, and a second lever section slidably mounted with respect thereto for longitudinal movement therealong between extended and retracted positions,

(c) a switch means,

(d) and means interconnecting said first lever section to said switch means whereby said switch is actuated upon movement of said first section to operative position when said second section is in the extended position.

2. The invention as defined in claim 1 including

(a) means for operating on said second lever section for maintaining said latter section in extended position relative to said first lever section.

3. A control device used on a power operated adjustable bed comprising

(a) means for mounting the control device so as to be located below a mattress supported on said bed,

(b) telescoping lever means including a first lever section pivotally connected to said mounting means for movement between operative and inoperative position, and a second lever section slidably mounted with respect to said first lever section for movement between extended and retracted positions with respect thereto whereby in the extended position said second lever section extends above the lever of the mattress,

(c) a switch means connected on the bed frame,

(d) and means interconnecting said first lever section to said switch means whereby said switch is actuated upon movement of said first lever section to operative position,

(e) and means for securing said second lever section in the retracted position so as to render said lever inoperative.

4. For use on a bed having an adjustable mattress support and power operated means for controlling the adjusted positions of said mattress support, the improvement of

(a) control device for effecting selective operation of said power means, said device including a mounting means,

(b) a plurality of telescoping operating levers mounted in said mounting means,

(c) each of said levers including a first section pivotally connected to said mounting means, and a movable section slidably mounted with respect to said first section for movement between operative extended position and inoperative retracted position relative to said first section,

(d) a plurality of switch means connected in circuit with the power means and adapted to actuate the power means for effecting the respective adjustments of the mattress support,

(e) and means interconnecting each of said first sections of the respective levers to one of said switch means whereby movement of the respective levers effects actuation of the switch means operatively connected thereto.

5. The invention as defined in claim 4 and including a friction means operating on the slidable section of the respective levers for maintaining the same in the extended position thereof.

6. The invention as defined in claim 4 and including locking means for rendering said levers inoperative in the retracted position thereof.

7. A control device for a power operated adjustable bed comprising

(a) a box means mounted on said bed,

(b) a plurality of telescoping lever means mounted in said box means,

(c) each of said lever means including a first section pivotally connected to said box means for movement between operative and inoperative position, and a second section slidably mounted with respect to said first mentioned means for movement between extended and retracted positions,

(d) a plurality of switch means,

(e) and means interconnnecting the first section of the respective lever means to a corresponding switch means whereby said switch is actuated upon movement of said first section to operative position,

(f) and means for locking and securing said second sections of the respective levers in the retracted position thereof so as to render the same immobile and thus prohibit unintentional actuation of said lever means.

8. For use on a bed having a mattress frame which can be raised, lowered or inclined with respect to a horizontal datum plane, and which frame includes individually adjustable, pivotally connected head and foot portions, and power means for effecting the respective adjustments, the improvement of

(a) a control means for controlling the operation of the power means for moving the frame or the respective head and foot portions thereof to any adjustable position,

(b) said control means including a mounting means,

(c) a plurality of levers, each of said levers being actuated to effect a given adjustment, and each of said levers including

(d) a rail section pivotally connected to said mounting means,

(e) a slidable lever section telescopically mounted in each of said rail sections for movement between operative extended positions and inoperative retracted position,

(f) means disposed within each of said rail sections frictionally bearing on the slidable section mounted therein whereby said friction means retains the slidable section fixed relative to its respective rail section,

(g) a plurality of switch means adapted when actuated to energize respective operating means for adjusting the position of said frame or its hinged head and foot portions accordingly,

(h) means connecting each of said rail sections to one of said switch means whereby said switch means is actuated upon movement of said rail section about its pivot,

(i) and means for locking each of said control levers in the retracted positions thereof.

9. The invention as defined in claim 8 wherein said locking means includes

(a) an angled locking plate hinged for movement between locked and unlocked positions, and

(b) said angled plate having notched out portions for confining the slidable section of the respective levers in the retracted position thereof and in the locked position of said plate.

10. For use in a power operated hospital bed having a mattress support which can be raised, lowered or inclined with respect to a horizontal datum plane, and which

mattress support includes individually adjustable head and foot end sections, and independently operated power means for effecting the individual adjusted positions of said mattress support and its end sections when energized, the improvement of

(a) a control device for moving the mattress support and/or the respective head and foot end sections to any of the adjusted positions,

(b) said control device including a mounting box adapted to be secured to the bed,

(c) three control lever means mounted in said box, each of said lever means controlling a given adjustment of said mattress support,

(d) each of said lever means including a rail section,

(e) and a slide section, said slide section being telescopically mounted in said rail section for movement between extended operative position and retracted inoperative position,

(f) means pivotally mounting the rail section of the respective lever means to said box to provide the respective rail sections with limited lateral movement about its pivot,

(g) means for frictionally retaining each of said slide members in their respective extended positions,

(h) means for adjusting the force with which said friction plate bears against said slide section,

(i) a switch means operatively associated with each of said control lever means, each of said switch means being connected in a circuit with the power means for effecting a given adjustment of said mattress support,

(j) a linkage connection connecting the rail section of each of said lever means to its associated switch means whereby lateral displacement of said lever about its respective pivot means actuates its respective switch means,

(k) means for returning said lever means in their neutral positions,

(l) and locking means for securing the respective slide sections of said levers in their respective retracted position so as to render said lever means immobile so as to prohibit unintentional actuation of said lever means.

11. The invention as defined in claim **10** wherein said means for returning the respective lever means to neutral position includes a toggle spring means operatively connected to said linkage.

12. For use in a power operated hospital bed having a mattress support which can be raised, lowered or inclined with respect to a horizontal datum plane, and which mattress support includes individually adjustable head and foot end sections, and independently operated power means for effecting the individual adjusted positions of said mattress support when energized, the improvement of

(a) a control device controlling the operation of said power means for moving the mattress support and/or its respective head and foot end sections to any of the adjustable positions of said mattress support,

(b) said control device including a mounting box adapted to be secured to the bed,

(c) control lever means mounted on said box, each of said lever means controlling a given adjustment of said mattress support,

(d) each of said levers including a first section,

(e) and a second section, said slide section being telescopically mounted in said second section for movement between extended operative position and retracted inoperative position,

(f) means pivotally mounting said first section of the respective lever means to said box to provide the respective first sections with limited lateral movement about its pivot,

(g) means for frictionally retaining each of said second sections in their respective extended positions,

(h) a switch means operatively associated with each of said control lever means, the respective switch means being connected in circuit to a given power means for effecting a given adjustment of said mattress support,

(i) a linkage connection connecting said first sections of each of said lever means to its associated switch means whereby lateral displacement of said first section about its respective pivot means actuates its respective switch means,

(j) means for maintaining said lever means in their neutral positions,

(k) and locking means for securing the respective slide sections of said levers in their respective retracted position so as to render the same immobile.

13. For use in a power operated hospital bed having a mattress support which can be raised, lowered or inclined with respect to a horizontal datum plane, and which mattress support includes individually adjustable head and foot end sections, and independently operated power means for effecting the individual adjusted positions of said mattress support when energized, the improvement of

(a) a three-way control device for controlling the respective adjusted positions of the mattress support and/or its respective head or foot end sections,

(b) said control device including a mounting box adapted to be secured to the bed below the level of the bed mattress,

(c) three control lever means mounted in said box, each of said levers effecting a given adjustment of said mattress support,

(d) each of said lever means including a rail section, and

(e) a slide section, said slide section being telescopically mounted in its respective rail section for movement between extended operative position and retracted inoperative position,

(f) pivot means for connecting each of said rail sections of the respective lever means to said box so as to provide the respective rail sections with limited lateral movement about its respective said pivot means,

(g) means for frictionally retaining each of said slide members in their extended positions relative to their respective rail sections,

(h) said frictional retaining means including a friction plate for bearing against said slide section,

(i) means for adjusting the force with which said friction plate bears against said slide section, and

(j) a switch means operatively associated with each of said control levers, each of said switch means being connected in circuit with a respective power means for effecting the given adjustment of said mattress support,

(k) a linkage connecting the rail section of each of said levers to its associated switch means whereby lateral displacement of said lever about its respective pivot means actuates its respective switch means,

(l) means for maintaining said lever means in their neutral position,

(m) said latter means including a toggle spring operatively connected to the respective linkage interconnecting each rail section with its respective switch means,

(n) and locking means for securing the respective slide sections of said levers in their retracted position so as to render said lever means immobile,

(o) said locking means including a lock plate hinged to said box for movement between locked and unlocked positions,

(p) said lock plate having an angled position provided with notched out portions for receiving the lower ends of the respective slide sections in the locked position of said plate,

(q) and means for latching said lock plate in locked position.

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