

[54] **VERTICALLY ADJUSTABLE OVERBED TABLE**

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[51] Int. Cl. **A47b 9/02**

[58] Field of Search **108/146, 144, 136; 248/162, 412, 337, 336**

[56] **References Cited**

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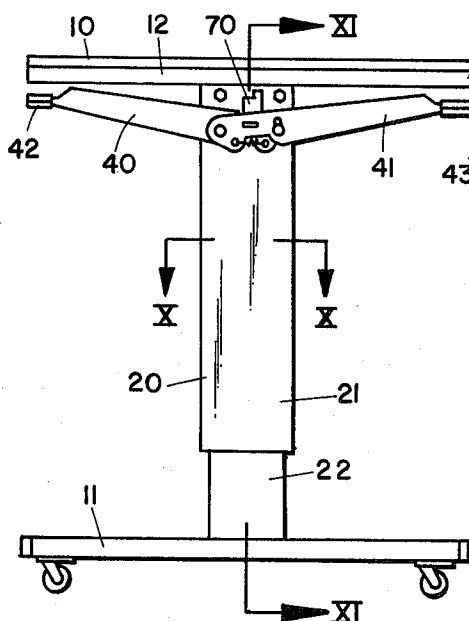
Attorney, Agent, or Firm—Price, Heneveld, Huizenga & Cooper

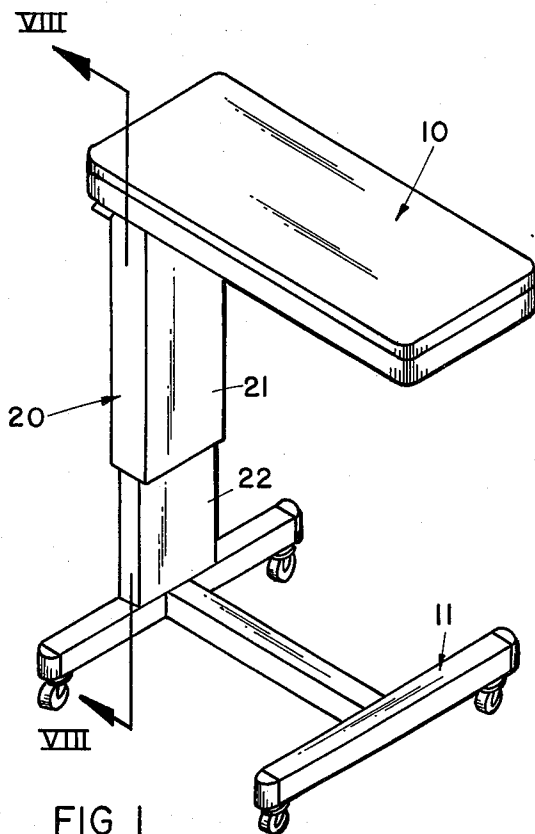
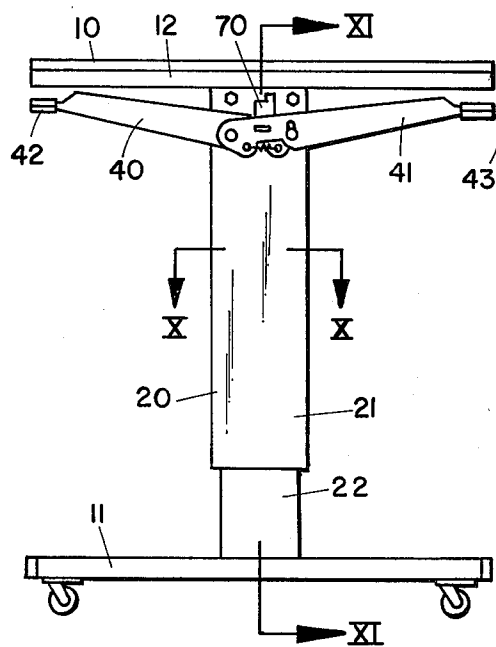
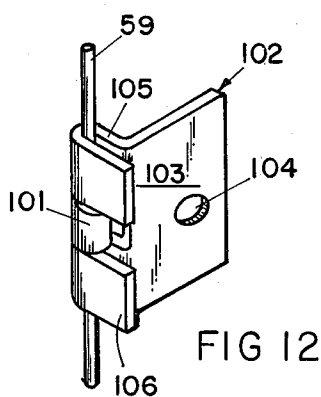
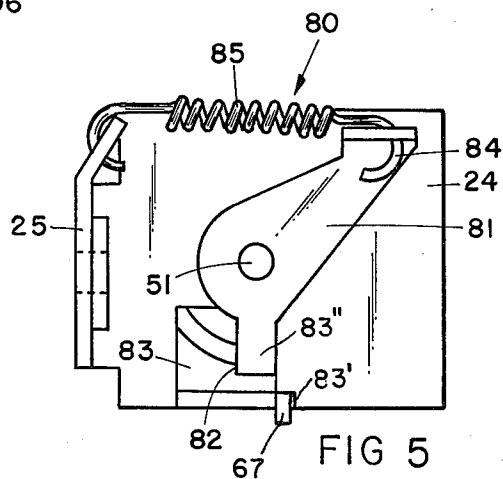
[57] **ABSTRACT**

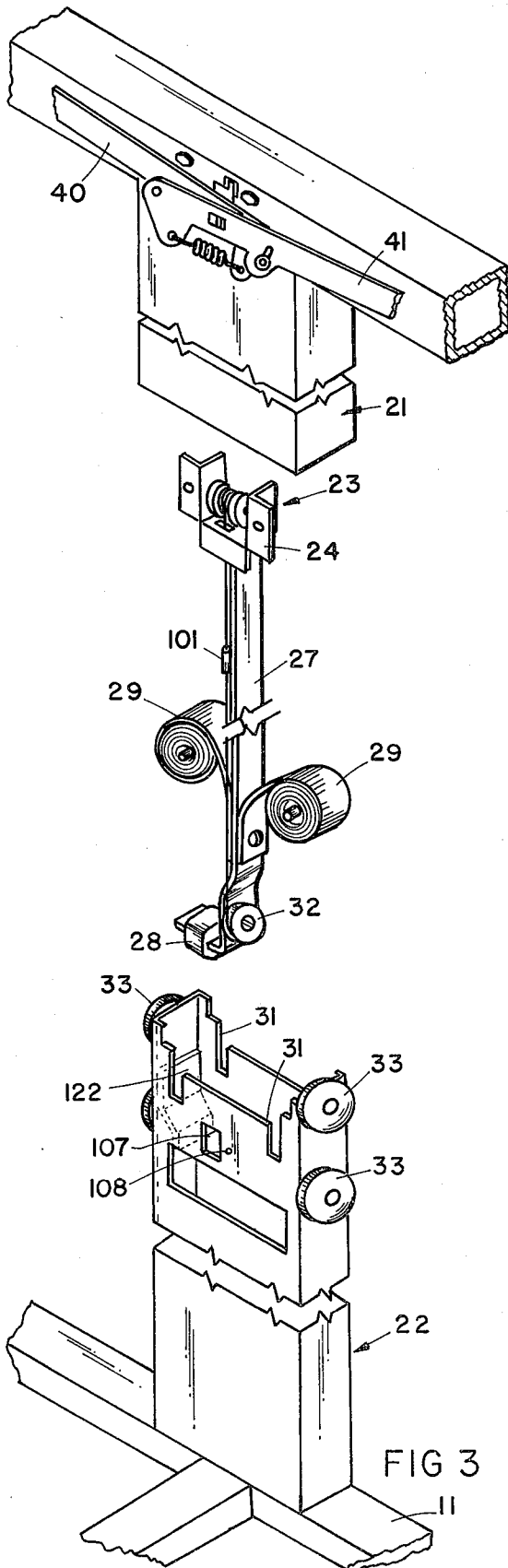
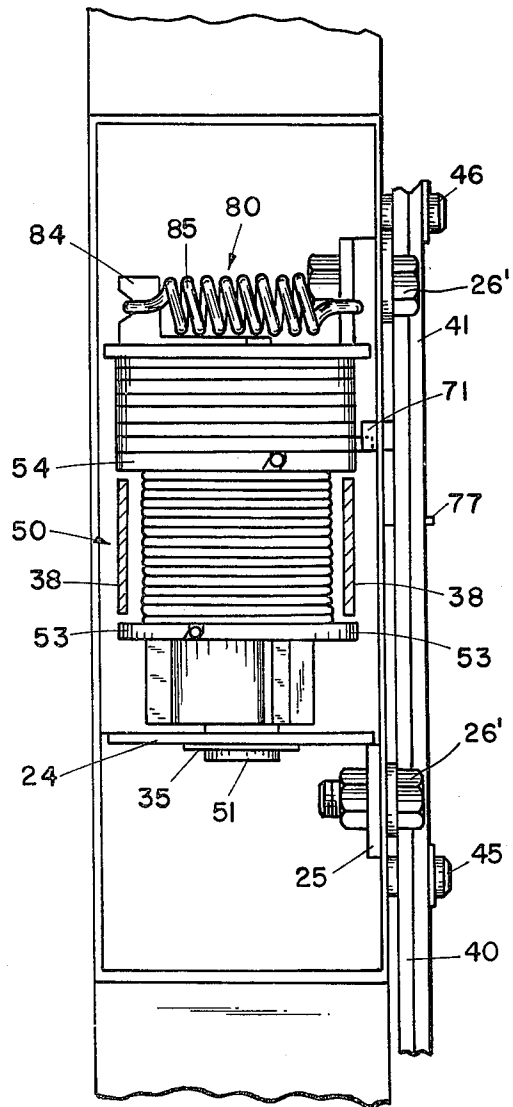
A vertically adjustable overbed table including a pedestal,

a horizontal table top mounted at the top of the pedestal and a horizontal roller-equipped base platform at the lower end of the pedestal. The pedestal includes an upper outer column which telescopes over a lower inner column, and a pair of constant force springs which are mounted within the columns to maintain the telescoping columns in equilibrium. A clutch assembly is mounted within the top of the upper column which includes a rotatable clutch drum, a clutch spring around the clutch drum and a rotatable spool wound with cable, the spool being connected to the clutch drum so that both rotate together. A depending loop is formed at an intermediate portion of the table which engages a pulley wheel at the lower end of a vertical shaft extending below the clutch assembly within the columns. One point of the depending cable is rigidly affixed to the inner column so that the two columns can be moved telescopically only when the cable spool is free to rotate to pay out and take up equal amounts of cable. Lever means are provided for releasing the tension on the clutch spring so that the clutch drum and the spool are free to rotate so that the table can be lowered. An override assembly is also provided in conjunction with the clutch spring which releases the clutch spring tension when a sufficient downward force is placed on the table top so that the table top can be lowered without utilizing the tension releasing lever means. The table top can be raised by exerting an upward force on the table top sufficient to overcome the equilibrium effect of the constant force spring.

14 Claims, 12 Drawing Figures







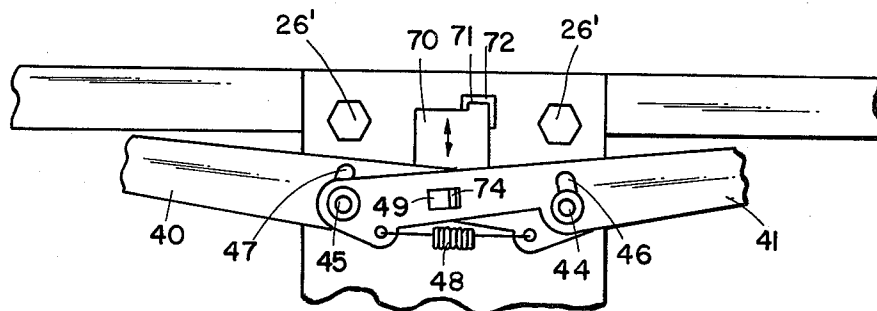


FIG 9

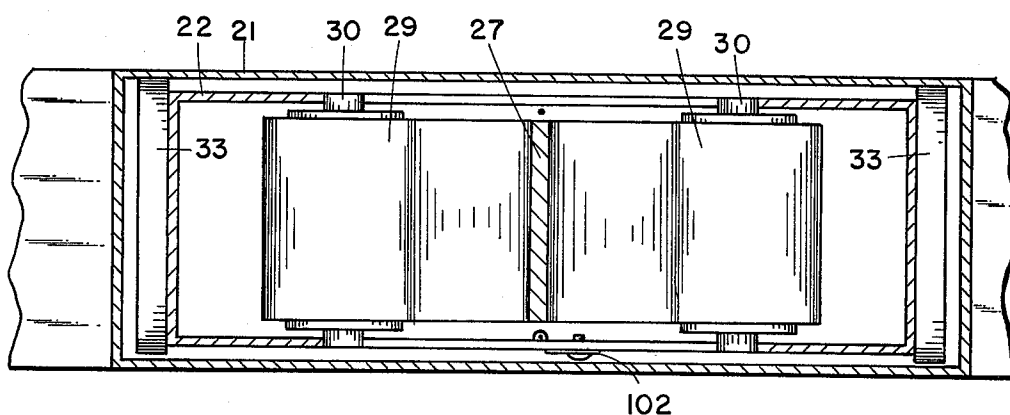


FIG 10

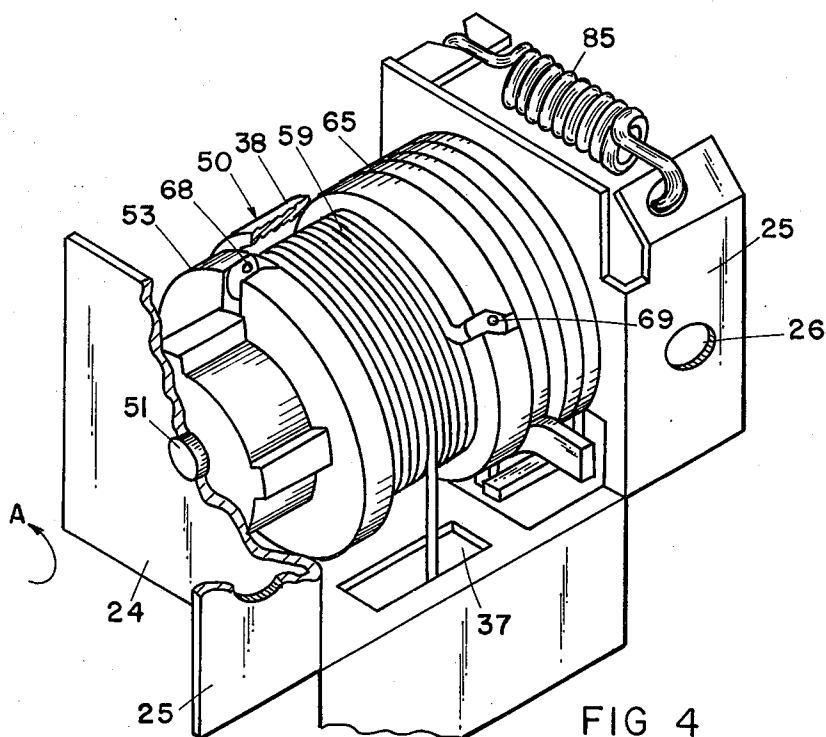


FIG 4

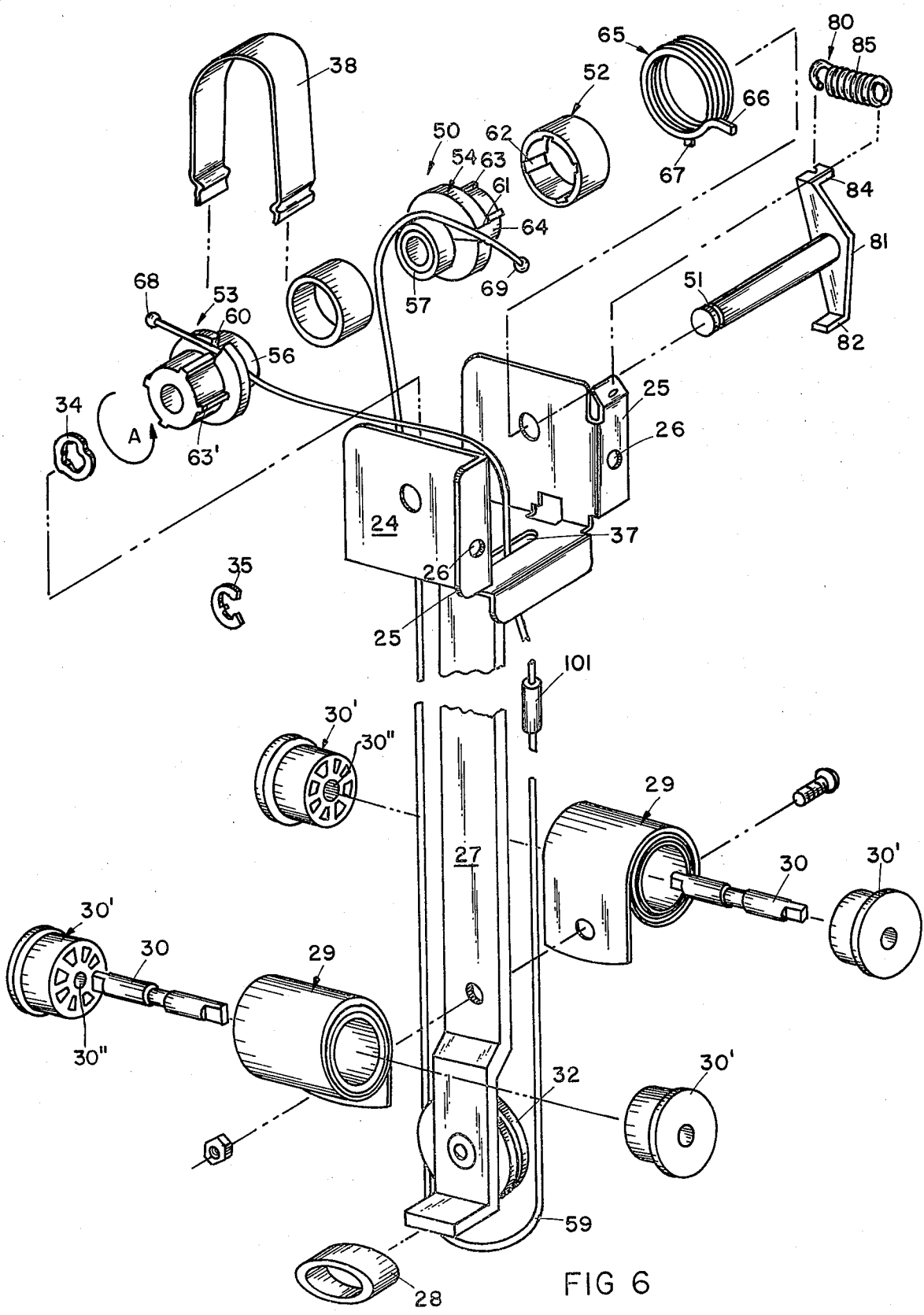


FIG 6

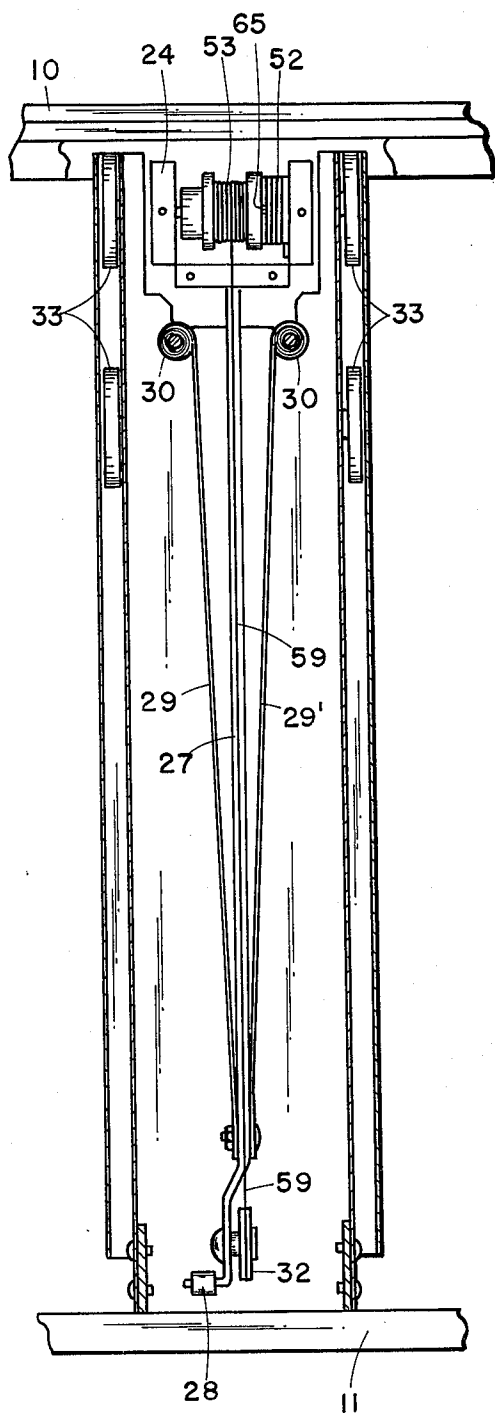


FIG 8

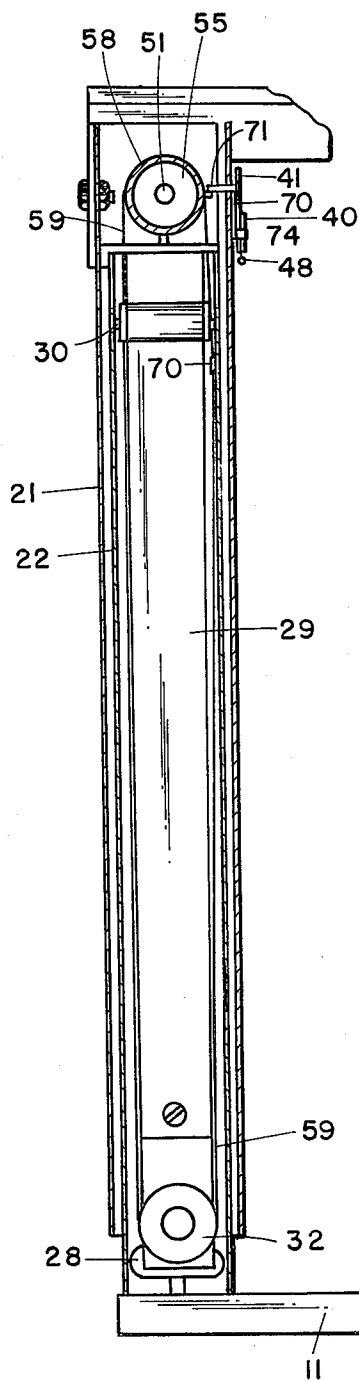


FIG II

VERTICALLY ADJUSTABLE OVERBED TABLE

BACKGROUND OF THE INVENTION

This invention relates to overbed tables and more particularly to a vertically adjustable overbed table which can be raised or lowered from either side of the table.

Overbed tables are most often used in hospitals to provide an eating and work surface for bed-ridden patients. Although some such overbed tables are rigid structures, many are vertically adjustable so that the patient or nurse can raise or lower the table to the most convenient height. While a variety of mechanisms have been employed in such vertically adjustable overbed tables, most of such adjustable tables are crank-operated, spring-biased or a combination of the two. In the crank-operated tables, the crank must be operated to either raise or lower the table. In the spring-biased tables, a brake lock is generally employed in conjunction with a spring. When the brake is released, the table is free to move either upwardly or downwardly to the desired position at which time the brake lock is again engaged. The disadvantages of these overbed tables are that the crank-operated tables are impractical when used with electric powered beds; may offer a hazard to the patient when the bed is elevated, necessitate the rather tedious cranking task, which is sometimes arduous to a weak, sickly patient and, in the case of the spring-biased tables bearing objects of moderate to heavy weight, the danger of the table lowering too quickly when the brake is released creating the danger of dropping on the patient, spilling food, and the like.

Some more recent overbed tables have employed a combination of crank operation and spring biasing. For example, in U.S. Pat. No. 3,504,643, an overbed table is disclosed which is spring-assisted for raising the table and which must be cranked to lower the table. Although such an overbed table minimizes the risk of injury to the patient from the table dropping on him, it still involves the tedious task of operating the crank to lower the table. In addition, overbed tables of the spring-bias type now on the market are at best difficult to service and at worse, dangerous to servicing personnel because constant force springs are usually inaccessible inside the telescoping columns, as well as the other mechanism necessary for operation of the table.

Thus, there has been a need for a vertically adjustable overbed table which is easy to raise and lower and which can be safely controlled during lowering; and a need that such a table can be easily and safely serviced when necessary.

SUMMARY OF THE INVENTION

According to the present invention, there is provided a vertically adjustable overbed table which does not utilize a crank assembly and which can be easily raised or lowered with no possibility of being accidentally lowered too quickly even when overloaded, thereby eliminating any chance of possible injury to a bed-ridden patient, spilled food and the like. The overbed table of the present invention comprises a pedestal column with a horizontal table top and a horizontal, roller-equipped base platform, the pedestal being located at the same side of each of the table platform and base platform. The pedestal includes an upper, outer column which telescopes over a lower inner column. The height of the table is a function of the degree to which

the lower inner column telescopes into the upper outer column.

A spring of the "constant force" type is mounted in association with the outer and inner columns to place the telescoping thereof in equilibrium when no external force is exerted on the table top. The table top is raised by exerting a slight upward force to overcome the telescoping equilibrium produced by the constant force spring.

A clutch assembly which is mounted in the upper portion of the upper outer column controls the lowering of the table. The clutch assembly, in the preferred embodiment of the invention, comprises a rotatable drum including a spool portion and a clutch portion. The clutch portion of the drum is engaged by a peripheral helical clutch spring which is mounted and tensioned so that the drum can be freely rotated in one direction but not in the other direction until the spring tension is overtly released. A cable is wound around the spool portion of the drum with an intermediate depending loop portion engaging a pulley wheel at the lower end of a depending shaft. The shaft is rigidly mounted at its upper end to an upper portion of the outer column and extends axially downwardly within the two telescoping columns. An intermediate portion of the depending loop of the cable is rigidly attached to the lower inner column so that telescoping movement of the outer column either upwardly or downwardly is possible only when the spool is free to rotate. Thus, since the clutch spring permits rotation of the drum in one direction without an overt release of tension, the cable is directionally wound around the spool with respect to the attachment of the intermediate portion of the depending cable loop to the inner column so that the upper outer column can be raised without overtly releasing the tension on the clutch spring. However, since the spool is not free to rotate in the opposite direction unless the clutch spring tension is overtly released, the table cannot be lowered unless the clutch spring tension is so released.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of an overbed table constructed according to the present invention;

FIG. 2 is an end elevation view of the overbed table of FIG. 1;

FIG. 3 is an exploded perspective view of the pedestal column assembly of the overbed table of FIG. 1;

FIG. 4 is a perspective view of the clutch assembly of the overbed table of FIG. 1;

FIG. 5 is an end elevation view of the clutch assembly of FIG. 4 showing the override assembly thereof;

FIG. 6 is an exploded perspective view of the clutch, override, cable and constant force spring assembly components of the overbed table of FIG. 1;

FIG. 7 is a plan view of the clutch and override assembly of the overbed table of FIG. 1;

FIG. 8 is a cross-sectional view of the pedestal of the overbed table of FIG. 1 taken along the plane VIII—VIII of FIG. 1;

FIG. 9 is a fragmentary end elevational view of the actuator lever arm assembly on the pedestal of the overbed table of FIG. 1;

FIG. 10 is a cross-sectional view taken along the plane X—X of FIG. 2;

FIG. 11 is a cross-sectional view of the pedestal of the overbed table of FIG. 1 taken along the plane XI—XI of FIG. 2; and

FIG. 12 is a fragmentary, perspective view of the mechanism utilized to lock the cable to the inner column.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring to the drawings in more detail, FIGS. 1 and 2 are respectively perspective and end elevational views of the overbed table of the present invention which includes table top 10, base 11, and pedestal 20. Table top 10 is rigidly attached to a metal tubular horizontal frame 12 which is welded or otherwise rigidly affixed to the top of the pedestal 20.

Pedestal 20 includes an upper, outer column 21 which telescopes over a lower inner column 22 which is rigidly connected at its lower end to base 11. A pair of lever arms 40 and 41 are pivotally connected at the upper portion of outer column 21 and extend outwardly in opposite directions. The end handles 42 and 43, which are affixed normally to arms 40 and 41, respectively, are accessible at the sides of table top 10. Lever arms 40 and 41 are depressible to permit lowering of table top 10 when desired, as will be explained more fully hereinafter. By providing a lever arm at each side of the table top 10, it will be appreciated that table top 10 can be placed over a patient from either side and in either case a lever arm will be accessible to both the patient and to the nurse.

Referring now to FIG. 3, the telescoping of outer column 21 over inner column 22 is controlled by means of an internal lift assembly 23. Lift assembly 23 includes clutch assembly 50 and override assembly 80 mounted on mounting bracket 24 which has side flanges 25 for rigidly mounting the lift assembly to the upper inside portion of upper column 21 through bolt holes 26. Depending from mounting bracket 24 is a rigid member 27 which is slightly longer than the length of outer column 21. The lower end of member 27 is provided with a horizontal foot portion having a rubber bumper 28 which limits the telescoping travel of the outer column in both up and down directions. It contacts the bottom wall of inner column 22 when outer column 21 is telescoped downwardly over inner column 22 to the fullest extent. It contacts the arrest bracket 122 when outer column 21 is at the limit of its upward reach.

Toward the lower end of member 27, one end of each of a pair of rolled constant force leaf springs 29 is attached to opposite sides of member 27. The other end of each of the constant force springs is attached to rotatable spindles 30 which extend outwardly from the rolled constant force leaf spring sufficient to be seated in corresponding slots 31 in the top portion of inner column 22. The spindle sections 30' are molded from plastic and the bore thereof has a thin depressible circumferential lip molded about the interior at 30''. These lips 30'' depress radially outwardly when the spindle sections 30' are forced over the axles, returning to their initial configuration in the central, reduced-diameter groove in the axle. These lips retain the assemblies as an integral unit once they have been assembled.

The adjacent faces of spool sections 30' come into abutment or near abutment during assembly. The spool

sections roll on axles 30, the axles being held stationary by the squared lugs on their extremities which fit into and mate in non-rotatable fashion with slots 31 in inner column 22.

A pulley wheel 32 is positioned near the lower end of member 22. The depending loop of cable 59 is looped about this wheel as will be explained more fully hereinafter.

To avoid frictional drag when outer column 21 is telescoped over inner column 22, a pair of rollers 33 is provided on each side of the upper portion of inner column 22. The axes of rollers 33 are offset with respect to the minor width of column 22 and/or the rollers are slightly undersized so that as column 21 is raised or lowered telescopically over column 22, rollers 33 will bear the sliding movement between one inside surface of outer column 21 and the adjacent outside surface of inner column 22. The contact between rollers 33 and the inside surface of outer column 21 is more clearly shown in FIG. 10.

Referring now to FIGS. 4-7, the detailed construction of the clutch and override assemblies is shown. Clutch assembly 50 includes a rotatable drum horizontally rotatably mounted on mounting bracket 24 on axle 51. The rotatable drum consists of a clutch drum section 52 and an adjacent spool section 53. Although a single-piece rotatable drum can be employed, in the preferred embodiment, as shown in FIG. 6, spool section 53 consists of a pair of spool halves 54 and 55 each of which has a set of ratchet teeth 56 and 57, respectively, on the inner, stepped-down diameter axial face thereof. Teeth 56 and 57 mesh and lock together in the working direction when the spool halves are brought together to interlock the two spool halves so that they rotate together as a single spool. The ratchet teeth permit relative rotation of the spool halves in the non-working direction such that cable 59 can be wound into working position during assembly of the mechanism by merely turning splined face 63', and thus spool half 53, with a conventional open-end wrench counterclockwise as viewed in FIG. 6. The inner axle extensions of spool halves 54 and 55 are preferably interlocked axially through a spool hub 58 to avoid any fouling of cable 59 when wound around the spool. Cable-retaining slots 60 and 61 are provided in the periphery of spool halves 54 and 55, respectively, in which the two ends of cable 59 are secured, as will be more fully explained hereinafter.

Clutch drum 52 is bored centrally and includes a series of notches 62 spaced at 90° intervals around the inside wall of the bore. Notches 62 receive corresponding radial splines 63 on the outer stepped-down diameter axial extension 64 of spool half 54 so that clutch drum 52 is rotated whenever spool portion 54 is rotated. It will be noted that spool half 55 also has an outer axial extension with a plurality of radial splines 63'. This intelligence is functional not only during assembly of the device but permits spool halves 54 and 55 to be identical, thus simplifying manufacturing.

Ratchet faces 56 and 57 are resiliently forced together by means of a spring washer 34 sandwiched within bracket 24. Shaft 51, retained against bracket 24 at one end by trip plate 81, is grooved at its opposite extremity to receive a snap ring 35 to retain the clutch assembly together. Stepped-down section 64 of spool half 54 is axially elongated with respect to clutch drum 52 and, when fabricated from molded plastic as in the

preferred form of this invention, serves as a thrust bearing against the interior sidewall of bracket 24.

The base of bracket 24 has two slots formed therein through which cable 59 passes from opposite sides of spool 53. A U-shaped spring clip closely enveloping the side portions of the cable drum, is snapped into the opposed exterior edges of these slots and insures proper take-up and release of cable 59 by spool assembly.

A peripheral helically coiled clutch spring 65 having ends 66 and 67 is provided around clutch drum 52. End 66 is formed to extend generally horizontally and is retained against upward movement by upper finger-like extension 71 of trip plate 70 as is discussed more fully below. However, end 66 is free to move downwardly. End 67 is formed to extend vertically downward and is retained against movement to the left (FIG. 5) by the lower horizontal foot 82 of the spring-biased trip plate 81 of override assembly 80 as will be discussed hereinafter. End 67 is retained from movement to the right, as viewed in FIG. 5, by its abutment with edge 83' of aperture 83.

Beginning at end 66, clutch spring 65 is coiled clockwise in the direction of end 67. Clutch spring 65 is tensioned and sized so that clutch drum 52 cannot be rotated in the direction of arrow "A" in FIGS. 4 and 6 because of the coil tightening and gripping effect when clutch drum 52 is rotatably urged in that direction and the retention of end 67 against foot 82. However, when clutch drum 52 is rotated in the opposite direction, end 66 is free to move downwardly while end 67 is fixed due to its abutment with wall 83'. This slightly uncoils clutch spring 65 so that no coil tightening and gripping effect is produced. Therefore, clutch drum 52 can be rotated within clutch spring 65 in a direction opposite to arrow A.

Referring to FIGS. 4, 8 and 11, the function of cable 59 is most clearly shown with table top 10 being almost at its lowest position in FIGS. 8 and 11 with constant force springs 29 nearly completely unrolled. As shown in FIG. 4, each end of cable 59 is provided with an anchoring or locking bead 68 and 69 which is received in cable slots 60 and 61, respectively, of the spool halves 54 and 55. Starting from locking bead 69, cable 59 is wound in one direction around spool portion 54, and starting from locking bead 68, cable 59 is wound around spool portion 55 in the opposite direction until a depending loop remains which is just long enough to be received around pulley 32 at the lower end of shaft 27. This winding can be easily accomplished, as noted previously, by free-wheeling spool half 53 counterclockwise as shown in FIG. 6. This procedure is continued until the depending loop is tensioned around pulley 32. Final tightening can be accomplished by placing an end wrench into engagement with splines 63'. Ratchet faces 56 and 57, resiliently urged together by washer 34, will thereafter prevent unwinding of the cable except when an equal amount is wound up on the opposite side of spool 53.

One of the features of the overbed table disclosed herein resides in the ability to assemble the components illustrated in FIG. 6 as an integral unit prior to insertion of the same into column 22. The constant force springs, clutch assembly, overload protection means, cable depending loop portion; and all other internal mechanism employed in the counter balance and height control, more particularly, is constructed as a separate, removable lift assembly and is removed and

served as a total unit. Because trip plate 70, to be discussed hereinafter, is part of the outer column assembly, and because finger-like extension engages clutch spring 65 above the horizontal end 66, when the two bolts 26' are removed the entire outer column assembly with lever arms and trip plate intact may be removed to give access to the lift assembly as a unit.

Once such assembly has been completed, the unit may be easily inserted into the lower column by merely wedging foot 28 under arrest bracket 122, seating the axles of constant force spring spindles into slots 31 and thereafter bolting the upper column 21 to the bracket 24 via apertures 26 on flanges 25. During this assembly process, the one point on cable 59 is fixedly attached to the upper extremity of inner column 22.

To this end, an intermediate lug 101 is provided on cable 59. This lug is engaged by a bifurcated retaining clip 102 having a planar section 103 containing a screw aperture 104, a rearwardly projecting bifurcated section 105, and a forwardly curved bifurcated section 106. Once the assembly shown in FIG. 6 is inserted into the inner column 22, the bifurcated sections of clip 102 are protruded into opening 107 and lug 101 engaged in the manner shown in FIG. 12. Clip 102 is then secured in the position shown in FIG. 10 by means of a screw, bolt or the like. Sufficient clearance is provided between the inner and outer columns so that the presence of clip 102 and its attachment screw does not interfere with smooth telescoping of the inner and outer columns.

With point 101 of cable 59 fixed with respect to inner column 22 in this manner, the only way that outer column 21 can be moved upwardly or downwardly is for spool portion 53 to rotate and unwind or pay out a portion of cable 59 from one side while taking up an equal portion from the other side. Therefore, when clutch spring 65 is tensioned, clutch drum 52 and consequently spool portion 53 will not be able to rotate in the direction of arrow A and accordingly upper column 21 cannot be telescoped downwardly over column 22. However, since clutch drum 52 can be rotated in the direction opposite arrow A, because of the uncoiling effect permitted by end 66 of clutch spring 65, outer column 21 can be raised upwardly since spool portion 53 will be free to rotate to pay out and take up an equal amount of cable 59.

To release the tension of clutch spring 65 on clutch drum 52 so that spool portion 53 will be free to rotate in the direction of arrow A to lower the table top, either a downward force is exerted on end 66 of clutch spring 65 tending to unwind clutch spring 65 or end 67 is permitted to move to the left (FIG. 5) by override assembly 80 so that no gripping action will result when clutch drum 52 is rotatably urged in the direction of arrow A. To relieve the tension of clutch spring 65 on clutch drum 52 by a downward force acting on clutch spring end 66, a vertically reciprocable trip plate 70 (FIGS. 7, 9 and 11) is mounted adjacent the upper outer side of outer column 21. Trip plate 70 has a finger-like extension 71 which extends through an elongated slot 72 in outer column 21 to be in depressing engagement with horizontal end 66 of clutch spring 65. Trip plate 70 also has a lower finger-like extension 74 to engage lever arms 40 and 41 as explained hereinafter.

Lever arms 40 and 41 are pivotally connected at the upper portion of outer column 21 by means of a pivot bolt 44 passing through the end of lever arm 40 into

outer column 21 and by a pivot bolt 45 passing through the end of lever arm 41 into outer column 21. Lever arms 40 and 41 are mounted so that the ends thereof overlap. Bolt 44 also passes through a vertically elongated aperture 46 in lever arm 41 and bolt 45 passes through a vertically elongated aperture 47 in lever arm 40 to control the degree of pivoting of the lever arms about their pivot points. A spring 48 interconnects depending ears provided on lever arms 40 and 41 to bias the lever arms in their full upper position (FIG. 9). Thus, when the lever arms are depressed to the fullest extent permitted by elongated apertures 46 or 47 and then released, they will be automatically returned to their upper position.

At the lower end of trip plate 70, an outwardly extending finger 74 extends through overlying apertures 49 through lever arms 40 and 41. Thus, when either of the lever arm handles are depressed, trip plate 70 will be moved downwardly to depressing end 66 of spring 65 to produce a spring uncoiling effect which releases the tension thereof on clutch drum 52. As long as one of the lever arm handles is kept depressed to maintain the released clutch spring tension on clutch drum 52, the table top can be lowered by a slight downward force since spool 53 will be free to rotate in the direction of arrow A to pay out and take-up corresponding amounts of cable 59. Generally, the downward force exerted on the lever arm handle is sufficient to provide the necessary downward force needed to overcome the upward biasing force of constant force spring 29 to achieve downward movement for telescoping of outer column 21 over inner column 22. As soon as the lever arm is released, spring means 48 will cause it to automatically return to its fullest upper position thereby raising trip plate 70 and end 66 of spring 65 resulting in tension again being placed on clutch drum 52 by clutch spring 65. Thus, a positive continued downward force is required on one of the lever arms to maintain a downward movement of the table top, and consequently, there is no possibility of the table top being lowered faster than desired since as soon as downward force exertion by the operator on the lever arm ceases, the table will cease its lowering action. Cessation of the downward force will occur whenever the table top "catches up" to the operator's hand thus insuring that the table top will not lower further or more quickly than desired.

Table top 10 can also be lowered without depressing one of the lever arms by exerting a large downward force directly on the table top such as might be experienced if someone were to fall upon it. The primary function of this feature is to prevent damage to the table in such a loading situation. This is accomplished by means of override assembly 80 which is most clearly shown in FIG. 5.

Override assembly 80 includes spring-biased override lever 81 which is rotatably mounted on mounting bracket 24 at one end of axle 51. Lever 81 has a lower horizontal foot portion 82 which extends through an opening 83 in the sidewall of mounting bracket 24 to contact vertical end 67 of clutch spring 65. A spring means such as coil spring 85 extends between the top portion of side flange 25 and a top outwardly extending horizontal extension 84 on lever 81 to bias foot 82 against edge 83" of opening 83. By this arrangement, when a large downward force is exerted on the table top in the direction of arrow A clutch drum 52 will be

rotatably urged with sufficient force to overcome the tension of override spring 85. Lever 81 will then rotate slightly in a clockwise direction (FIG. 5) permitting movement of spring end 67 to the left (FIG. 5) — and permitting spring end 66 to engage fingerlike extension 71 of trip plate 70 — to release the tension of clutch spring 65 on clutch drum 52. As long as this requisite downward force is maintained, spool 53 will be free to rotate in the direction of arrow A and table top 10 can be lowered. However, as with the action of the lever arm, when the downward force on the table top 10 is discontinued or diminished to such an extent that the force of spring means 85 is no longer overcome and override lever 81 rotates back to the original position thereby again placing clutch spring 65 under tension, the downward movement of table top 10 will stop. The spring constant of spring 85 should be chosen, as will be readily apparent to those skilled in the art, such that override lever 81 will be permitted to rotate only when the table top experiences an atypical loading.

It will be apparent to those skilled in the art from a reading of the foregoing specification and study of the accompanying drawings that this invention has provided a novel and unobvious vertically adjustable overbed table. The table may be raised merely by exerting an upward force thereagainst. Once it has been raised to a predetermined position, it will be locked from downward movement by action of the unique clutch assembly. The table may be lowered from this position only by the actuation of the override assembly in an "atypical" loading situation or by depression of the clutch lever arms. There is no danger, during such downward movement, of the table top "running away" downwardly since a constant downward force must be maintained either on the table top or the lever arms for continued downward movement.

While a preferred embodiment of the present invention has been described and illustrated, it will be understood to those skilled in the art that changes and modifications can be made without departing from the spirit of the invention. Accordingly, the scope of the present invention is deemed to be limited only by the following appended claims.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A vertically adjustable overbed table comprising: a pedestal, a horizontal table top mounted at the top of said pedestal and a base platform at the lower end of said pedestal; said pedestal including an outer column and an inner column, said outer column telescopically engaging said inner column and being adapted for vertical telescoping movement with respect to said inner column; at least one spring means associated with said columns for maintaining the telescoping movement of said outer column and said inner column in approximate equilibrium; and a clutch assembly mounted within said pedestal; said clutch assembly including a rotatable clutch drum, means for rotating said drum during telescopic movement of said columns, a tensioned clutch spring means surrounding said drum for permitting upward movement of one of said columns with respect to the other of said columns when an upward force is exerted thereon sufficient to overcome the equilibrium effect of said constant force

spring and for permitting downward movement of said one column with respect to said other column only when the tension of said clutch spring is released; and means for releasing the tension of said clutch spring.

2. The overbed table according to claim 1 wherein said outer column is affixed to said table top, wherein said inner column is affixed to said base and wherein said clutch assembly is mounted within said outer column and comprises a horizontally mounted rotatable clutch drum; a tensioned helical coil spring around said drum; a horizontally mounted rotatable cable spool adjacent said clutch drum and connected thereto so as to be rotatable therewith and only therewith; a cable having its ends wound around said spool in opposite directions, the ends of said cable being affixed to said spool and an intermediate portion of said cable extending below said spool to form a depending cable loop and an intermediate point of said cable loop being affixed to said inner column; a rigid member depending within said columns and attached at its upper end to an upper portion of said outer column and having a pulley wheel at the lower end thereof receiving said depending cable loop, whereby said outer column can be telescoped downwardly over said inner column when a downward force is placed on said outer column only when said clutch spring tension is released and said spool is free to rotate to take up cable above said intermediate point of said depending cable loop and to pay out an equal amount of cable below said intermediate point of said depending cable loop.

3. The overbed table according to claim 2 wherein one end of said clutch spring extends outwardly from said spring coil and wherein said means for releasing the tension on said clutch spring comprises a trip plate reciprocally mounted on said outer column; said trip plate having a finger-like extension in engagement with said one end of said clutch spring so that when said trip plate is moved in a first direction said clutch spring tension is released so said table top can be lowered.

4. The overbed table according to claim 3 wherein at least one upwardly spring-biased lever arm is pivotally mounted on said outer column adjacent said trip plate and in engagement therewith so that when said lever arm is depressed downwardly said trip plate will release the clutch spring tension.

5. The overbed table according to claim 4 which includes a pair of said lever arms each extending outwardly from said outer column to opposite sides of said table top.

6. The overbed table of claim 4 wherein said spring means includes a pair of said constant force springs; each of said constant force springs comprising a leaf spring rolled around an axle, each said constant force spring having one end affixed to the lower end of said rigid member and having its axle horizontally rotatably mounted at an upper portion of said inner column.

7. The overbed table according to claim 6 which further comprises a spring-biased override assembly mounted on said outer column adjacent said clutch assembly in engagement with the other end of said clutch spring whereby when a downward force is exerted on said outer column sufficient to overcome the spring biasing of said override assembly, said override assembly will release the clutch spring tension so that said table top can be lowered.

8. The overbed table of claim 7 wherein movement of said one end of said clutch spring is in a direction opposite to said first direction is restricted by said finger-like extension, wherein the other end of said clutch spring depends away from said clutch spring coil and wherein said override assembly comprises an override lever rotatably mounted adjacent said other end of said clutch spring having a foot in engagement with said other end of said clutch spring; said override lever being spring biased against rotation in a direction in which said foot will tend to be moved by said other end of said clutch spring when a downward force is exerted on said outer column whereby when a downward force is exerted on said outer column sufficient to overcome the spring-biasing of said override lever, said override lever will be rotated by said other end of said clutch spring and the clutch spring tension will thereby be released to permit said table top to be lowered.

9. The table as set forth in claim 2 wherein said spool includes two abutting sections, one section being rotatable with respect to the other to wind cable thereon during assembly of said table.

10. The table as set forth in claim 9 wherein said spool sections have ratchet faces in abutment with one another permitting one section to be rotated with respect to the other in a non-working direction only to wind cable thereon during assembly of said table.

11. The table as set forth in claim 10 which further comprises means for resiliently urging said faces together.

12. A vertically adjustable overbed table comprising: a pedestal, a horizontal table top mounted at the top of said pedestal and a base platform at the lower end of said pedestal;

said pedestal including an outer column and an inner column, said outer column telescopically engaging said inner column and being adapted for vertical telescoping movement with respect to said inner column; and a clutch assembly mounted within said pedestal for controlling the telescoping movement of said columns;

said clutch assembly including a rotatable clutch drum, means for rotating said drum during telescopic movement of said columns, a tensioned clutch spring means for selectively restraining rotation of said drum, said spring means permitting free rotation of said drum in a first direction to permit free upward movement of one of said columns with respect to the other of said columns when an upward force is exerted thereon, said spring means restraining rotation of said drum in a direction opposite to said first direction to restrain downward movement of said one column with respect to said other column; and means for releasing the tension on said clutch spring to permit free rotation of said drum in said opposite direction.

13. The overbed table according to claim 12 wherein said outer column is affixed to said table top, wherein said inner column is affixed to said base and wherein said clutch assembly is mounted within said outer column and comprises a horizontally mounted rotatable clutch drum; a tensioned helically coiled spring positioned around said drum, said spring having one end thereof arrested from movement and being positioned around said drum such that the spring tends to tighten radially under the influence of attempted rotation of said drum in said opposite direction, a horizontally

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mounted rotatable cable spool adjacent said clutch drum and connected thereto so as to be rotatable therewith and only therewith; a cable having its ends wound around said spool in opposite directions, the ends of said cable being affixed to said spool and an intermediate portion of said cable extending below said spool to form a depending cable loop and an intermediate point of said cable loop being affixed to said inner column; a rigid member depending within said columns and attached at its upper end to an upper portion of said outer column and having a pulley wheel at the lower end thereof receiving said depending cable loop,

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whereby said outer column can be telescoped downwardly over said inner column when a downward force is placed on said outer column only when said clutch spring tension is released and said spool is free to rotate to take up cable above said intermediate point of said depending cable loop and to pay out an equal amount of cable below said intermediate point of said depending cable loop.

14. The table as set forth in claim 12 wherein said releasing means comprises a lever which is moveable downwardly to release the tension of said clutch spring.

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