

March 7, 1967

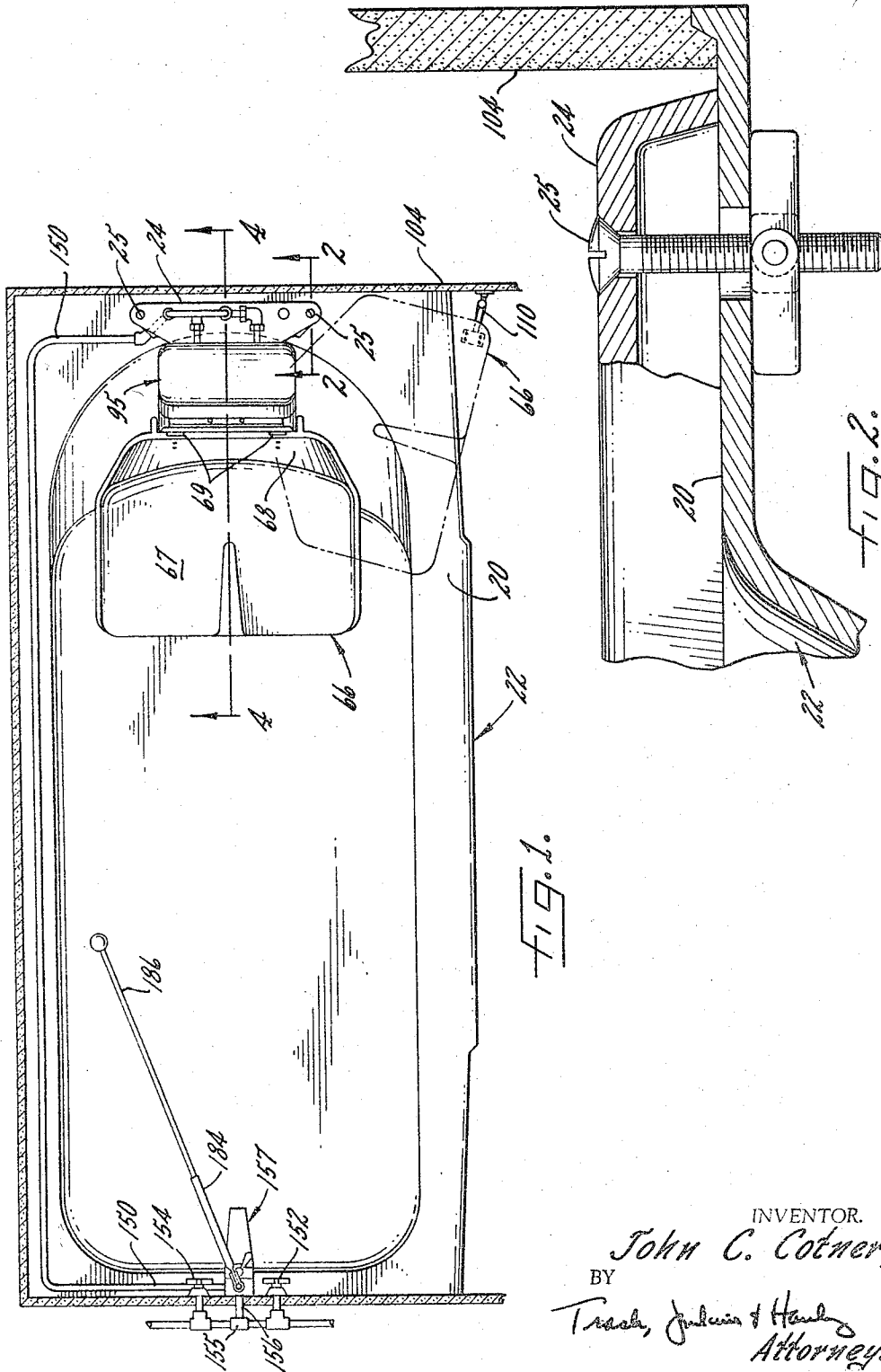
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3,307,204

SITZ BATH

Filed Sept. 8, 1964

7 Sheets-Sheet 1



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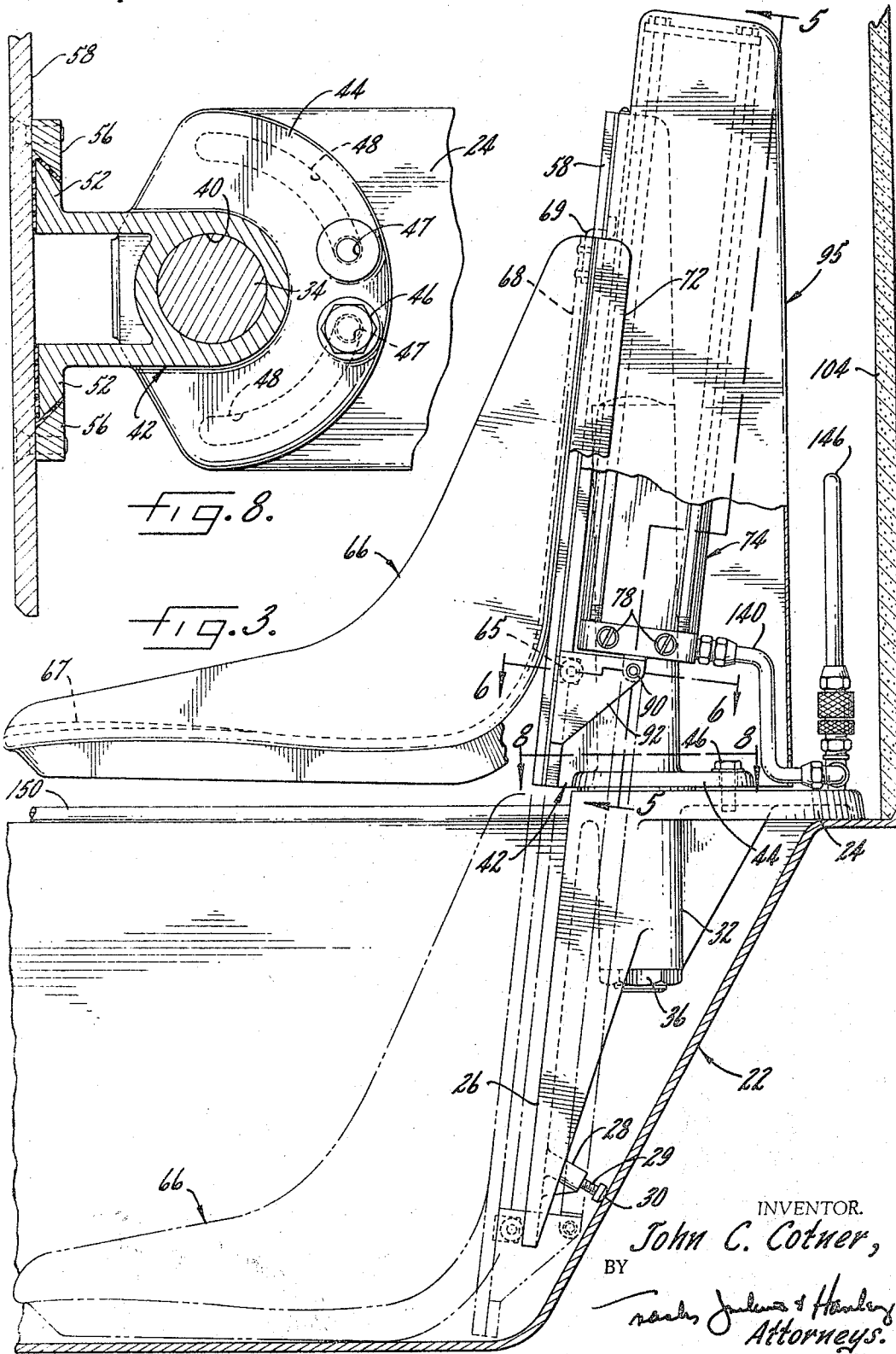
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7 Sheets-Sheet 2



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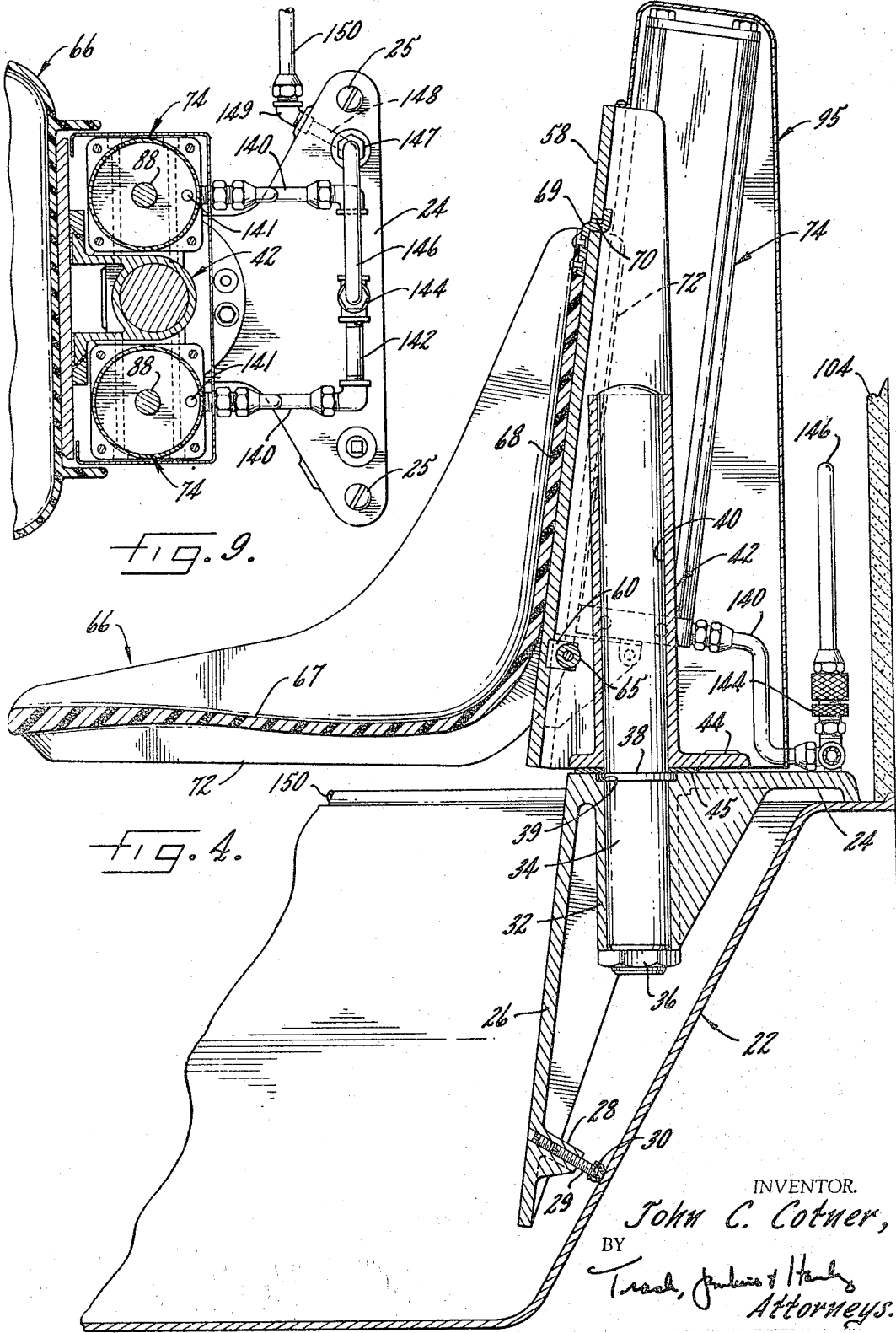
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7 Sheets-Sheet 3



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SITZ BATH

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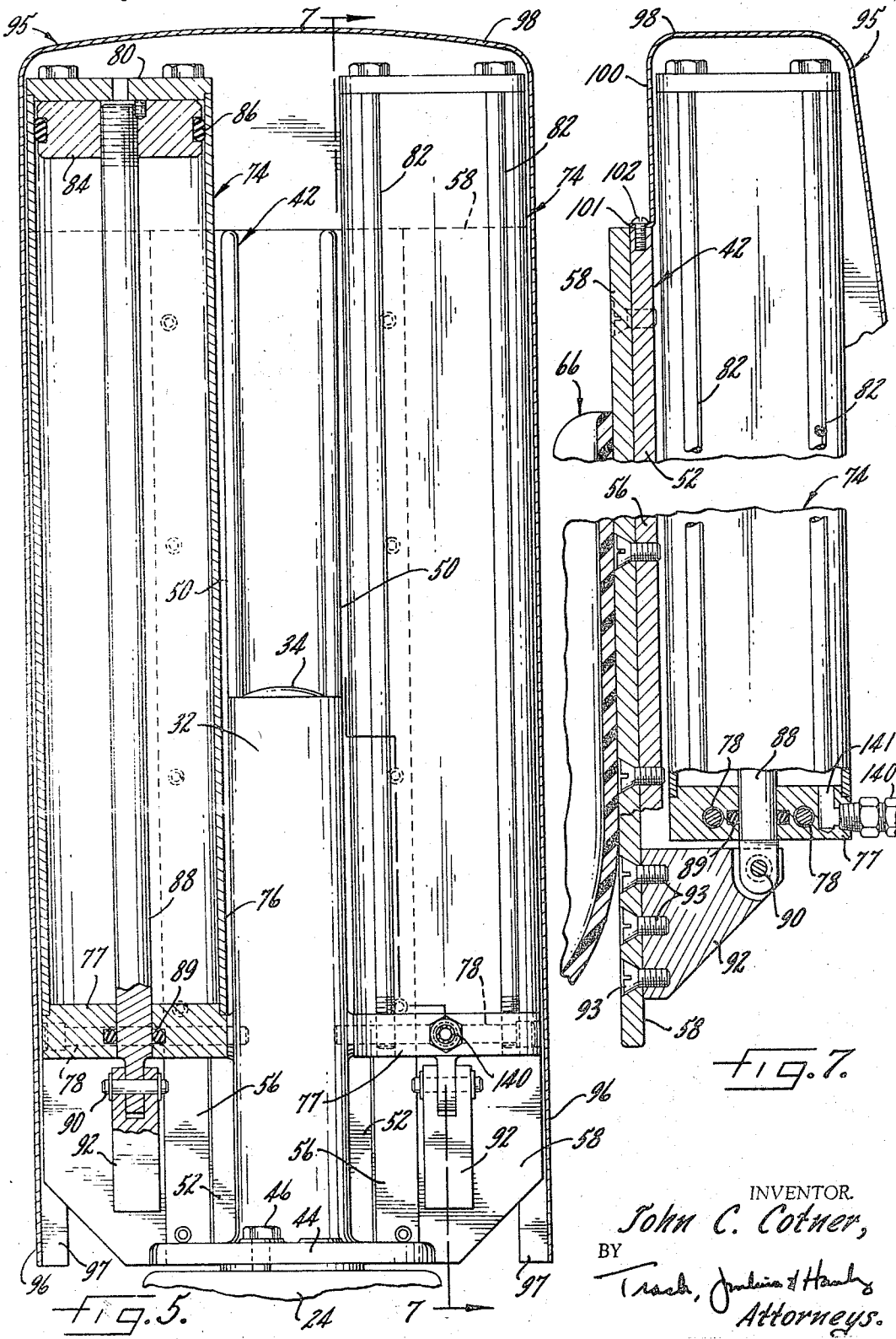


FIG. 7.

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SITZ BATH

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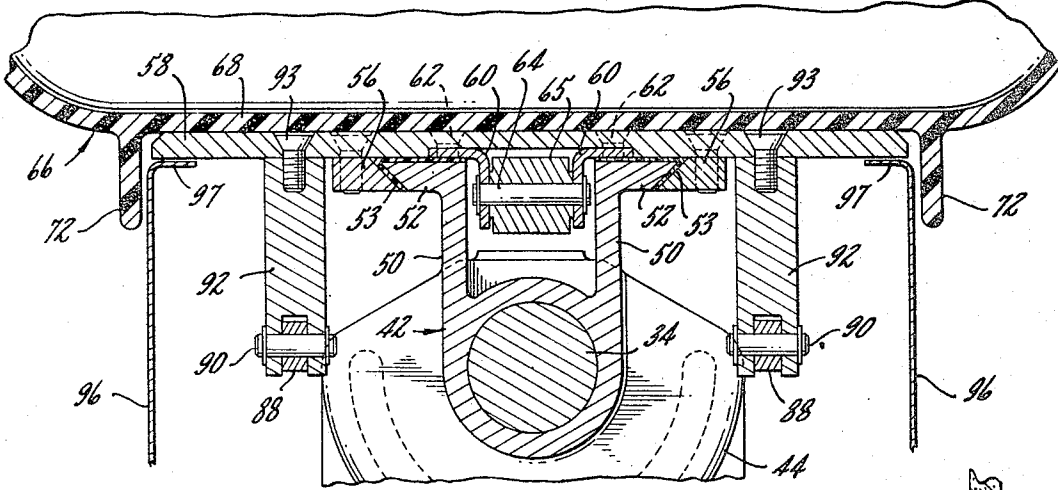


FIG. 6.

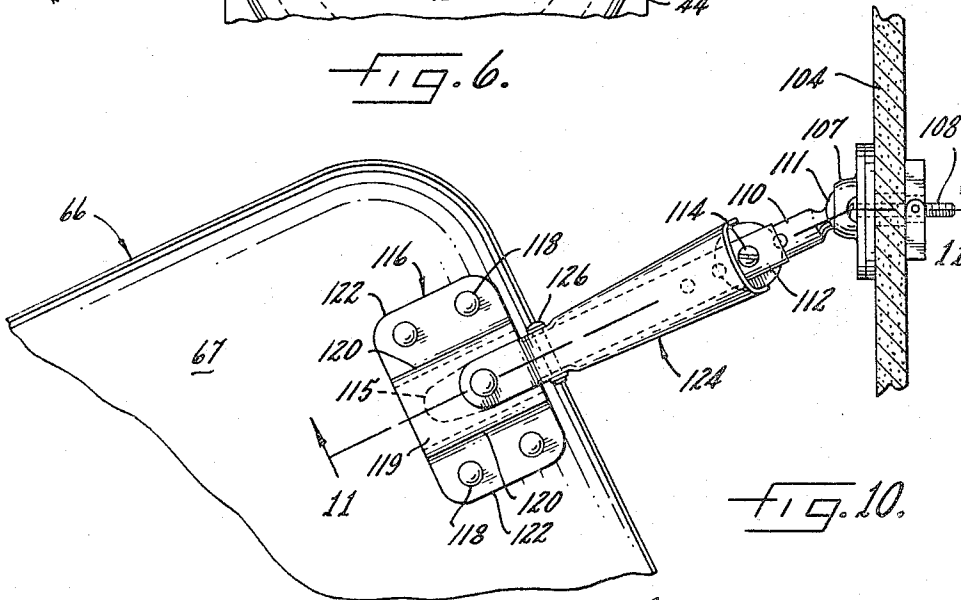


FIG. 10.

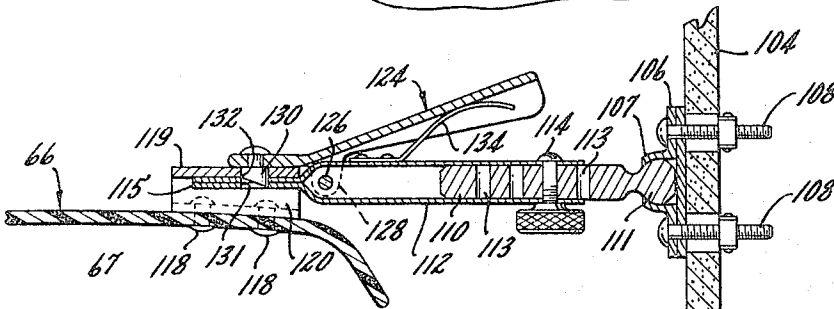


FIG. 11.

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SITZ BATH

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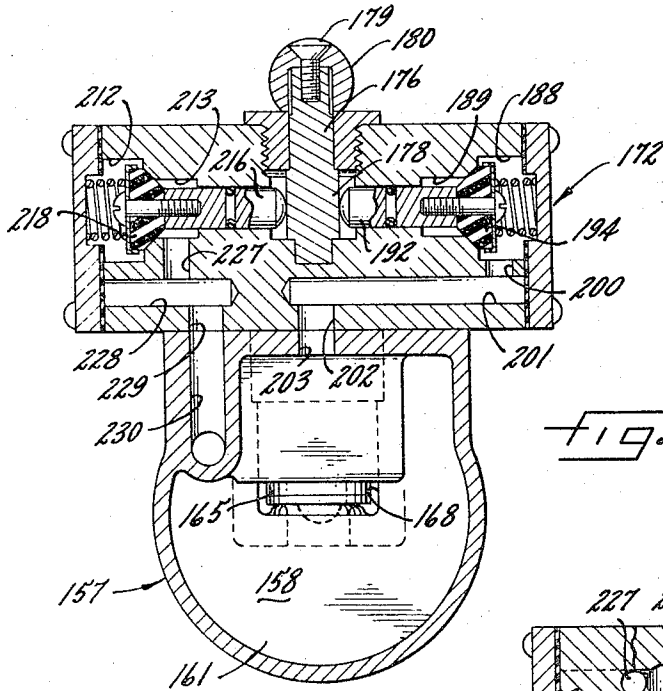


Fig. 14.

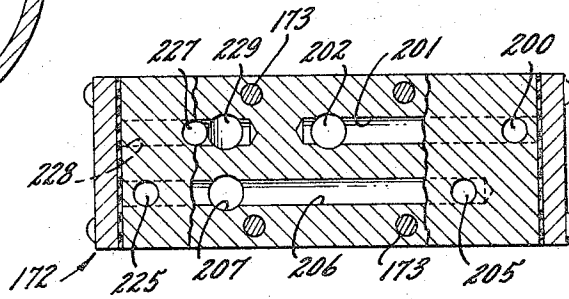


Fig. 15.

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3,307,204
SITZ BATH

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24 Claims. (Cl. 4-185)

This invention relates to a lift for a sitz bath, and more particularly to a lift assisting invalids, the aged, etc. in getting into and out of a bathtub.

It is an object of the invention to provide a lift for a sitz bath which can be simply and easily installed on a conventional bathtub without disturbing the walls of the room in which the tub is placed, which can be used with either a left-handed or a right-handed tub, which can be used in combination with the permanent tub plumbing, which will permit the tub floor and side walls to be easily cleaned, which will be accessible to the user from a position outside the tub, which will safely transport the user into and out of the tub, which can be simply and easily operated, which will be hydraulically operable by the water source at the tub, which will be of attractive appearance, and which will be sturdy and durable in use.

In carrying out the invention in its preferred form, a base is mounted on the rim of a bathtub at one end thereof and is provided with a downwardly projecting leg supported against the adjacent tub side wall. A post projects upwardly from the base and is received in a support bracket rotatably supported in the base. A carrier having a chair mounted thereon is slidably supported on said bracket for vertical movement relative to said bracket to move said chair into and out of said tub and for rotational movement with said bracket to move said chair between a loading and unloading position at the side of the tub and a raising and lowering position in alignment with the longitudinal tub axis. Conveniently, means are provided for limiting the rotational movements of the chair and releasably locking it in its loading and unloading position.

Vertical movements of the chair and carrier are effected by a pair of cylinders mounted on the opposed sides of the support bracket rearwardly of said carrier. The cylinders have downwardly projecting pistons connected to yokes mounted adjacent the lower end of the carrier to move said carrier and chair vertically upon actuation of said pistons. The base leg, support bracket, and cylinders are all angled downwardly toward the opposite end of the tub so that the chair will move downwardly at a slight angle relative to the tub floor to make its descent more comfortable to the person sitting in said chair.

Conveniently, the pistons are actuated by the water source used for filling the tub. To this end, a diverter valve assembly is interconnected to the water source at the tub through the tub nozzle. Said valve assembly comprises a pair of selectively actuated valves for controlling the flow of water to and from the cylinders. One of said pair of valves is operatively interconnected through the nozzle to the water source and is in communication with a conduit leading to the cylinders so that when said valve is opened the water will flow through said conduit to the cylinders for raising the chair. The other of said pair of valves is also in communication with said conduit and is operatively interconnected to the discharge outlet of the nozzle so that when said other valve is opened the water will flow from the cylinders and be discharged into the tub through the nozzle for lowering the chair. An actuator is mounted on the diverter valve assembly and is operable for selectively opening said pair of valves for controlling the vertical positioning of the chair.

Other objects and features will become apparent from the more detailed description which follows and from the accompanying drawings, in which:

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FIG. 1 is a plan view of a conventional tub having a lift employing my invention mounted thereon and showing the chair in its loading and unloading position in chain link lines;

5 FIG. 2 is a fragmentary vertical section taken on the line 2-2 of FIG. 1;

FIG. 3 is a side elevation of the lift shown in FIG. 1 with portions thereof being broken away;

10 FIG. 4 is a vertical section taken on the line 4-4 of FIG. 1;

FIG. 5 is a fragmentary rear view of the lift taken on the line 5-5 of FIG. 3 and showing portions thereof broken away;

15 FIG. 6 is an enlarged horizontal section taken on the line 6-6 of FIG. 3;

FIG. 7 is a vertical section taken on the line 7-7 of FIG. 5;

20 FIG. 8 is an enlarged horizontal section taken on the line 8-8 of FIG. 3;

FIG. 9 is a fragmentary plan view of the rear portion of the lift and showing the fluid system for said lift;

25 FIG. 10 is a fragmentary bottom plan view of the seat showing the locking assembly for releasably retaining the chair in an extended loading and unloading position;

FIG. 11 is an enlarged vertical section taken on the line 11-11 of FIG. 10;

30 FIG. 12 is a side elevation partially in section of the fluid control apparatus for actuating the lift shown in FIG. 1;

FIG. 13 is a vertical section taken on the line 13-13 of FIG. 12;

35 FIG. 14 is a vertical section taken on the line 14-14 of FIG. 12; and

FIG. 15 is a horizontal section taken on the line 15-15 of FIG. 13.

As shown in FIG. 1, my lift is mounted on the rim 20 of a tub 22 adjacent the rear of said tub. To effect such mounting, a base 24 is supported on the rim 20 and connected thereto by toggle bolts 25 received in said rim. A generally U-shaped leg 26 angles obliquely downwardly from the front of the base into the tub. A tapped boss 28 generally normal to the leg 26 projects rearwardly therefrom and receives a bolt 29 having a resilient covering 30 on its head which is engageable with the rear tub wall for thus supporting the lower end of the base within said tub. Immediately rearwardly of the leg 26, said base is provided with a downwardly projecting sleeve 32 in which a post 34 is mounted. The post is retained in the sleeve 32 in position to project above and below the plane of the tub rim 20 by a nut 36 received on the lower end of the post and bearing against the lower end face of the sleeve and by a collar 38 formed on the post intermediate its length and supported on a shoulder 39 at the upper end of the sleeve 32.

The portion of the post 34 projecting above the base 24 is received in an annular opening 40 in a support bracket 42. The bracket 42, which is rotatable about the axis of the post 34, is supported on the base 24, and to this end, it has an outwardly projecting flange 44 at its lower end riding on a thrust bearing 45 resting on the post collar 38 and base 24. To limit rotational movements of the support bracket about the post 34, a headed pin 46 is mounted in one of a pair of arcuately spaced openings 47 in the bracket flange 44. Said pin projects downwardly from the flange 44 and is receivable in one of a pair of arcuately spaced arcuate slots 48 formed in the base 24. A bathtub will normally be built such that one of its longitudinal sides is open for access, the opposite side normally abutting one of the bathroom walls. The invention illustrated in FIG. 1 is mounted on a left-hand tub (the

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left-hand side in open position of access) and consequently the pin 46 is shown as being received in the left-hand slot 48. If it is desired to mount the lift on a right-hand tub, the pin 46 is merely removed from its position shown in the drawing and placed in the other opening 47 so that its lower end will ride in, and its movements be limited by, the right-hand slot 48 shown in FIG. 8.

As shown in FIG. 6, a pair of laterally spaced arms 50 project forwardly on the bracket 42, and terminate at their forward ends in laterally projecting fingers 52 provided with outwardly angled edges 53, said fingers being covered with Teflon facings. Said arms and fingers, which are parallel with the base leg 26, constitute a pair of guides for a pair of slides comprising a pair of laterally spaced angled gibs 56 mounted on the rear face of a carrier 58 and matingly engageable with such fingers. The gibs are slidably carried on the fingers 52, but because of the angular interconnection between said fingers and gibs, the carrier 58 will be slidably interlocked on the bracket 42 for rotation therewith. A pair of opposed L-shaped brackets 60 are mounted, as by screws 62, on the rear face of the carrier 58 immediately below the gibs 56. The brackets 60 support an axle 64 carrying a roller 65 disposed in alignment with the space between the bracket arms 50. Thus, when the carrier 58 is in its elevated position as shown in full lines in FIG. 3, said roller will be interposed between the bracket arms 50, and when said carrier is in its lower position as shown in chain link lines in FIG. 3, said roller will rest upon the front face of the base leg 26.

The carrier 58 supports a chair 66 comprising a seat 67 and back rest 68. Said chair is removably mounted on the carrier 58 by a pair of hooks 69 mounted on the upper end of the back rest 68 and receivable in openings 70 formed in said carrier adjacent the upper end thereof. Conveniently, the chair is formed as a plastic molding and is rigidized by a pair of rearwardly projecting lips 72 disposed laterally outwardly from the opposed edges of the carrier 58. As will be apparent, with the chair interconnected to the carrier 58, said chair will be vertically movable with said carrier on said bracket 42 and rotatable with said carrier and bracket 42 about the vertical axis of the post 34.

Vertical movement of the carrier 58 and chair 66 is effected by a pair of hydraulic cylinders 74 disposed on opposite sides of the bracket 42 at the rear of said carrier in parallelism with the base leg 26 and bracket fingers 52. The cylinders are identical in construction, and as shown in FIGS. 5 and 7, each comprises a cylindrical shell 76 supported at its lower end on a base plate 77 connected, as by bolts 78, to the adjacent bracket arm 50. The upper end of the shell 76 is closed by an end plate 80, connected by tie-bolts 82 to the base plate 77. The cylinder piston is provided with a head 84 having a seal 86 engageable with the inner walls of the shell 76 and with a rod 88 extending downwardly from the head 84 through a seal 89 in the plate 77. The lower end of the rod 88 is connected by a pin 90 to a yoke 92 mounted on the rear face of the carrier, as by screws 93, for transmitting the vertical movement of the piston to the carrier and chair.

In order to enhance the appearance and safety of the lift, a generally U-shaped housing 95 is disposed around the cylinders 74. As shown in FIG. 6, said housing has a pair of side walls 96 extending along the opposed sides of the cylinders 74 and terminating at their forward ends in in-turned flanges 97 disposed immediately rearwardly of the carrier 58. The upper end of said housing has a top wall 98 extending over the tops of the cylinders 74 and terminating in a front wall 100 having an out-turned flange 101 at its lower end connected by screws 102 to the upper end of the bracket 42. Thus, the housing 95 encloses the lift and swivel assembly, and by being connected to the bracket 42, rotates with said lift and swivel assembly and the carrier and chair about the axis of the post 34.

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In order to releasably retain the chair 66 in its outwardly swung loading and unloading position, a locking assembly is provided on the underside of said chair and the bathroom wall 104 at the rear of the tub. As shown in FIGS. 10 and 11, a plate 106 provided with a ball socket 107 is connected to the wall 104 by toggle bolts 108. A rod 110 having a ball 111 swivelably received in the socket 107 projects outwardly from the plate 106 and is telescopically received in a tubular latch tongue 112. Conveniently, the rod 110 has a plurality of longitudinally spaced openings 113 for the selective reception of a bolt 114 extending through one of said openings and aligned openings formed in the tongue 112 for interconnecting said tongue and rod in the desired position of adjustment. The outer end of the tongue 112 is flattened, as at 115, for reception in a channeled bracket 116 mounted on the underside of the chair seat 67 by rivets 118. Said bracket comprises a web 119 interconnecting a pair of laterally spaced legs 120 terminating at their upper ends in outwardly directed flanges 122 through which the rivets 118 extend. The lateral spacing between the legs 120 is only slightly greater than the width of the flattened tongue end 115 whereby said legs will guide the tongue into the space between the bracket web 119 and the bottom of the chair seat 67.

In order to releasably lock the tongue end 115 in the bracket 116, a lever 124 is swingably connected to said tongue by a pivot pin 126 carried in openings in the tongue and a pair of upstanding ears 128 formed on the lever. A detent 130 projects upwardly from the lever adjacent its outer end for reception in openings 131 and 132 in the bracket web 119 and latch tongue end 115, respectively, when the tongue is inserted into the bracket 116. The detent 130 is urged into the bracket and tongue openings by a leaf spring 134 riveted to the underside of the tongue 112 and bearing against the lever 124. By swinging the lever 124 about the axis of the pin 126 to disengage the detent 130 from the openings 131 and 132, the tongue 112 can be removed from the bracket 116 to permit the chair 66 to be swung inwardly about the axis of the post 34 into its raising and lowering position in alignment with the longitudinal tub axis.

As shown in FIG. 9, water is introduced into and discharged from the cylinders 74 by a pair of conduits 140 connected to passages 141 in the cylinder base plates 77. The conduits extend rearwardly under the housing 95 and have their opposite ends connected to a manifold 142 supported immediately above the base 24 by said conduits. Said manifold is connected, as by a quick-disconnect coupling 144, to one end of a flexible hose 146. The opposite end of the hose is connected to a fitting 147 mounted in the base 24, and said fitting is connected by a pipe 148 and connection 149 to a conduit 150 leading to the water source at the opposite end of the tub.

A conventional faucet normally comprises a hot water valve 152 and a cold water valve 154 for controlling the flow of water into a mixing manifold 155. A nipple 156 is connected to the manifold 155 and extends outwardly therefrom to a discharge nozzle 157.

As shown in FIG. 12, the nozzle 157 is provided with a transversely extending partition 158 interposed between its discharge outlet 159 and its connection to the nipple 156 to define a discharge chamber 160 and inlet chamber 161. Said partition is integrally connected to a forwardly projecting rounded wall 162 to form with the said wall a valve seat 164 against which a valve 165 is received. The valve 165 is connected to an actuating handle 166 projecting upwardly through an opening 167 in the housing and upon rotation of said handle to lift the valve 165 from the seat 164 water is free to flow from the inlet chamber 161 through an opening 168 in the partition 158 and an opening 170 at the base of the valve seat 164 into the discharge chamber 160 for discharge into the tub 22 through the nozzle outlet 159.

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In order to permit the water from the manifold 155 to the cylinder 74 to raise the chair 66, I mount a diverter valve assembly 172 on top of the nozzle 157 by a plurality of bolts 173. As shown, the diverter valve assembly comprises a housing having a centrally disposed opening 174 extending downwardly from its upper face for the reception of an actuator 176 provided at its lower end with a double lobed cam 178. The upper end of said actuator is connected by a screw 179 to a yoke 180 which is pivotally connected by a bolt and wing nut 182 to one end of an actuating handle 184 projecting toward the rear of the tub. The opposite end of the handle 184 is connected by a friction joint to a handle extension 186 adapted to be grasped by the person using the lift. The extension 186 is telescopically adjustable in the handle 184 so that when the lift is not in use said extension can be telescoped into the handle 184 and the handle and extension can be swung upwardly about the axis of the bolt and wing nut 182 into a retracted vertical position.

A pair of identical diametrically opposed valves for controlling the flow of water to and from the cylinders 74 project outwardly from the valve assembly opening 174 within the vertical extent of the cam 178. The valve which permits water to flow from the nozzle inlet nipple 156 to the conduit 150 for raising the chair is shown in FIG. 13 and comprises a large diameter chamber 188 interconnected by an intermediate diameter chamber 189 to a smaller diameter chamber 190. A valve seat 191 is provided at the juncture between the chambers 188 and 189. The valve has a stem 192 slidably carried in the chamber 190 and connected to a valve head 194 biased against the seat 191 by a coil spring 195. One end of the spring bears against the face of the head remote from the stem 192, and the opposite end of said spring is carried in an aligned recess 196 formed in an end plate 198 mounted on the adjacent end of the diverter, as by screws 199, and constituting the housing end wall. The chamber 188 is connected to the water source by a passage 200 extending downwardly from said chamber and terminating in a transversely extending passage 201. The opposite end of the passage 201 terminates in a downwardly extending passage 202 in open communication with an opening 203 open to the nozzle inlet chamber 161. The chamber 189 is in open communication with a downwardly extending passage 205 terminating in a transversely extending passage 206. Adjacent its opposite end, the passage 206 is in open communication with a downwardly projecting passage 207 in open communication with a passage 208 formed in the nozzle 157 and connected to the conduit 150.

The exhaust valve for exhausting the water from the cylinders 74 to lower the chair 66 comprises a large diameter chamber 212 interconnected by an intermediate diameter chamber 213 to a smaller diameter chamber 214. A valve seat 215 is provided at the juncture of the chambers 212 and 213. The valve has a stem 216 slidably carried in the chamber 214 and connected to a head 218 biased against the seat 215 by a coil spring 220. One end of said spring bears against the face of the head remote from the stem 216, and the opposite end of said spring is carried in an aligned recess 221 formed in an end plate 222 mounted on the adjacent end of the diverter 172, as by screws 223 and constituting the housing end wall.

To dispose the exhaust valve in operative communication with the conduit 150, a vertically extending passage 225 interconnects the chamber 212 and the passage 206. The chamber 213 is in open communication with a vertically extending passage 227 connected by a traverse passage 228 to another vertically extending passage 229 disposed in alignment with a passage 230 in the nozzle 157. The passage 230 projects forwardly through an opening in the partition 158 laterally offset from the valve 165 so that water may move through the passage 230 irrespective of whether the valve 165 is in its open or closed position.

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With the valves 152 and 154 in their open positions and the valves in the diverter valve assembly closed, the valve 165 can be opened to fill the tub. With the valves 152 and 154 in their open positions and the valve 165 closed, the water will be free to flow from the manifold 155 to the nipple 156 and through the inlet chamber 161 to the passages 200-202 to thus dispose the water in open communication with the chamber 188 of the inlet valve assembly. To raise the chair 66, it is merely necessary to move the valve actuator 176 to cause its cam 178 to bear against the valve stem 192 to move the inlet valve to the right as viewed in FIG. 13. This moves the valve head 194 away from the seat 191 to permit the water to flow from the chamber 188 through the chamber 189 and the passages 205-208 into the conduit 150 for raising the cylinder pistons. Upward movement of the pistons in the cylinders 74 is transmitted by the piston rods 88 to the carrier 58 for raising said carrier on the bracket arms 50 to dispose the chair 66 above the level of the tub rim. During such upward movement, the lower end of the carrier will be supported against the front face of the base leg 26 by the roller 65 riding against said leg.

When the chair is in its fully raised position, the actuator cam 178 is moved into a neutral position in which it is disposed out of engagement with either of the valve stems 192 or 216 and the chair will be maintained in its elevated position by the water pressure against the piston heads 84. With the chair in its raised position, it may be rotated about the axis of the post 34 into its loading and unloading position at an oblique angle to the longitudinal tub axis as shown in chain link lines and FIG. 1, such rotational movement being limited by the pin 46 riding in the base slot 48. The locking apparatus shown in FIGS. 10 and 11 may then be employed for releasably locking said chair in its loading and unloading position.

To lower the chair, it is rotated about the axis of the post 34 to position it in alignment with the longitudinal axis of the tub. The valve actuator 176 is then moved to cause the cam 178 to bear against the valve stem 216 to move the exhaust valve to the left as shown in FIG. 14. When the exhaust valve is moved to the left, the water can flow from the conduit 150 through the passages 206-208 and 225 into the chamber 212, and from said chamber into the chamber 213, whereupon it is free to exit through the passages 227-230 for discharge out the nozzle outlet 159 for thus lowering the chair 66.

I claim:

1. A lift for a sitz bath, comprising a base mountable on a bathtub rim, a post mounted on said base and projecting upwardly therefrom, a support bracket carried on said post and rotatable about the axis of said post, a carrier vertically slidable on said support bracket and rotatable therewith, at least one cylinder connected to said bracket and having a piston connected to said carrier for moving said carrier vertically relative to the base and support bracket, a chair mounted on said carrier for rotational movement therewith between a loading and unloading position at an angle to the longitudinal tub axis and a raising and lowering position parallel with the longitudinal tub axis for vertical movement with said carrier into and out of the tub, and means for connecting said cylinder to a source of fluid under pressure for effecting vertical movement of said piston to raise and lower said chair.

2. A lift for a sitz bath as set forth in claim 1 in which said base has a sleeve projecting downwardly into the tub, a collar projects outwardly from said post and is supported on a shoulder on said sleeve, and a nut is threadedly mounted on the lower end of said post and engages the lower end face of said sleeve.

3. A lift for a sitz bath as set forth in claim 1 in which a channelled bracket is mounted on the chair adjacent one side thereof, and a locking arm is swingably interconnected to a wall surface adjacent the tub for locking re-

ception in said channeled bracket for releasably locking said chair in its loading and unloading position.

4. A lift for a sitz bath as set forth in claim 3 in which said arm comprises a rod having a ball at one of its ends movably received in a socket on a plate mounted on said wall surface, a latch tongue having one of its ends received on the end of the rod opposite said ball and its opposite end received in said channeled bracket, a lever swingably connected to said tongue and having a detent receivable in openings formed in said tongue and channeled bracket for releasably locking said tongue and bracket together to hold the chair in its loading and unloading position, and biasing means urging said detent into said openings.

5. A lift for a sitz bath as set forth in claim 4 in which rod and latch tongue are telescopically adjustable.

6. A lift for a sitz bath, comprising a base mountable on a bathtub rim, a post mounted on said base and projecting upwardly therefrom, a support bracket having an opening formed therein and received around said post and an outwardly projecting flange and its lower end rotatably received on a thrust bearing on said base, whereby said bracket is rotatable about the axis of said post, a carrier vertically slidable on said support bracket and rotatable therewith, a pair of cylinders mounted on the opposite sides of said bracket and having pistons connected to said carrier for moving said carrier vertically relative to the base and support bracket, a chair mounted on said carrier for rotational movement therewith between a loading and unloading position at an angle to the longitudinal tub axis and raising and lowering position parallel with the longitudinal tub axis for vertical movement with said carrier into and out of the tub, and means for connecting said cylinders to a source of fluid under pressure for effecting vertical movement of said pistons to raise and lower said chair.

7. A lift for a sitz bath as set forth in claim 6 in which said base has a pair of arcuately spaced arcuate recesses, and a pin selectively carried in one of a pair of openings formed in said support bracket flange is selectively received in one of said recesses for limiting the rotational movement of said bracket.

8. A lift for a sitz bath, comprising a base mountable on a bathtub rim, a leg projecting obliquely downwardly from said base into the tub, said leg having a projection connected to an adjustable member bearing against the adjacent tub side wall, a post mounted on said base and projecting upwardly therefrom, a support bracket carried on said post and rotatable thereabout, a carrier carried on said support bracket for rotation therewith, means on said carrier slidably engaging said support bracket and adapted to bear against said leg for vertical movement of said carrier relative to the support bracket and base, at least one cylinder connected to said carrier for effecting vertical movement of said carrier, a chair mounted on said carrier for rotational movement therewith between a loading and unloading position at an angle to the longitudinal tub axis and a raising and lowering position parallel with the longitudinal tub axis for vertical movement with said carrier into and out of the tub, and means for connecting said cylinder to a source of fluid under pressure for effecting vertical movement of said piston to raise and lower said chair.

9. A lift for a sitz bath as set forth in claim 8 in which said support bracket, leg, and cylinder angle forwardly from top to bottom, whereby said chair is lowered into the tub at an inclined angle to the plane of the tub floor.

10. A lift for a sitz bath as set forth in claim 8 in which said projection comprises a tapped boss generally normal to said leg, and said adjustable member is threadedly received in said boss.

11. A lift for a sitz bath, comprising a base mountable on a bathtub rim and having a leg projecting into said tub, a post mounted on said base and projecting upward-

ly therefrom, a support bracket rotatably supported on said base and provided with an opening rotatably received around said post and a pair of vertically extending arms projecting forwardly from said opening, a carrier having a pair of laterally spaced gibs on its rear face slidably received on said arms for operatively interconnecting said carrier and support bracket whereby said carrier is rotatable with and vertically movable with respect to said support bracket, a roller interconnected to the rear face of said carrier below and intermediate said gibs adapted to ride against said leg when the carrier is moved downwardly relative to said support bracket and base, at least one cylinder connected to said bracket and having a piston connected to said carrier for moving said carrier vertically relative to the base and support bracket, a chair mounted on said carrier for rotational movement therewith between a loading and unloading position at an angle to the longitudinal tub axis and a raising and lowering position parallel with the longitudinal tub axis for vertical movement with said carrier into and out of the tub, and means for connecting said cylinder to a source of fluid under pressure for effecting vertical movement of said piston to raise and lower said chair.

12. A sitz bath as set forth in claim 11 in which said arms have laterally projecting fingers at their ends provided with angulated faces, and said gibs have angulated faces matingly engageable with the faces on said fingers for retaining said carrier in a laterally centered position on said support bracket.

13. A lift for a sitz bath, comprising a base mountable on a bathtub rim and having a leg projecting into said tub, a post mounted on said base and projecting upwardly therefrom, a support bracket rotatably supported on said base and provided with an opening rotatably received around said post and a pair of laterally spaced, vertically extending arms projecting forwardly from said opening, a carrier having a pair of laterally spaced slides on its rear face slidably received on said arms for operatively interconnecting said support member and carrier whereby said carrier is rotatable with and vertically movable with respect to said support bracket, a roller interconnected to the rear face of said carrier below and intermediate said slides adapted to ride against said leg when the carrier is moved downwardly with respect to said support bracket and base, a pair of cylinders connected to said legs on opposite sides of said support bracket and having pistons connected to a pair of yokes mounted on the rear face of the carrier, a chair mounted on said carrier for rotational movement therewith between a loading and unloading position at an angle to the longitudinal tub axis and a raising and lowering position parallel with the longitudinal tub axis for vertical movement with said carrier into and out of the tub, and means for connecting said cylinders to a source of fluid under pressure for effecting vertical movement of said pistons to raise and lower said chair.

14. A lift for a sitz bath, comprising a base mountable on a bathtub rim, a post mounted on said base and projecting upwardly therefrom, a support bracket carried on said post and rotatable about the axis of said post, means operatively interconnecting a chair to said support bracket whereby said chair is rotatable with said support bracket between a loading and unloading position at an angle to the longitudinal tub axis and a raising and lowering position parallel with the longitudinal tub axis for vertical movement relative to said support bracket into and out of the tub, at least one cylinder connected to said support bracket and having a piston operatively interconnected to said chair for effecting vertical movement of said chair, and means for connecting said cylinder to a power source.

15. A lift for a sitz bath, comprising a base mountable on a bathtub rim, a post mounted on said base and projecting upwardly therefrom, a support bracket carried on said post and rotatable about the axis of said post, means operatively interconnecting a chair to said support bracket whereby said chair is rotatable with said support

bracket between a loading and unloading position at an angle to the longitudinal tub axis and a raising and lowering position parallel with the longitudinal tub axis for vertical movement relative to said support bracket into and out of the tub, a pair of cylinders connected to the opposite sides of said support bracket and having pistons operatively interconnected to said chair for effecting vertical movement of said chair, a pair of rigid conduits interconnecting said cylinders and a manifold, and flexible hose having one of its ends connected to said manifold and its opposite end operatively interconnected to a conduit leading to a source of fluid under pressure.

16. In combination with a lift for a sitz bath comprising a lift assembly mountable on a bathtub and having at least one hydraulic cylinder operatively interconnected to a chair carried on said lift assembly for moving said chair into and out of said bathtub; a fluid control apparatus, comprising a pair of valves connected to a manifold for controlling the flow of a pair of liquids into said manifold, a nozzle interconnected to said manifold and provided with a discharge outlet, a partition in said nozzle compartmenting it into an inlet chamber in open communication with said manifold and a discharge chamber in open communication with said discharge outlet, a third valve carried in said nozzle for controlling the flow of said fluids from said inlet chamber to said discharge chamber, a diverter valve housing mounted on said nozzle and having opposed, normally closed fourth and fifth valves, said fourth valve being interposed between and controlling the flow of said fluids between a first set of passages extending between said fourth valve and said inlet chamber and a second set of passages extending between said fourth valve and a conduit connected to said cylinder, said fifth valve interposed between and controlling the flow of said fluids between said second set of passages and a third set of passages extending between said fifth valve and said discharge chamber, and an actuator interposed between said fourth and fifth valves for selectively opening said fourth valve to permit said fluids to flow to said cylinder and for selectively opening said fifth valve to permit said fluids to flow from said cylinder for discharge out of said nozzle discharge outlet.

17. The invention as set forth in claim 15 in which said actuator comprises a double nose cam rotatably carried in said housing and selectively engaging said fourth and fifth valves for selectively opening said fourth and fifth valves, and a handle interconnected to said cam for effecting rotation thereof.

18. The invention as set forth in claim 17 with the addition that said handle is swingably mounted on said actuator, and an extension is mounted on said handle, said handle and extension being telescopically interconnected for adjusting the overall length of said handle and extension.

19. The invention as set forth in claim 16 in which said fourth and fifth valves comprise a pair of opposed sets of chambers formed in said housing, a valve stem

and head carried in each of said sets of chambers with the adjacent ends of said stems disposed on opposite sides of said cam, and biasing means interposed between each of said heads and the adjacent housing end wall for biasing said fourth and fifth valves into closed position.

20. The invention as set forth in claim 19 in which each of said sets of chambers comprises a large diameter chamber in which the associated valve head and biasing means are carried, and an intermediate diameter chamber in open communication with and interconnecting said large diameter chamber and a smaller diameter chamber in which the associated valve stem is slidably carried, the juncture of said larger and intermediate diameter chambers defining a valve seat for said head.

21. The invention as set forth in claim 20 in which one end of said large diameter chamber comprises an end plate mounted on the diverter valve housing and forming the adjacent housing end wall, and said biasing means comprises a spring having one of its ends received against said head and its opposite end received in a recess in said end plate.

22. The invention as set forth in claim 16 in which said second set of passages comprises a plurality of passages formed in said diverter valve housing in open communication with and extending between said fourth and fifth valves, and a passage formed in said nozzle and connected to said conduit.

23. The invention as set forth in claim 16 in which said third set of passages comprises a plurality of passages formed in said diverter valve housing in open communication with and extending between said fifth valve, and a passage formed in said nozzle, said passage in said nozzle by-passing said third valve and terminating in the nozzle discharge chamber.

24. The invention as set forth in claim 16 with the addition that wall means project outwardly from said partition to act in combination therewith to form a valve seat for said third valve, said valve seat being in open communication with said discharge chamber and said partition having an opening formed therein operatively disposed between said inlet chamber and third valve, whereby upon movement of said third valve away from said valve seat fluid will flow from said inlet chamber into said discharge chamber.

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