R. FREEMAN.

DISAPPEARING SHOWER BATH.

APPLICATION FILED SEPT. 27, 1913.

1,095,837.

Patented May 5, 1914.

2 SHEETS—SHEET 1.

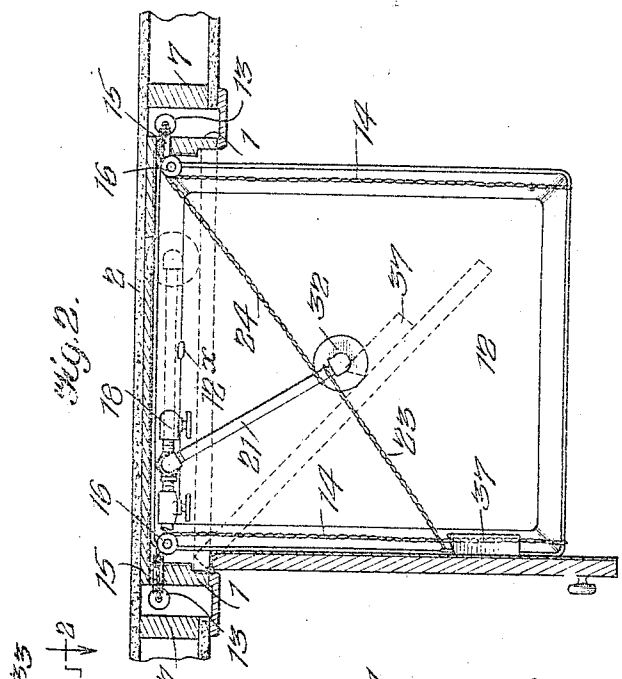


Fig. 2.

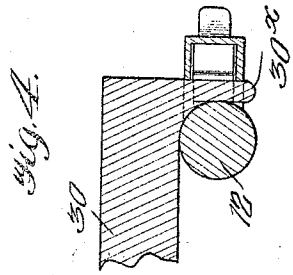


Fig. 4.

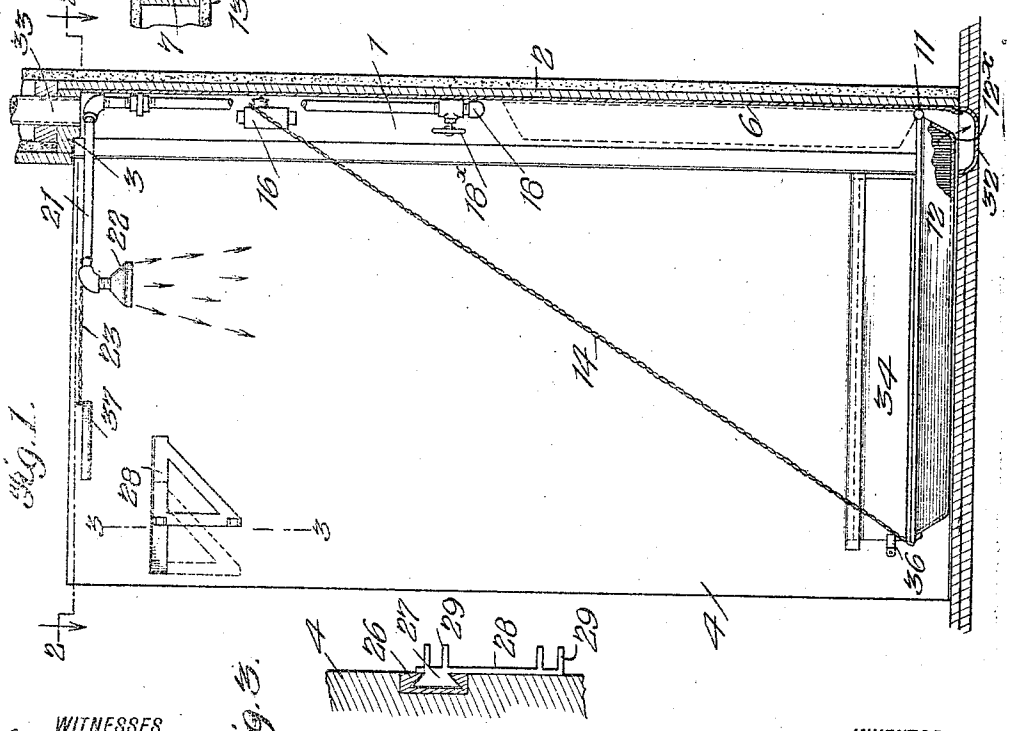


Fig. 1.

Fig. 5.

WITNESSES

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2 SHEETS—SHEET 2.

Fig. 6.

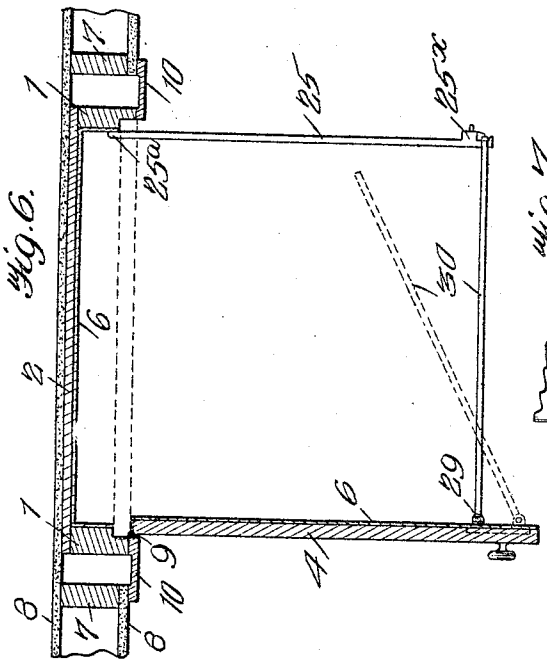


Fig. 7.

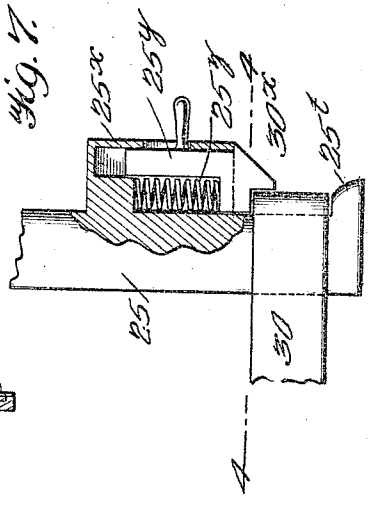


Fig. 5.

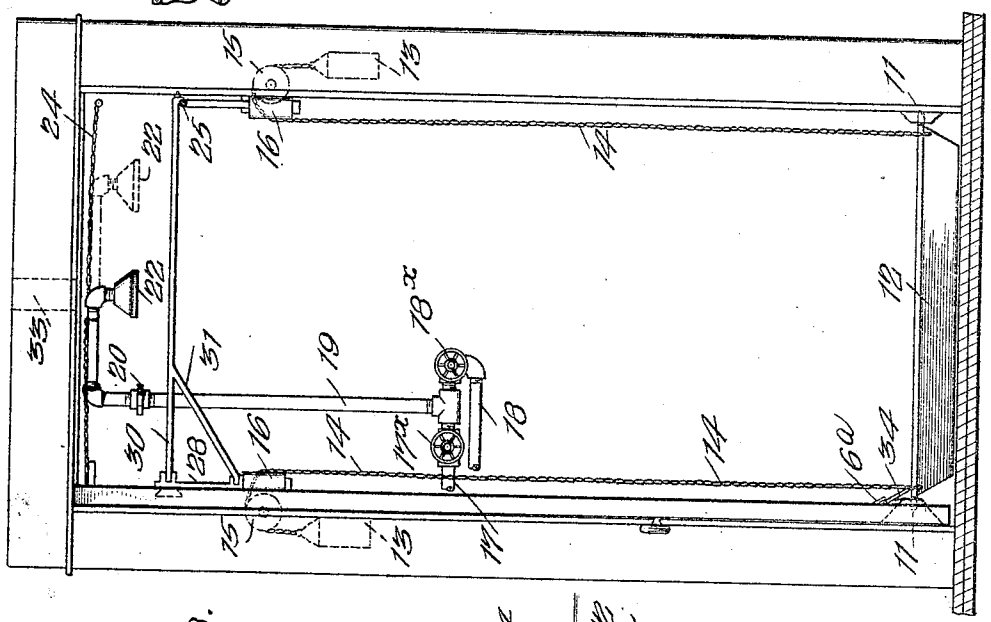
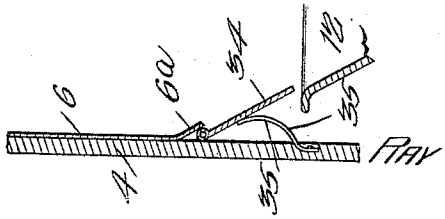


Fig. 8.



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DISAPPEARING SHOWER-BATH.

1,095,837. Specification of Letters Patent. Patented May 5, 1914.

Application filed September 27, 1913. Serial No. 792,171.

To all whom it may concern:

Be it known that I, RAY FREEMAN, a citizen of the United States, and a resident of Santa Barbara, in the county of Santa Barbara and State of California, have made certain new and useful Improvements in Disappearing Shower-Baths, of which the following is a specification.

My invention relates to improvements in shower baths, and it consists in the combinations, constructions, and arrangements herein described and claimed.

An object of my invention is to provide a shower bath which may be installed in bed rooms at comparatively slight expense, without detracting from the appearance of the room, since the bath is designed to be folded up and caused to disappear within the wall of the room.

A further object of my invention is to provide a disappearing shower bath which is so arranged as to take up a minimum of space, the tub, curtains, and shower head being arranged to move into a space within a six inch wall.

A further object of my invention is to provide a bath which may be concealed behind a door so that when the latter is opened the shower head may be swung into place, while a counterbalanced tub may be brought into position and curtain rods having curtains may be swung out and secured so as to form a completely inclosed space around the tub, thereby obviating any danger of wetting the floor of the room.

Other objects and advantages will appear in the following specification and the novel features of the device will be particularly pointed out in the appended claims.

My invention is illustrated in the accompanying drawings forming part of this application in which—

Figure 1 is a vertical sectional view through the device, the curtain rods and curtain being removed, Fig. 2 is a horizontal section along the line 2—2 of Fig. 1, Fig. 3 is an enlarged section along the line 3—3 of Fig. 1, Fig. 4 is a section along the line 4—4 of Fig. 7, Fig. 5 is a front view of the device with the curtains removed, Fig. 6 is a horizontal section through the door showing the positions of the curtain rods, Fig. 7 is a detail view partly in section showing the means of locking the curtain rods, and Fig. 8 is a detail sectional view through the bottom of the door showing the shield or lip for guiding the water into the tub.

In carrying out my invention I make a cabinet which consists of the side members 1 and sheathing 2, which forms the rear portion of the cabinet, and the top 3. This cabinet is provided with a door 4 of standard size. The cabinet as described is lined on its interior with sheet metal 6. It is designed to be set into a wall, as shown in Fig. 6. In this figure the studding is shown at 7 on each side of which is the lath and plaster 8. The door is hinged at 9 to one of the side members 1 of the cabinet, and swings against the other one, as shown in Fig. 6. The door is also lined with sheet metal 6. The door casing 10 covers the edge of the side member 1 of the cabinet so that the appearance of the door from the interior of the room is that of an ordinary door leading to a room or closet.

Hinged to the side members 1 at 11 (see Fig. 1) is a tub 12 which is of sufficient depth to catch the water, but which may be swung up into the position shown in dotted lines in Fig. 1. The tub is provided with a pair of counterweights 13, disposed between the side members 1 of the cabinet and the studs 7. These counterweights are connected by chains 14 which pass over pulleys 15 set in the side members 1 of the cabinet, being guided by rollers 16.

The cold water pipe 17 and the hot water pipe 18 (see Fig. 5) are provided with valves 17^x and 18^x respectively. They communicate with a vertical pipe 19 which bears a union or swivel 20 to which is connected a pipe 21 bearing the shower head 22. The latter is designed to swing outwardly and to this end is provided with a chain 23, which is secured to the door on one side and with a chain 24 which is secured to the interior of the cabinet so as to limit the movement of the shower head 22, thereby bringing the latter directly over the center of the inclosure, when the door is open.

A curtain rod 25 is pivoted at 25^a to the inside of the cabinet and its outer end is provided with a lock like that shown in Fig. 7. This consists of a lock casing 25^z in which is disposed a slidable latch 25^y, pressed upon normally by a spring 25^z. The door 4 has set into it on the inner side a metal bearing member 26 (see Fig. 3) having a dovetailed slot arranged to receive a dovetailed

tongue 27 of a triangular-shaped plate 28, which is provided with upper and lower ears 29 for pivotally supporting a curtain rod 30 and its brace 31 (see Fig. 5). The end of the curtain rod 30 is provided with a downwardly turned extension 30^x (see Fig. 4) arranged to fit over and engage the curtain rod 25, which is provided with a lateral extension 25^x (see Fig. 7) between which extension and the latch 25^y the rod 30 is held. It will be seen from Fig. 1 that the slot in the bearing member 26 is extended so as to permit the plate 28 to be pushed inwardly or outwardly.

At the rear edge of the tub 12 is an opening 12^x which is just above a trough 32 which is set in the floor and which is designed to communicate with the sewer (not shown). Extending upwardly through the top member 3 of the cabinet is a ventilating pipe 33 which may lead through the roof or may communicate with the main ventilating pipe (not shown) of the dwelling.

From the foregoing description of the various parts of the device the operation thereof may be readily understood.

As has been before stated when the door is closed one would not know that it concealed the shower bath. When it is desired to use the bath the door is opened as far as it will go. The opening of the door causes the swinging of the shower head into position, through the medium of the chains, as described. The tub is now pulled downwardly into its position on the floor, this being easily done on account of the counterweights. The curtain rod 30 is now swung outwardly taking the dotted line path shown in Fig. 6. The plate 28 bearing the curtain 30 is now pushed into position shown in Figs. 1 and 6 and the curtain rod 25 is swung outwardly so as to engage the end 30^x of the rod 30 as shown in Fig. 4. The latch member 25^y being beveled will cause the latch to spring behind the extension 30^x so as to lock these two curtain rods in position automatically. The bath is now ready for use and the water may be turned on immediately. The water runs out through the opening 12^x into the trough 32 and into the sewer.

It is understood, of course, that curtains are attached to the curtain rods for preventing the water from splashing on the floor. These curtains may be made of any suitable material. The water which splashes against the door lining would ordinarily run on the floor, but in order to prevent this the lower edge of the lining 6 is bent outwardly, as shown at 6^a in Fig. 8. Underneath this outward bend is hinged a plate 34 which is normally pressed upon by a spring 35 so as to keep the lower edge of the plate 34 over the edge of the tub 12, thus preventing the water from reaching the floor. This plate 34 is normally held close to the door by means of a latch 36 (see Fig. 1) which must be released of course when the device is being used.

In order to close the device the plate 34 is pushed inwardly against the spring and held by the catch 36. The latch 25^y is retracted by means of the handle and the curtain rod 25 with its curtain is swung inwardly to its original position. The plate 28 bearing the curtain rod 30 is pulled outwardly so as to permit the rod 30 to take the dotted line position shown in Fig. 6 when the latter is swung inwardly. The tub is lifted up into the dotted line position shown in Fig. 1, being retained by the counterweights and the door 4 is now closed. In order to prevent the door from striking the shower head 22 a block 37 is secured to the door, this block engaging the elbow on the pipe 21 (see Fig. 2) thereby preventing the unscrewing of the pipe which might occur owing to the leverage obtained if the door should strike the head 22.

The pipe 33 acts as a ventilator, so as to cause the drying out of the curtains, and the linings of the door and cabinet.

It will be understood that the tub may be of any suitable material and may be enameled. The linings of the door and cabinet may be galvanized iron or they may be painted or enameled without departing from the spirit of the invention.

I claim.

1. In a disappearing shower bath, a cabinet provided with a door hinged to swing on a vertical axis, a swivel shower head rigidly secured within said cabinet and adapted to move in a horizontal plane, a tub hinged at one edge and adapted to swing upwardly into the cabinet, and means connected with said door and operated by the opening thereof for swinging said shower head into position over the tub.

2. In a disappearing shower bath, a cabinet provided with a door, a swivel shower head rigidly secured within said cabinet, a tub hinged at one edge and adapted to swing upwardly into the cabinet, means connected with said door and operated by the opening thereof for swinging said shower head into position over the tub, a curtain rod having one end hinged to the interior of the cabinet, a second curtain rod pivotally carried by the door, and means for locking said rods together.

3. In a disappearing shower bath, a cabinet adapted to be set into a wall, a door for said cabinet, a slidable plate carried by said door, and a curtain rod hinged to said plate and arranged to fold within the cabinet.

4. In a disappearing shower bath, a cabinet adapted to be set into a wall, a door for said cabinet, a slidable plate carried by said door, a curtain rod hinged to said plate and

arranged to fold within the cabinet, and a second curtain rod hingedly connected on the interior of the cabinet and arranged to engage the end of said first mentioned curtain rod when the plate bearing the latter is moved inwardly.

5. In a disappearing shower bath, a cabinet adapted to be set into a wall, a door for said cabinet, a slidable plate carried by said door, a curtain rod hinged to said plate and arranged to fold within the cabinet, a second curtain rod hingedly connected on the interior of the cabinet and arranged to engage the end of said first mentioned curtain rod when the plate bearing the latter is moved inwardly, and means for automatically locking the two curtain rods together.

6. In a disappearing shower bath, a cabinet provided with a door, a tub hinged to the interior of said cabinet and arranged to swing downwardly, counterweights for said tub, a hinged guide plate carried by said door, a spring for holding said spring plate in an inclined position with respect to the door, the lower edge of said inclined plate being over the tub when the latter is let down, and means for locking the guide plate close to the door against the tension of the spring.

7. In a disappearing shower bath, a cabinet comprising sides, a back, and a top, a door for said cabinet arranged to swing on a vertical axis, the interior of said cabinet and said door being provided with impermeable linings, a tub hinged to the interior of said cabinet and arranged to swing downwardly upon the floor when the door is open, a trough disposed in the floor underneath the hinged end of said tub, said tub being provided with an opening for discharging into said trough, a swivel shower head normally disposed within said cabinet and adapted to swing in a horizontal plane, and means carried by the door for swinging the shower head over the tub when the door is open.

8. In a disappearing shower bath, a cabinet comprising sides, a back, and a top, a door for said cabinet, the interior of said cabinet and said door being provided with impermeable linings, a tub hinged to the interior of said cabinet and arranged to swing downwardly upon the floor when the door is open, a trough disposed in the floor underneath the hinged end of said tub, said tub being provided with an opening for discharging into said trough, a swivel shower head normally disposed within said cabinet, means carried by the door for swinging the shower head over the tub when the door is open, and auxiliary means for causing the retraction of the shower head into the cabinet when the door is closed.

9. In a disappearing shower bath, a cabinet adapted to be set into a wall, a door for said cabinet arranged to swing on a vertical axis, a slidable plate carried by said door, a curtain rod hinged to said plate and adapted to fold within the cabinet, a swiveled shower head arranged to move in a horizontal plane, and means connecting the door and the shower head for bringing the latter into operative position when the door is opened.

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Witnesses:
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L. A. STANLEY.