May 23, 1950 N. S. RICHARDSON 2,508,970

COMBINED SHOWER AND BATHTUB

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Fig. 1.

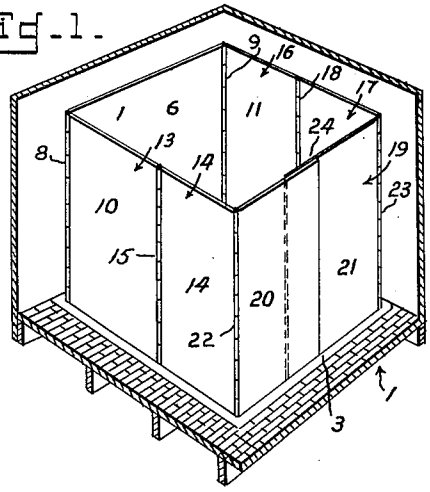


Fig. 2.

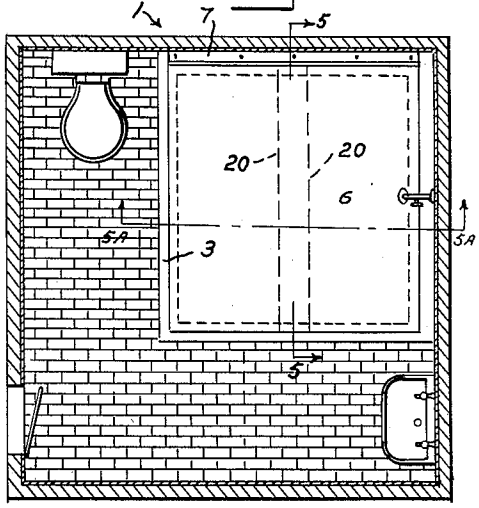


Fig. 3.

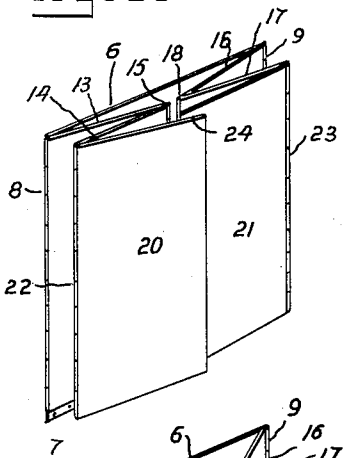


Fig. 5.

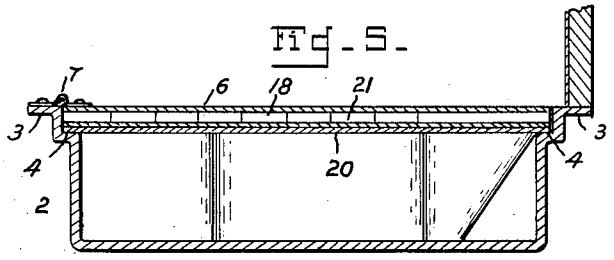
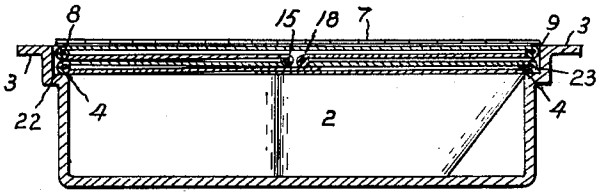


Fig. 5A.



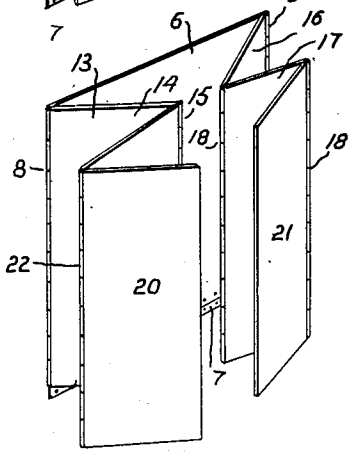


Fig. 4.

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Fig. 6.

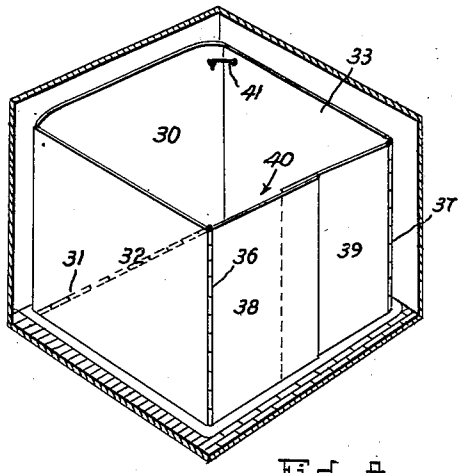


Fig. 7.

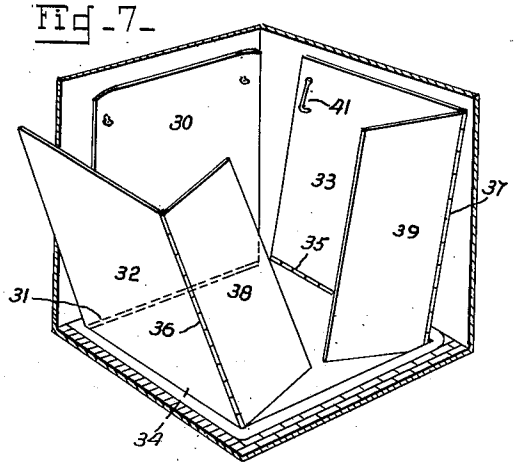


Fig. 8.

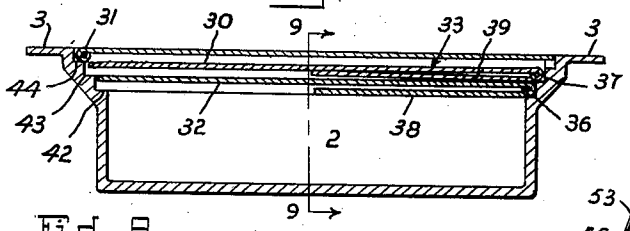


Fig. 9.

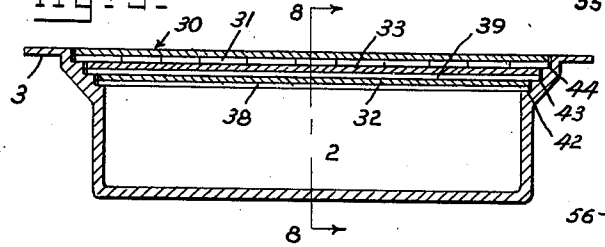


Fig. 11.

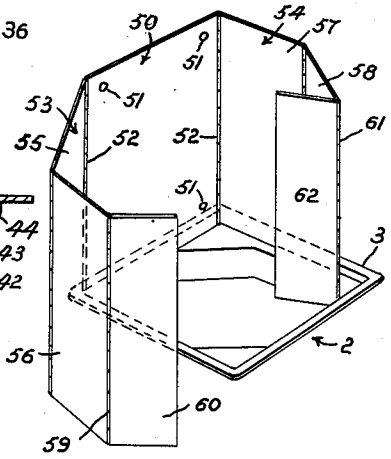
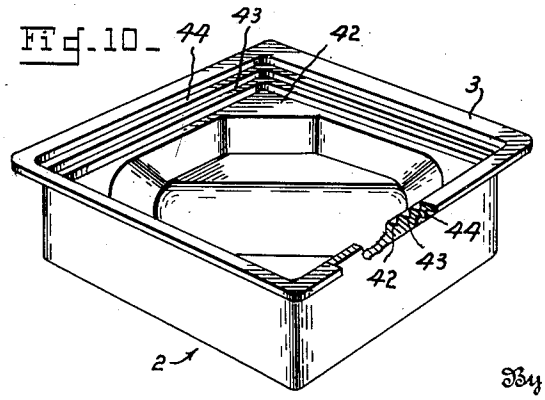


Fig. 10.



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COMBINED SHOWER AND BATHTUB

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Application October 8, 1947, Serial No. 778,645

2 Claims. (Cl. 4—148)

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This invention relates to improvements in a combined bathtub and shower compartment.

The prime object of the invention is to provide a structure especially designed to provide a full size standard square or like tub and shower for small property where space is an important factor.

A further object of the invention is to provide a bath arrangement for small property, wherein a shower cabinet and bathtub are arranged so that the space utilized for the purpose may also be utilized as a part of the floor of the room when the cabinet and tub are not in use.

The shower cabinet is so constructed and associated with a sunken tub, the cabinet can be collapsed within the tub, and when so collapsed will form a cover for the tub and at the same time form a continuation of or part of the floor, hence providing space in the room for purposes other than a mere bathtub.

By supporting the tub below the floor and mounting the improvement above the tub an important result is accomplished in installing square tubs. That is to say, I employ one model tub which can be used for either a recess arrangement in a room for bath purposes, or either corner of the room, depending only upon which corner of the room is selected to install the equipment.

The invention is constructed and arranged so that a shower cabinet of approximately four feet high, plus the depth of the tub can be quickly and conveniently set up for use, and with equal convenience it can be collapsed on the tub to form a part of the bathroom floor.

The invention is illustrated in the accompanying drawing wherein:

Fig. 1 is a perspective view of my improved combined shower cabinet and bath tub.

Fig. 2 is a plan view of a bathroom showing the application of my invention.

Fig. 3 is a perspective view of the shower cabinet collapsed.

Fig. 4 is a similar view showing the cabinet partially opened up to illustrate the construction.

Fig. 5 is a transverse section on the line 5—5 of Fig. 2.

Fig. 5A is a section on the line 5A—5A of Fig. 2.

Fig. 6 is a perspective view of a somewhat different form of cabinet.

Fig. 7 is a similar view but showing the cabinet partially opened up.

Fig. 8 is a section on the line 8—8 of Fig. 6.

Fig. 9 is a section on the line 9—9 of Fig. 8.

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Fig. 10 is a perspective view showing a further development of my invention.

Fig. 11 is a perspective view of another application of my invention.

It is to be understood my improvement is especially designed to enhance the value of and enlarge the use of square tubs, such, for instance, as disclosed in the patent to Albert E. Steinkamp, No. 1,844,988, and more particularly to the use of such tubs in small houses, where space is an important factor.

1 indicates a bathroom with a sunken tub 2 in one corner, the upper edge or flange 3 of the tub being in the same horizontal plane as the floor, as shown in Fig. 5.

The tub 2 is square and just below the upper flange 3 is a flange 4, which may be of stamped metal properly enameled or of porcelain or similar material. This tub may be provided with the usual seats; back rest and well; as shown in the patent referred to, but if found desirable these features may be rearranged or dispensed with.

Cooperating with the tub is a collapsible shower cabinet of particular construction.

The cabinet consists of an end wall 6, hinged at 7 to the upper edge of the tub. This end wall is equal to the width and length of the interior of the tub above the flange 4, to be nested within the tub, as will be hereinafter described.

Hinged on opposite edges of the end wall 6, as at 8 and 9, are side walls 10 and 11. The side wall 10 comprises two sections 13 and 14 hinged together at 15, and the side wall 11 comprises two sections 16 and 17 hinged together at 18.

19 indicates the opposite end wall, composed of two sections 20 and 21, the section 20 being hinged at its edge at 22 to the edge of the section 14, of side wall 10. The section 21 is hinged at 23 to the edge of the section 17 of the side wall 11. The sections 20 and 21 overlap somewhat, as shown at 24, and are held in locked position by a latch, when the cabinet is in use as shown in Fig. 1.

The width of the side walls about equals the inner width of the tub, while the opposite end wall, 19, is slightly wider than the interior width of the tub, due to the overlapping of the sections 20 and 21. In addition to the overlapping sections affording a means to secure the cabinet in erected condition, it also affords a means to slightly spread the cabinet to rest on the flange 4 of the tub to stabilize the structure when in use.

As shown in Fig. 5, the upper flange of the tub is flush with the floor and when the cabinet is

collapsed the sides and end walls are nested within the confines of the tub, the material of the end wall 6 being on top of the sections being of thicker gage than the material forming the other walls so as to provide stability when it becomes a part of or continuation of the floor.

In the form of the invention disclosed in Figs. 1 to 5, if the cabinet is set up and it is desired to collapse it, the latch *a* is released and the sections of the two side walls 10, 11, and end wall 19, are folded inwardly as shown in Fig. 4 and forced against the end wall 6, as shown in Fig. 3. Then the collapsed walls are turned down on hinge 7 and nested within the tub on the flange 4, the end wall 6 being flush with the floor, as shown in Fig. 5.

If the cabinet is to be used for shower purposes, the collapsed walls are raised on hinge 7, and then the sections are extended to form a square, as shown in Fig. 1. In this position the sections 20 and 21 overlap and are latched, and as previously stated may be spread apart somewhat so that the lower ends of the side walls will be supported on the edge of flange 3.

In Figs. 6 to 10 is disclosed a somewhat different form of the invention, but the principal advantages of the improvement previously described are present.

In these figures 30 represents an end wall hinged to the tub at 31. Side walls 32 and 33 respectively are hinged at 34 and 35 to the tub, and to the edges of the side walls are hinged as at 36 and 37, sections 38 and 39 which when brought together form an opposite end wall 40.

When the sections are set up for shower purposes as shown in Fig. 6, latches or hooks 41 are employed to hold the walls in assembled relation.

When using this form of the invention, and in order to provide proper support for the various walls forming the cabinet, I provide the tub with three separate flanges 42—43 and 44. These flanges in no way detract from the characteristics of the usual square tub as now used.

To accommodate the walls of the cabinet within the tub when the cabinet is not in use, the sections 38 and 39 are folded onto the respective side walls, then side wall 32 is turned down on flange 42 on the tub, then side wall 33 is turned down on flange 43. The two side walls having been nested within the tub, end wall 30 is turned down on top of the two side walls, and is supported on flange 44, even with the floor of the room.

To open up the cabinet for use, the various walls are turned up and out on their hinges and locked together by the latches 41 as shown in Figure 6.

As a further development of the invention I have shown the cabinet supported on a wall of

the room, disconnected from the tub, but associated therewith. In this instance, end wall 50 is permanently attached to the wall as at 51, and to the opposite edges are hinged, as at 52, side walls 53 and 54 respectively.

The side wall 53 is composed of two sections 55 and 56, and the side wall 54 is likewise composed of two sections 57 and 58. Hinged at 59 to the section 56 is an end section 60, and hinged to section 58 as at 61 is a companion end section 62, the sections 60 and 62 forming a complete end wall when the cabinet is set up for shower purposes.

When the cabinet is not in use the side and outer walls are folded against the end wall 50 and latched together, but of course in this case the tub is open.

The advantage of this arrangement is to provide a tub for bath purposes and if desired a shower arrangement of full length. That is to say when the cabinet is opened up over the tub, with the depth of the tub and the length of the walls above the tub a full-size shower compartment is provided.

Obviously when the cabinet is constructed as shown in Fig. 11, the tub need not necessarily be square, as the cabinet walls can be made in as many sections as desired to fit the shape of the tub.

What I claim is:

1. A combined shower cabinet and tub comprising a collapsible cabinet including a series of walls, one of said walls being equal to the width of the tub opening and hinged to the tub, the other walls being hinged together in sections and to said hinged wall, whereby to provide for collapsing the wall sections to be folded against the hinged wall and turned down on the tub or opened up in cabinet formation to form with the tub a shower compartment.

2. A combined shower cabinet and tub, comprising a tub provided with an internal flange near the upper edge, a collapsible cabinet comprising an end wall equal to the width of the tub and a series of walls made of hinged sections, said series of walls being hinged together and to said end wall, whereby the walls can be folded and supported on the flange in the tub when the cabinet is not in use or opened up to form with the tub a shower compartment.

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REFERENCES CITED

The following references are of record in the file of this patent:

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Number	Name	Date
1,990,871	Klocke	Feb. 12, 1935