July 8, 1947. S. E. NILSON 2,423,722

SHOWER CABINET

Filed Jan. 18, 1945 2 Sheets-Sheet 1

Fig. 1.

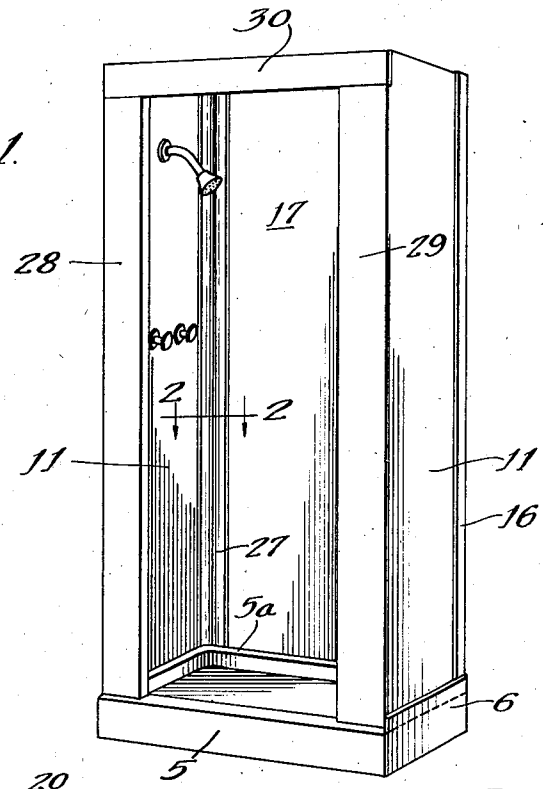
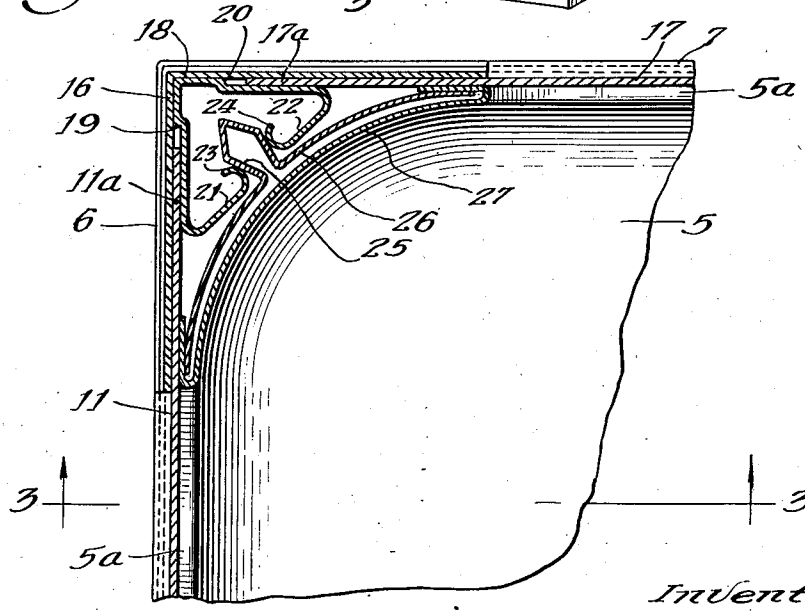


Fig. 2.



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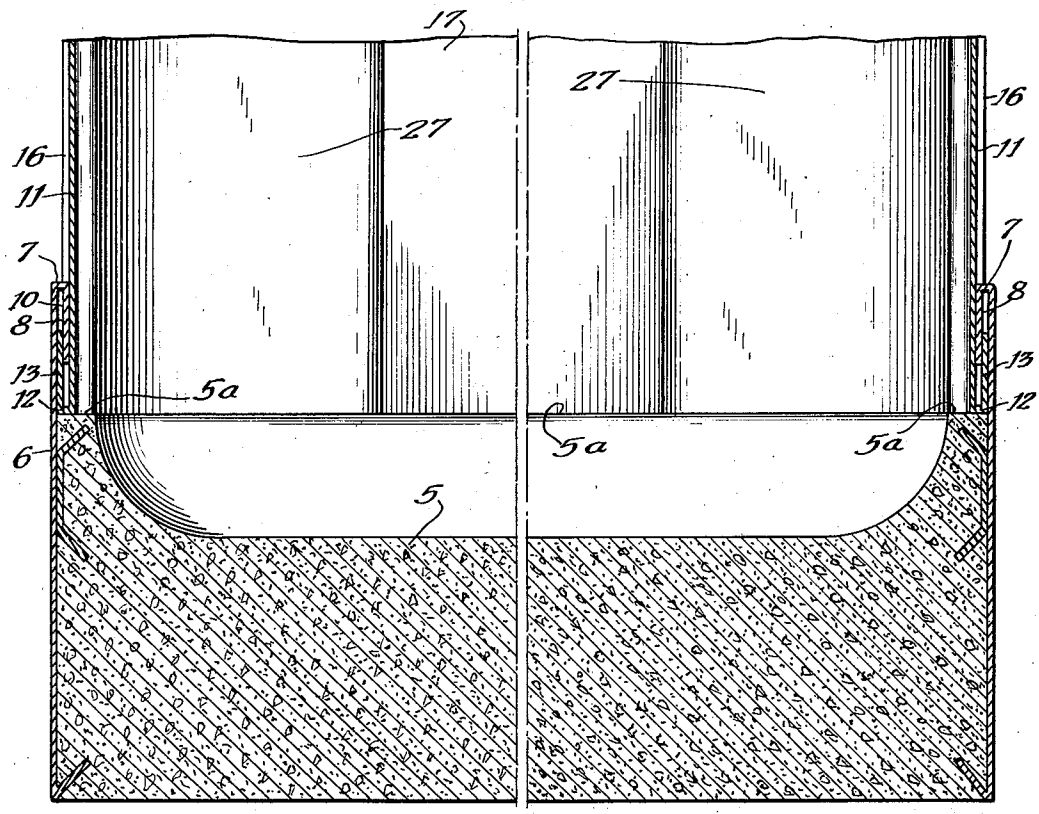

Fig. 3.

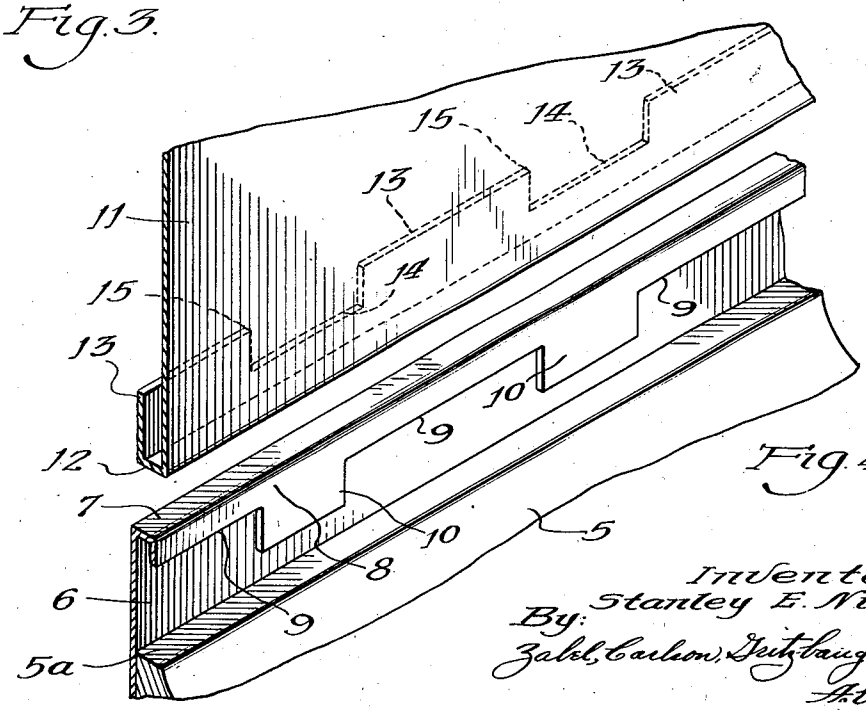

Fig. 4.

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UNITED STATES PATENT OFFICE

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SHOWER CABINET

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5 Claims. (Cl. 189—2)

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The present invention relates to shower cabinets and is particularly directed to improvements to the connection of the side and back walls of the shower cabinet to the receptor portion of the cabinet and to each other.

It is the principal purpose of my invention to provide an improved shower cabinet wherein the sheet metal walls are so connected with each other and with the upstanding metal flange of the receptor as to eliminate exposure of any of the raw edges of metal to water.

It is a further purpose of the invention to provide connecting means whereby the shower cabinet walls may be mounted to the receptor flange and to the corner frames of the cabinet without using metal screws and washers.

It is a further purpose of the invention to provide a shower cabinet construction wherein the assembly of the walls on the receptor and the connection of the walls to each other may be accomplished with considerable saving of time and materials.

The nature and advantages of my invention will appear more fully from the following description and the accompanying drawings wherein a preferred form of the invention is shown. It should be understood however, that the drawings and description are illustrative only and are not to be taken as limiting the invention except insofar as it is limited by the claims.

In the drawings:

Figure 1 is a perspective view of a shower cabinet embodying my invention.

Figure 2 is an enlarged fragmentary sectional view taken on the line 2—2 of Figure 1;

Figure 3 is a sectional view taken on the line 3—3 of Figure 2; and

Figure 4 is a fragmentary perspective view illustrating the manner in which a side wall is interlocked with a receptor flange.

Referring now to the drawings, Figure 1 illustrates a typical shower cabinet of the type to which my invention applies. A shower cabinet of this type usually comprises a receptor 5 that may be made of metal or of concrete or similar material with a metal flange cast integral with the concrete. In all such devices to which my invention applies there is an upstanding flange 6 of metal, and the side and back walls of the shower cabinet are secured to this flange. The critical points in a shower cabinet are the raw edges of the metallic walls and the meeting lines of the walls with each other and with the receptor. It is customary to provide a suitable surface on the metal walls to prevent their rusting or corroding. The raw edges however, do not readily take such protective surfacing and remain difficult from the standpoint of attack by water. In accordance with my invention I construct the upstanding flange 6 of the receptor 5 with its top edge bent over as indicated at 7 (see Figure 4). The flange is also bent downwardly as shown at 8 and is provided with spaced gaps 9 through which corresponding parts provided on the side walls may pass to interlock with the flange. The gaps 9 are separated by depending portions 10 on the flange.

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The showing in Figure 4 illustrates a side wall 11 with its lower edge bent horizontally at 12 and then upwardly to provide spaced lugs 13, which lugs are slightly smaller than the gaps 9. The lugs 13 are separated by gaps 14 in the upturned portion of the side wall. The gaps 14 are just large enough size to receive the portions 10. The lugs 13 have the corners as shown at 15 to facilitate the connection of a side wall with the flange 6. The connection is made in the following fashion. Assuming that the parts are in the position shown in Figure 4, the wall 11 is lowered until the part 12 thereof is substantially upon the ledge 5a of the receptor 5. Then the wall 11 is moved toward the flange 6 until the leading edges 15 of the lugs 13 are in a position that upon slight movement of the side wall longitudinally of the flange, these will catch behind the portions 10. Then the side wall is moved horizontally in a direction parallel to the flange 6 to wedge the lugs 13 behind the portions 10. This completes the connection of the side wall with the flange.

The back corners of the shower cabinet have upstanding angle irons 16 that are adapted to seat down inside the flange 6. The portions 7 and 8 of the flange 6 are cut away far enough to allow room for the angle iron 16. The angle iron overlaps with the adjacent edges 11a and 17a of the side wall 11 and the back wall 17. In order to close the joint at the angles where the side walls and the back wall meet I provide a series of spring clips 18 at each corner. These spring clips are offset as shown at 19 and 20 so as to provide space between them and the angle iron 16 to receive the adjacent edges of the walls. Preferably the clips 18 are welded to the angle iron 16. Each of the clips 18 has wing portions 21 and 22 extending inwardly and rounded as indicated at 23 and 24 to receive a projection 25 that is integral with a spring metal clip 26. The spring metal clip 26 is mounted within a curved corner cover plate 27. The clip 26 can be either in small sections welded at intervals along the cover plate 27 or it

may be held in place entirely by spring tension. The clip may be continuous for the full length of the cover plate or it may consist of small sections.

In order that the advantages of the device may be fully understood, a brief description of the assembly of a shower cabinet upon a receptor 5 will now be given. The initial step in assembling the upright walls is to place the back wall 17 in position with the angle irons 16 at the opposite side edges thereof. Next the side walls 11 are interlocked with the receptor flange in the manner hereinbefore described and shoved rearwardly until the edge portions 11a are forced into the space between the clips 18 and the angle irons 16. The side walls desirably have the front stiles 28 and 29 made integral therewith and the receptor flanges are cut away to pass the walls as shown in Figure 1. After the side walls are in place, the corner cover strip 27 with its clips 26 is placed against each back corner and forced into the corner until the projection 25 is interlocked around the portions 23 and 24 of the clips 18. The size of the corner cover plate 27 is made such that engagement of the clips 26 and 18 forces the corner cover plate snugly against the side and back walls. The only additional assembly necessary is the securing of the head piece 30 at the top of the walls 28 and 29. This construction leaves the whole interior of the shower cabinet free of raw metal edges. It is also free of any screw heads or washers. There is no pocket in which the water can be dropped to cause corrosion so the interior finish of the cabinet is fully protected. Assembly is easy and requires no special tools of any kind. Sealed joints are unnecessary since the very nature of the construction drains all the water that strikes the walls down into the receptor.

It is believed that the nature and advantages of my invention will be clear to those skilled in this art upon reading the foregoing specification.

Having thus described my invention, I claim:

1. A shower cabinet comprising a receptor having an upstanding flange along the back and side walls thereof and having ledges extending inward from said flange at said back and side walls, said flange having spaced downwardly extending lugs thereon, the free ends of said lugs being spaced inward from the flange, cabinet walls having outwardly turned lower edges resting on said ledges, and upstanding lugs on the said walls spaced therefrom and engaging between the lugs on the flange and the upstanding portion of said flange.

2. A shower cabinet comprising a receptor having a flange along the back and side walls thereof, said flange comprising an upstanding body portion having an inturned portion at the top thereof and a depending portion spaced from said upstanding body portion, the depending portion being provided with spaced gaps separated by depending lugs, cabinet walls engaged and supported by the receptor, said walls having their lower edges turned outwardly and each having an upstanding portion on the outwardly directed edge thereof spaced from the wall on which the same is provided, said upstanding portions having lugs separated by gaps of such width as to receive the lugs on the depending portions of said flange, whereby the walls may be interlocked with the flange by moving the walls laterally against the flange and then lengthwise of the flange to bring the wall lugs behind the depending flange lugs.

3. A shower cabinet comprising a receptor having a flange along the back and side walls thereof, said flange comprising an upstanding body portion having an inturned portion at the top thereof and a depending portion spaced from said upstanding body portion, the depending portion being provided with spaced gaps separated by depending lugs, cabinet walls engaged and supported by the receptor, said walls having their lower edges provided with lugs on the exterior thereof spaced from said walls for engagement with the depending lugs on the flange.

4. A corner connection for shower cabinets comprising an angle iron having clips fixed to the inner angle thereof, said clips having side portions each provided with an offset therein to provide a portion extending parallel to the legs of said angle iron spaced therefrom to form wall receiving sockets between said portions and the angle iron, and a corner cover plate having projecting latch means and having its side edges bent back to extend substantially parallel to the legs of said angle iron whereby to engage and press against side walls placed inside the legs of the angle iron, said clips having spring catch portions extending inwardly from the portions thereof spaced from said legs adapted to receive the projecting latch means.

5. A corner connection for shower cabinets comprising an angle iron having clips fixed to the inner angle thereof, said clips having side portions each provided with an offset therein to provide a portion extending parallel to the legs of said angle iron and spaced therefrom to form wall receiving sockets between said portions and the angle iron, a corner cover plate having its side edges bent back to provide flanges thereon extending substantially parallel to the legs of said angle iron whereby to engage face to face with walls engaged within said sockets in spaced relation to said sockets, and latching means comprising laterally extending portions engaged with said flanges and projecting latch means, said clips having spring catch portions extending inwardly from the portions thereof spaced from said legs receiving the projecting latch means.

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REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
1,723,410	Dickert	Aug. 6, 1929
2,343,201	Nilson	Feb. 29, 1944
2,173,693	Nilson	Sept. 19, 1939
2,189,159	Anschicks	Feb. 6, 1940
1,800,609	Drake	Apr. 14, 1931
1,888,729	Lefevre	Nov. 22, 1932