This invention relates generally to a curtain wall for a
bathing enclosure. More particularly, this invention relates to a bathing or shower curtain or the like which is to be vertically arranged and extended during use across an opening in a bathing enclosure, such as a bathtub enclosure or a shower stall.

The subject invention has wide and varied applicability in relationship to bathing or shower enclosures. However, by way of example, the preferred embodiment will be directed to use of the subject curtain wall in relationship with a bathtub-shower combination commonly found in homes and apartments. In such relationship, the subject curtain wall is to be extended between spaced walls which define the bathing or shower enclosure generally are located.

It should be understood, however, that the subject curtain wall is equally well suited for use with shower stalls or cabinets which do not include a bathtub as part thereof. Such shower stalls are commonly found in the dressing rooms of golf and tennis clubs, swimming pools and the like.

Because the subject curtain wall invention has particular applicability when employed in shower curtains for domestic installations, such as in the bathroom of a home or apartment, in conjunction with the bathtub located in such bathroom, the preferred embodiments are described hereinafter with respect to such an installation. Generally, when a bather takes a shower in such a bathroom, he stands in the bathtub and draws the shower curtain across the opening in the bathtub enclosure to preclude splashing of water into the surrounding bathroom. Because generally the shower head is located at a substantial distance from the edge of the bathtub, generally about five feet above the bathtub bottom, it is necessary for the top edge or margin of the shower curtain to be located at a substantial distance above the shower head if the curtain is to be effective to preclude water from splashing into the surrounding bathroom during the bathing operation.

Shower curtains available heretofore were generally completely non-transparent throughout their full vertical extent to afford the bather with the maximum amount of privacy during bathing. However, such a shower curtain, if mounted properly to preclude water leaving the shower enclosure, generally extends to a location above the eye level of the average bather and precludes the bather from seeing from the shower enclosure into the surrounding bathroom.

This condition has serious drawbacks, particularly in households in which small children reside. When a bather is bathing behind a drawn prior art shower curtain which does not permit the bather to see therethrough, small children may enter the bathroom without the bather becoming aware of their presence. As a result, such children can become engaged in all manner of mischief or dangerous activities, including causing the wash basin to overflow, or playing in the bathroom medicine cabinet, and the like. Also, when prior art curtains are employed across shower stalls in public golf or swimming clubs, the bather cannot keep his eye on his personal belongings which he has left outside the shower enclosure.

Additionally, prior art shower curtains are a general rule preclude to a great extent light entering the shower enclosure from the bathroom. As a result, it is difficult for the bather to see objects which may be resting on the bottom of the bathtub, such as bars of soap and the like, and safety problems accordingly arise. Also, prior art shower curtains for all practical purposes form a solid opaque wall across the bathing enclosure which gives the bather therebehind an uncomfortable "closed-in" feeling. This situation is particularly bothersome to a bather who may suffer to any extent from claustrophobia.

With these important shortcomings of conventional prior art shower curtains in mind, the subject invention will be summarized by stating its objects, which include the following: the provision of a curtain wall which will permit a bather to see therethrough during bathing; the provision of a "see-through" curtain wall which will provide the requisite amount of privacy for a bather located therebehind; the provision of a flexible and retractable curtain wall for a shower or like bathing enclosure; and the provision of a shower curtain or the like which will to a major degree eliminate the claustrophobic and draughty effects produced by drawn prior art curtains by permitting light passage without sacrificing privacy so that greater safety and more enjoyment may be imparted to the bathing operation.

The subject curtain wall includes an opaque lower privacy portion and an upper transparent "see-through" portion so that a bather in the enclosure is afforded privacy while at the same time permitting him to see into the surrounding room and permitting light to enter the bathing enclosure. This permits the bather to keep a watch on children who may be present in the room, or, when the curtain is employed in a public place, to keep an eye out for unauthorized persons tampering with his clothes or other personal property located outside the shower enclosure.

In light of the foregoing, reference is directed to the accompanying drawings which illustrate several preferred embodiments of the subject invention.

FIG. 1 is a side elevational view of a bathtub-shower combination bathing enclosure with the subject curtain wall vertically hung in position across the opening of the enclosure.

FIG. 2 is a partial plan view of one embodiment of the subject curtain wall construction.

FIG. 3 is a partial end elevation of a composite curtain wall illustrating a manner of joining the discrete panels thereof together.

FIG. 4 is a plan view of a modified composite curtain wall construction.

FIGS. 5 through 7 are partial isometric views of modified composite curtain wall constructions illustrating details of other manners in which the respective panels thereof may be joined together.

FIGS. 8 and 9 are partial end elevational views of still other modified composite curtain wall constructions.

As noted previously, this invention will be described primarily with respect to its application in conjunction with a combined bathtub-shower installation of the type commonly employed in homes and apartments. As seen in FIG. 1, a bathing enclosure is illustrated which includes a bathtub 1 located in a recess formed between opposite spaced bathroom walls 2 and 3. A shower curtain supporting rod 4 extends between the opposite walls and is secured thereto in any well known manner, such as by employing brackets 6 at opposite ends thereof which are screwed or otherwise secured to the walls.

As seen in FIG. 1, the shower curtain supporting rod 4 normally is positioned closely adjacent to the ceiling 7 of the bathroom so that splashing of water during bathing over the top edge or margin of the shower curtain 8 supported on and depending from the rod 4 normally
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The subject shower curtain is provided with a series of spaced openings 9, preferably grommet reinforced, adjacent its upper margin or edge 11 through which the lower ends of hooks 12 extend. The upper ends of such hooks are engaged over the shower curtain supporting rod 4 in the well known manner.

With such bathtub-shower combinations of the illustrated type, it is the general practice to employ a curtain of approximately 72" height. Accordingly, for all except unusually tall persons well over six feet, with prior art non-transparent shower curtains it is not possible for a bather behind such a curtain to see into the surrounding room without drawing back the curtain.

However, as seen in FIG. 1, the subject shower curtain 8 is provided with a transparent upper portion or window 13 which extends a predetermined distance downwardly from the curtain upper margin 11. That is, the upper portion of the shower curtain is defined by a transparent panel which extends across the curtain between the curtain margin 11 and a predetermined line or location 14 which extends generally horizontally of the shower curtain when the same is vertically hung. The lower portion 16 of the shower curtain, that is that part of the curtain which depends from line 14 to the lower or bottom margin 17 of the curtain, is of non-transparent material which cannot be seen through.

As used hereinafter and in the appended claims, the material from which the lower panel 16 of the curtain is formed is referred to as being opaque. It should be understood, however, that the term opaque is intended to include not only the materials which will not admit the passage of light therethrough, but also those translucent materials through which some light may pass but which cannot be seen through. That is, opaque is intended to cover all those materials suitable for bathing curtain use which cannot be seen through. Also, as used herein, the term transparent as applied to the upper portion 13 of the shower curtain is intended to cover those materials suitable for bathing curtain use which are clear or substantially clear and through which light may pass and through which a person may easily see with little or no distortion.

As noted in FIG. 1, a bather 18 of average size who is standing behind a curtain 8 of this invention may readily see through the transparent upper portion 13 of the curtain into the surrounding bathroom so that he or she may be aware of occurrences in the bathroom and also so that light may be admitted into the bathing enclosure.

As will be described hereinafter, it is preferred that the curtain wall is formed of a flexible, water resistant, and preferably water impervious material, at least on its inner surface. Many such curtain wall materials are well known as will be discussed further hereinafter. Desirably the subject curtain wall includes a flexible sheet type body which may be of either one piece or multi-piece composite construction. That is, the subject curtain wall may be of the single sheet construction seen in FIG. 2 or of the composite multi-panel construction seen in FIGS. 3 through 9.

Referring first to the construction shown in FIG. 2, the curtain 21 illustrated therein includes a body which consists of a single suitable water repellent sheet of normally transparent material, such as a suitable transparent plastic. The upper portion 22 of sheet 21 is untreated and remains transparent but the lower portion 23 thereof has been treated for a predetermined distance upwards from the curtain lower margin to a location indicated generally at 24 to render such lower portion opaque. That is, the curtain sheet within the slipped area has been heat treated, for example by pigmentation, by coating the same with water resistant inks or the like, by embossing the same, etc., to make the same opaque as used herein, i.e. non-transparent. Alternatively, the curtain sheet of FIG. 2 could normally be opaque for its full length with the upper portion 23 thereof having been treated to render the same transparent.

The subject invention also may be embodied in composite shower curtains, a simple embodiment of which is seen in FIG. 3. Such curtain 26 comprises an upper transparent panel 27 and a separate lower opaque privacy panel 28 joined together. As seen, the upper and the lower panels are overlapped at 29 along their full widths and are secured together in the area of overlap, such as by means of a row of stitching 31 extending therethrough. Alternatively, if the upper and lower panels are formed of thermo-plastic material, a heat sealed seam may be effected therebetween, in the well known manner, in place of the stitching 31.

In the composite curtain of FIG. 3, no means for reinforcing the overlapped joint between the respective curtain panels is employed. However, it has been found to be desirable in composite curtains to provide reinforcing means for the joint between the respective curtain panels so that the curtain may withstand long usage and everyday wear and tear, particularly the stresses in the vertical direction applied to the panel joint by small children. Accordingly, as seen in FIGS. 4 and 5, a reinforcing composite shower curtain 32 which comprises an upper transparent portion 33 and a lower opaque portion 34 joined together along a horizontally extending predetermined line is shown. Reinforcing means is provided which desirably is in the form of one or more reinforcing strips 36 which extend across the shower curtain in the direction of and overlying the joint between the curtain panels. Such reinforcing strip or strips may be stitched or heat sealed to the respective curtain panels as may be desired.

As seen in FIG. 5, preferably a pair of such reinforcing strips 36 are provided, one engaged with the front surface and one engaged with the back surface of the respective transparent upper panel 33 and the opaque lower panel 34 which define the shower curtain. In this embodiment of the invention, a pair of generally parallel lines of stitching 37 extend along the full width of the curtain and secure the reinforcing strips to both upper and lower panels and thereby operatively secure the panels together. However, if the panels and the reinforcing strips are formed from a heat sealable material, heat seal joints may be employed in place of the stitching. It is also contemplated, as seen in FIG. 6, that a composite shower curtain 39 may be provided in which a transparent panel 41 extends the full vertical extent of the curtain and defines the inner surface thereof. To impart opacity to such a composite shower curtain to provide the requisite privacy for the bather, a separate opaque panel 42 which is vertically shorter than the transparent panel 41 may be secured to the transparent panel in either of the manners described previously. That is, one or a pair of reinforcing strips 36 may be stitched as at 37 to the opposite surfaces of the respective panels, or may be heat sealed thereto, along a panel joint line 43.

With the construction shown in FIG. 6, the panels 41 and 42 along their vertical edges and bottom margins may be stitched or heat sealed together to provide an integral two-ply sheet body. Alternatively, the two panels 41 and 42 may be maintained free of each other at locations other than along the joint line 43 so that the inner water resistant transparent panel may be positioned inside a bathtub while the outer opaque panel may be positioned outside the bathtub during the bathing operation.

A further alternative construction of a composite curtain is embodied in the curtain 44 illustrated in FIG. 7. In such construction an upper transparent panel 46 is secured by one or a pair of reinforcing strips 36 stitched or heat sealed along lines 37 to a pair of lower panels 47 and 48 of substantially equal dimensions. Preferably, at least one of the panels 47 and 48 is opaque.
although, if desired, the panels 47 and 48 may be of such type that they cooperate with each other in providing collectively an opaque panel. That is, if desired, each of the panels may be provided with a particular pattern, which, by itself, would not be truly opaque but, when the same is combined with the other panel, the net result is an opaque privacy panel. The panels 47 and 48 may be stitched or heat sealed together along their corresponding vertical side edges and bottom margins to provide an integral two-ply panel, or, alternatively, the panels may be free of stitching or heat sealing along their side edges and bottom margin so that the inner panel 48 may be located inside the bathtub with outer panel 47 located outside the bathtub during bathing.

In each of the embodiments illustrated in FIGS. 5 through 7, a pair of reinforcing strips have been employed, one on each of the opposite surfaces of the curtain. However, under certain situations a single strip employed on only one surface of the curtain may prove adequate, and this alternative construction also is contemplated.

With the composite constructions of FIGS. 6 and 7 in which the lower opaque portion of the curtain is defined by two discrete panels, the outer of such panels may be of cloth or other decorative materials which need not necessarily be water repellant in that such outer panel normally will not be exposed to the bathing water. This, in effect, provides a "two-in-one" curtain which incorporates utility and decoration into a single curtain. Herefore, two separate curtains hung from the same rod generally were required to perform these two functions. Referring now to FIG. 8, a modified reinforcing strip construction is shown in conjunction with the shower curtain 51 illustrated therein. An upper transparent curtain panel 52 is operatively connected to a lower opaque panel 53 by means of a pair of reinforcing strips 54. To provide added reinforcement to withstand vertical stresses which may be applied to the joint between the panels, each of the reinforcing strips is infolded along its longitudinal upper and lower edges as at 56 to provide a two-ply construction through which lines of stitching 57 extend. This provides a substantially stronger reinforcing arrangement than is provided when unfolded reinforcing strips are employed.

Alternatively, if desired, as seen in the composite shower curtain 59 of FIG. 9, a reinforced joint 60 may be provided between an upper transparent panel 61 and a lower opaque panel 62 without requiring separate reinforcing strips. That is, one of the respective panels may be reversely bent upon itself along a margin thereof to provide an integral reinforcing strip for the panel joint. In the embodiment illustrated, the upper edge of the opaque panel 52 is bent downwardly as at 63 to provide a two-ply panel strip through which a line of stitching 64 may be extended to secure the panels together. If desired, other multi-folded edge constructions in one or both of the transparent or opaque panels could be employed to provide joint strength to resist the stresses of everyday usage of the subject curtain.

Various flexible, water repellant or impervious materials may be employed with curtains of this invention. For the transparent panels, preferably a soft-pliable plastic material is employed. Many suitable transparent plastics are available and, by way of example, sheets of polyethylene, polypropylene, vinyl acetate, poly-vinylidine chloride, or one of the numerous polyesters could be used.

In the composite curtain constructions described, the opaque panels also may be of a suitable plastic treated to render the same opaque. Alternatively, cloth panels also may be employed when such panels are to form the outer surface of the lower curtain portion. Such cloth panels, which generally are more decorative and more expensive than the plastic panels, need not necessarily be water repellant in that the same will generally be out of contact with the shower water.

While it should be understood that curtains of the subject invention may take various sizes without departing from the inventive concept, shower curtains conventionally employed in bathtub-shower combinations have vertical and horizontal dimensions of 72" by 72", respectively. In such shower curtain, it has been found suitable if the upper transparent panel extends 18" downwardly from the upper margin of the curtain for the full width thereof, with the opaque privacy panel extending the remaining 54" downwardly for the full curtain width.

However, if the shower curtain is intended to be employed in a bathing enclosure known to be used primarily by people of small stature, such as children, a 36" by 72" transparent panel and a 36" by 72" privacy panel may be employed. Also, if the curtain is to be employed in a bathtub to provide privacy for a person taking a bath rather than a shower, such as an invalid, the privacy panel need only be approximately 24 inches high.

Various modifications of the invention may be employed for a particular purpose without departing from the spirit of the invention. For example, the combined see-through and privacy features of the invention could be incorporated with a plastic sliding shower door if so desired and the term curtain wall used herein is intended to cover such an installation also.

The important features of this invention include the provision in a curtain wall for a bathing enclosure of a transparent panel or window positioned relative to the eyes of the bather behind the curtain so that visibility from the bathing enclosure into the surrounding room may be had and so that light from the surrounding room may enter the bathing enclosure.

Having made a full disclosure of certain preferred embodiments of this invention, reference is directed to appended claims for the scope to be afforded thereto.

I claim:

1. A see-through flexible shower curtain to be used in combination with a shower bath enclosure to be vertically hung across such enclosure to provide privacy for a bather in said enclosure and to preclude water splashing from said enclosure while said bather is showering, said curtain consisting of only two vertically distinct integrally connected curtain portions one of which is transparent and the other of which is opaque, each of said curtain portions being flexible and foldable in all directions, said transparent portion comprising a generally clear plastic panel which extends downwardly from the top margin of said curtain, said transparent plastic panel forming the uppermost portion of said curtain when the curtain is vertically hung across a shower enclosure, said opaque portion extending upwardly from the bottom margin of said curtain and forming the lowermost portion of said curtain when the same is vertically hung across a shower enclosure, said uppermost and lowermost portions of said curtain being integrally connected with each other along a line extending the full distance across said curtain including said top and bottom margins of said curtain, said lowermost opaque curtain portion comprising an opaque panel of flexible and foldable water resistant material, both said uppermost portion transparent panel and said lowermost portion opaque panel extending the full height of said curtain the full distance between opposite side margins thereof, said lowermost opaque panel portion being of greater vertical extent than said transparent portion so that the body of a bather of average height standing in said enclosure when said curtain is drawn cannot be seen from outside said enclosure, said uppermost transparent portion panel providing a see-through window in said curtain for the full width thereof so that said bather may see from said enclosure while standing in said enclosure, said transparent panel having a series of aligned openings adjacent the top margin of said curtain adapted to receive therein
means for supporting said curtain so that the same may be hung across said enclosure.

2. The curtain of claim 1 in which said lowermost opaque curtain portion comprises a pair of flexible and foldable panels at least one of which is water resistant, each of said last mentioned panels being integrally connected with said uppermost portion transparent panel along said line which lies intermediate said top and bottom curtain margins.

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