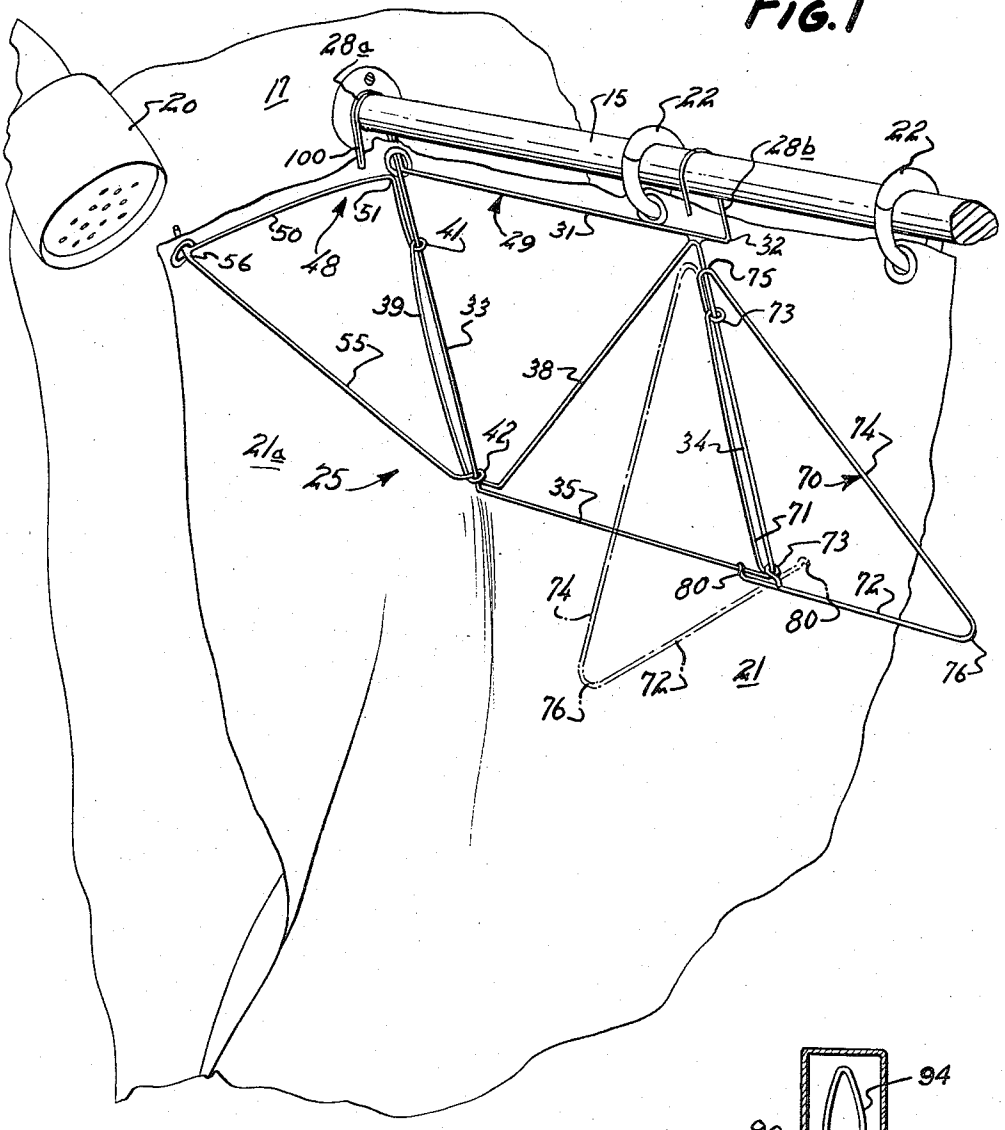
March 24, 1959 L. FOOTE 2,878,487

SHOWER CURTAIN ADAPTER

Filed July 12, 1957

FIG. 1



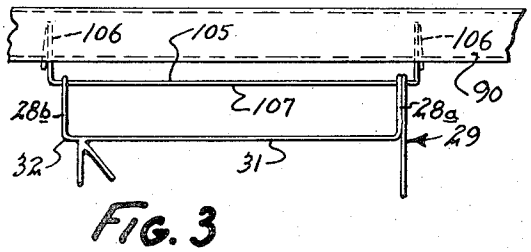


FIG. 3

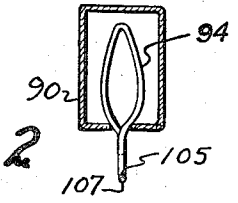


FIG. 2

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SHOWER CURTAIN ADAPTER

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8 Claims. (Cl. 4—154)

This invention relates to an anti-billowing shower curtain adapter.

It is an object of this invention to provide a device for use in combination with shower curtains to prevent the shower curtain from billowing inwardly during use of the shower.

A still further object of the invention is to provide a device for mounting the shower curtain inwardly at the forward edge portion so that the forward edge portion of the shower curtain lies in substantial juxtaposition with the front wall of the showering area.

Another object of this invention is to provide a shower anti-billowing device of simple and economical construction which may be removably attached to conventional shower curtain mounting means.

A feature and advantage of this invention is that the device may be readily installed on a shower curtain mounting rod without the necessity of altering the shower curtain or rod.

Another object of this invention is to provide means incorporated with the anti-billowing device by which articles may be hung within the shower area.

A further object of this invention is to provide a novel means for locking the device against removal from the conventional shower curtain mounting means.

Other objects of the present invention will become apparent upon reading the following specification and referring to the accompanying drawings in which similar characters of reference represent corresponding parts in each of the several views.

In the drawings:

Fig. 1 is a perspective view of the invention shown attached to a conventional shower curtain mounting rod.

Fig. 2 is a view of a modification of the invention shown in fragmentary portion adapted for mounting to slotted shower curtain supporting fixtures such as conventionally mounted on the ceiling adjacent the shower area.

Fig. 3 is a view of a modification of the invention shown in front elevation in which a mounting rod is arranged to support the embodiment of the invention shown in Fig. 1.

Referring now to the drawings and with particular reference to Fig. 1 there is shown a preferred embodiment of the invention adapted for mounting on a shower curtain mounting rod 15. Rod 15 is conventionally supported on front wall 17 from which projects a shower nozzle 20. A shower curtain 21 is hung by conventional hooks 22 on rod 15 as indicated in the drawings.

An anti-billowing frame 25 is mounted on rod 15 interiorly of curtain 21 and adjacent wall 17. Frame 25 is pivotally connected to rod 15 to swing toward and away from the showering area so as to be positionable to prevent the shower curtain from billowing inwardly during use of the shower.

In greater detail frame 25 comprises two hooks 28^a and 28^b arranged for removable pivotal mounting on rod 15. From the hooks are supported a rectangular frame member 29 having a top horizontal segment 31 attached to the depending end 32 of hooks 28^a and 28^b and a front vertical component 33 and a rear vertical component 34 depending from the ends of the horizontal segment 31 in spaced parallel alignment. The bottom ends of vertical segments 33 and 34 are joined by a bottom horizontal segment 35. A stiffener member 38 is employed extending between the intersections of segments 31 and 34 and the intersection of segments 33 and 35 to add rigidity to frame 29.

A shower curtain supporting frame 48 is pivotally attached to vertical component 33 of frame 29 to support the front end 21^a of curtain 21. Frame 49 is triangular in shape having a vertical component 39 adjacent the vertical component 33 of frame 29 and pivotally mounted thereto by loop hinges 41 and 42. Loop hinge 42 is disposed adjacent the bottom of segment 39 whereat the hook member rests on stiffener 38 thus affording a vertical support for frame 48. Frame 48 is further provided with a horizontal shower supporting lever arm 50 mounted on the top 51 of segment 39 and disposed in alignment with the top horizontal segment 31 of frame 29. The arm is supported by a diagonal member 55 connected adjacent the outer extremity of horizontal arm 50 as at 56 and the depending end of segment 39.

Frame 48 is positionable so the axis of frame 48 is substantially normal to frame 29 whereat arm 50 is disposed to support the end portion 21^a of the shower curtain 21 in juxtaposition with front wall 17. The weight of the end portion 21^a of curtain 21 thus tends to pull arm 50 of frame 48 downwardly thence forcing bottom segment 35 of frame 29 outwardly thereby positioning curtain 21 outwardly from the showering area.

It is thus readily apparent that device 25 effectively counteracts the tendency of the shower curtain to billow inwardly.

It is noted that the weight of end portion 21^a of the shower curtain acting on lever arm 50 causes the latter to swing downwardly about a fulcrum defined by hooks 28^a and 28^b supported pivotally on rod 15. This leverage movement, in turn, causes frame 29 to swing outwardly against the curtain 21 to bias the curtain against inward billowing.

It is also noted that end portion 21^a of the shower curtain is curved so as to be substantially juxtaposed the wall 17 whereat the end portion of the shower curtain has a greater surface area disposed adjacent the wall to form a more perfect seal between the wall and the curtain thus substantially reducing water leakage from the shower area at the joinder of the curtain and wall.

A triangular frame 70 is pivotally mounted adjacent vertical segment 34 of frame 29 to provide an effective extension of bottom segment 35 thus lengthening the effective length of device 25 at the bottom portion. Frame 70 comprises a vertical segment 71 mounted adjacent and parallel to segment 34 and pivotally mounted thereto by mounting members 73. The bottom of frame 70 is formed by a segment 72 aligned with segment 35. Segments 71 and 72 are joined by a diagonal segment 74 mounted adjacent each portion 75 and 76 of segments 71 and 72 respectively. Frame member 70 is held with segment 72 in axial alignment with bottom segment 35 of frame 29 by a stop member 80 during operation of device 25. Frame 70 is arranged to be reciprocally moved with respect to frame 29 so as to disengage the frame locking means 80 from engagement with bottom segment 35 thus allowing frame 70 to swing inwardly wherein frame 70 is positioned to form a mounting means by which garments or towels and the like may be hung for drying when the shower is not in use.

Front hook 28^a is arranged with a downwardly depending leg 100 which ends substantially adjacent lever arm 50 and disposed to form a lock to prevent device 25 from being removed from rod 15 as long as frame 48 is disposed inwardly positioned with respect to frame 29.

Referring now to Fig. 2 there is provided another embodiment of the invention identical to the device **25** hereinabove described in connection with Fig. 1 in which hook members **28a** and **28b** are replaced with mounting members adapted for mounting in an overhead track **90** in shower installations in which shower curtains **21** are suspended from overhead tracks **90** by reciprocally slidable mounting members. In this embodiment a clip member **94** formed of spring stock is mounted on opposite ends of top segment **31**.

In operation the expandable spring **94** is inserted within the overhead track or guide way **90** so the device **25** may be mounted in the track in much the same manner as the shower curtain.

Referring now to Fig. 3, there is disclosed another modification of the invention, for mounting the embodiment of device **25** as shown in Fig. 1 on an overhead track such as shown in Fig. 2. An accessory attachment **105** is arranged with two expandable spring members **106** of the same type as clip member **94** of Fig. 2. The two spring members **106** are arranged in spaced apart relation to support a rod **107** from which hooks **28a** and **28b** may be hung as indicated in the drawings.

Although the foregoing invention has been described in some detail by way of illustration and example for purposes of clarity of understanding, it is understood that certain changes and modifications may be practiced within the spirit of the invention as limited only by the scope of the appended claims.

What is claimed is:

1. In a device for preventing shower curtains hung from a horizontal rod from billowing towards the shower area the combination of: a frame member; means to mount pivotally said frame member on said rod juxtaposed the face of the shower curtain facing the shower area; a lever arm mounted on said frame to extend into the shower area; and weighted means mounted on said arm biasing said arm downwardly to force said frame to pivot towards the shower curtain.

2. In a device for preventing hanging shower curtains from billowing towards the shower area the combination of: a frame member; mounting means to mount said frame member proximate the top of the curtain and on the shower side thereof; said mounting means including pivoting means for movement of said frame about a horizontal axis towards and away from said shower area; an arm connected to said frame and projecting from said frame toward the shower area and means connecting a portion of said shower curtain on said arm to transmit weight of a portion of said curtain to said frame whereby the weight of the portion of the shower curtain on said arm forces said arm downwardly and swings said frame member outwardly from the shower area to restrict inward billowing of the shower curtain.

3. In a device for preventing shower curtains hung from a horizontal rod from billowing inwardly towards the shower area the combination of: a frame; mounting means connected to said frame to mount said frame on the horizontal rod proximate the top of the curtain and on the shower side thereof; said mounting means pivotally connected with said horizontal rod for movement about a horizontal axis towards and away from the shower area; an arm mounted on said frame and extending into the shower area; and means to weight said arm to bias said frame to rotate away from the shower area.

4. In a device for preventing shower curtains hung from a horizontal rod from billowing towards the shower area the combination of: a frame having first, second and third members; means connected to said first member for pivotally mounting said frame on the rod for movement toward and away from the shower area with said first frame member being disposed proximate the top of the curtain and on the shower side thereof; said first frame having its longitudinal axis arranged in parallel relation to the longitudinal axis of the horizontal rod; said second member being pivotally mounted on said first member for swingable movement about a vertical axis and movable to an operable position substantially normal to the plane of said first member; weighted means comprising a portion of the shower curtain mounted in spaced relation to said first frame member on said second frame member while in the operable position to bias the frame to move away from the shower area to restrict inward billowing of the shower curtain; said third member being pivotally mounted for swingable movement about a vertical axis on said first member and movable in a first position whereat the plane of said first and third members are in coplanar relation and to a second position whereat the plane of said third member is normal to the plane of said first member; and releasable locking means mounted on said third member and engageable with said first member to lock said third member in the first position.

5. A device according to claim 4 and wherein said hook for mounting said frame on said shower curtain mounting means comprises; a rod, means for mounting said rod in a substantially horizontal position adjacent the shower curtain mounting means, and hook members attached to said first frame member and pivotally suspended from said rod.

6. In a device for preventing shower curtains hung from a horizontal curtain mounting means from billowing inwardly towards the showering area the combination of: a frame; mounting means on said frame connecting the frame to the curtain mounting means for pivotal movement about a horizontal axis toward and away from the showering area; a first member carried by said frame in spaced parallelism below the curtain mounting means; a second member pivotally connected to said frame about a vertical axis for swingable movement into the showering area; and means carrying an end portion of the shower curtain on said second member.

7. A device for preventing shower curtains hung from a horizontal rod from billowing toward the shower area the combination of: a frame member depending from said rod; mounting means pivotally mounting said frame member for swingable movement about a horizontal axis on said horizontal rod toward and away from the shower area; said frame having a first member below said mounting means in spaced parallel relation with the horizontal rod, and a second member having a first end mounted between said mounting means and first member and a length extending in a direction normal to said first member and into the shower area; and weighted means carried by said second member on the length adjacent the second end of said second member.

8. A device for preventing shower curtains hung from a horizontal rod from billowing toward the shower area the combination of: a frame, said frame having first and second components disposed in substantially normal relationship with respect to each other; means connected to said first component pivotally mounting said frame on said rod to depend therefrom in parallelism with said rod and rotatable about a horizontal axis for movement toward and away from the shower area with said second component extending inwardly into the showering area; said first component disposed against a portion of the shower area facing face of the shower curtain, and means supporting a portion of said shower curtain on a portion of said second component.

References Cited in the file of this patent

UNITED STATES PATENTS

2,545,648	Byrne	May 20, 1951
2,554,106	Heubeck	May 22, 1951
2,573,985	Porter	Nov. 6, 1951
2,774,974	Zaloga	Dec. 25, 1956
2,778,030	Goche	Jan. 22, 1957