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(54) **SHOWER CURTAIN HOOKS**

(75) Inventor: **David Baines**, Bedford, NY (US)

(73) Assignee: **Maytex Mills, Inc.**, New York, NY (US)

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Publication Classification

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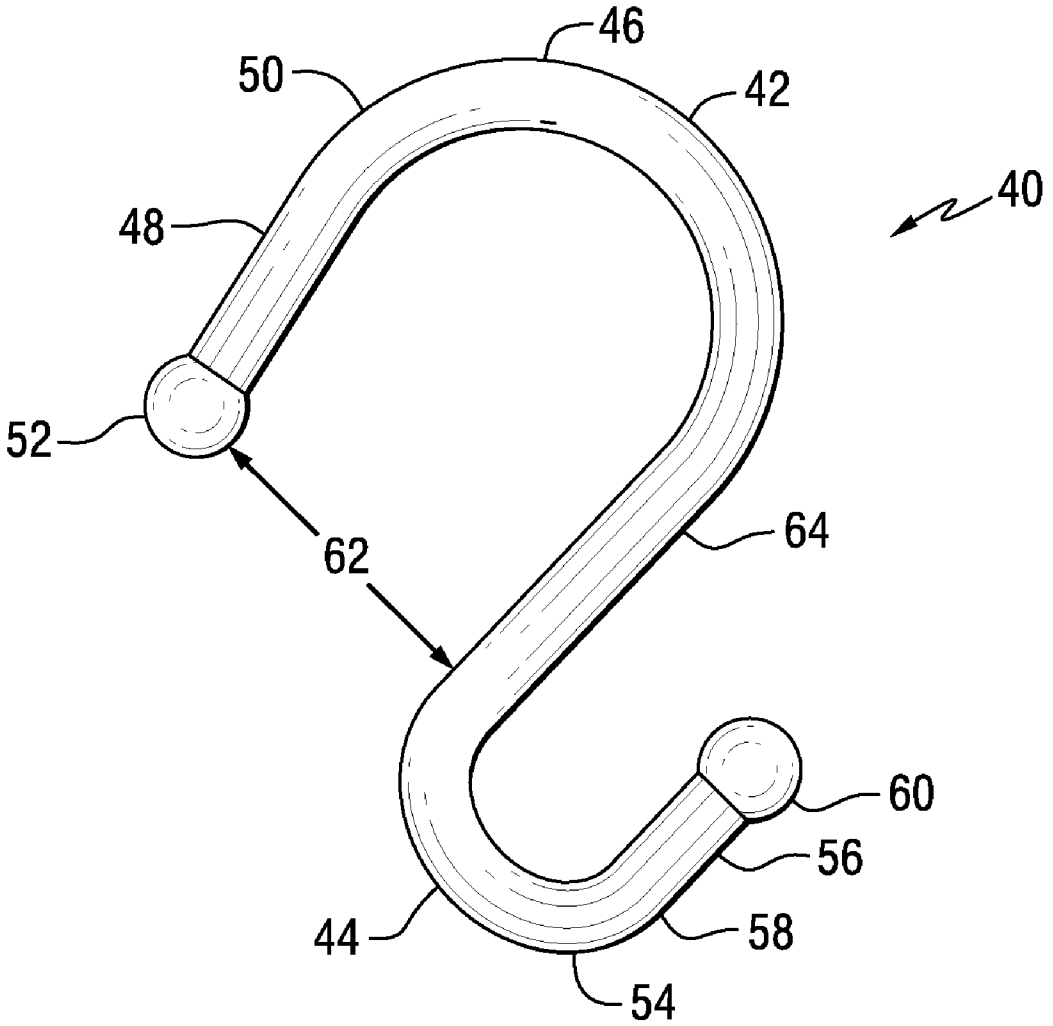
A47H 13/04 (2006.01)

(52) **U.S. Cl.** **24/716**

(57) **ABSTRACT**

A shower curtain hook includes a generally S-shaped member including a top portion configured to slideably engage a rod having a first diameter, and a bottom portion; the top portion including a curved section and a straight section extending from one end of the curved section; and a ball attached to an end of the straight section, wherein a distance between the ball and the bottom portion is smaller the first diameter.



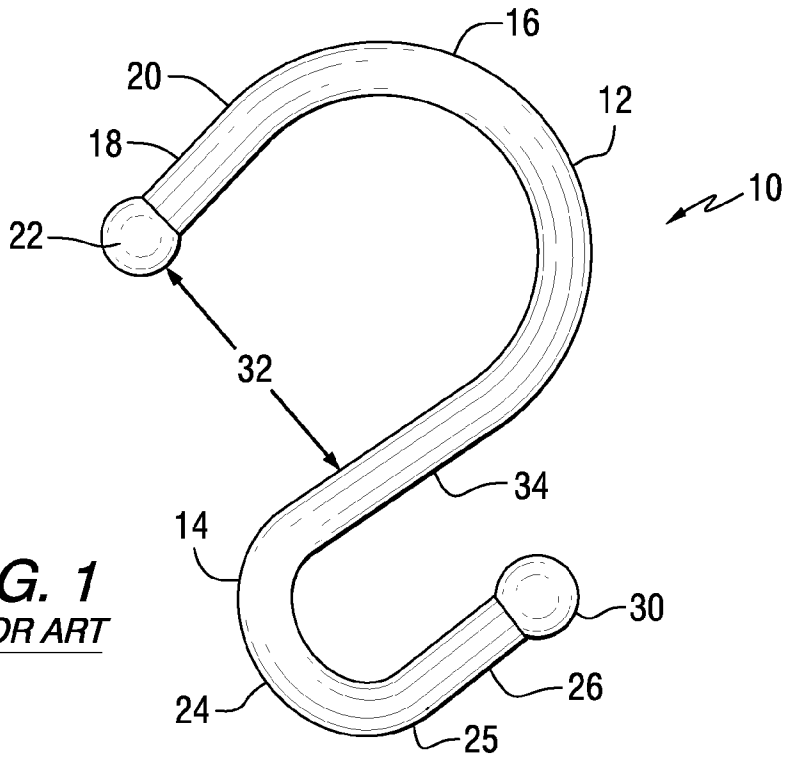


FIG. 1
PRIOR ART

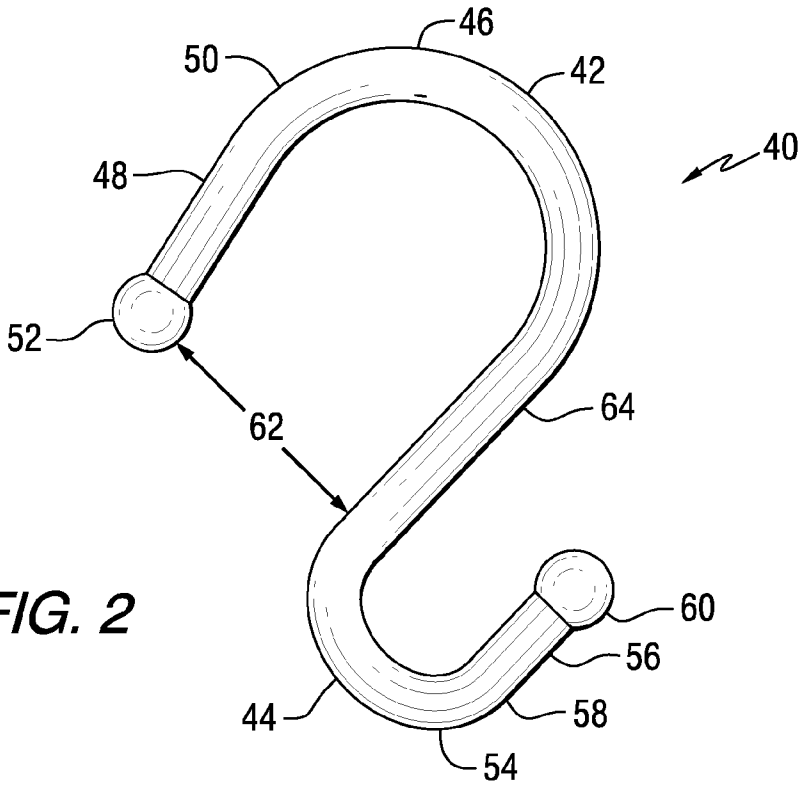


FIG. 2

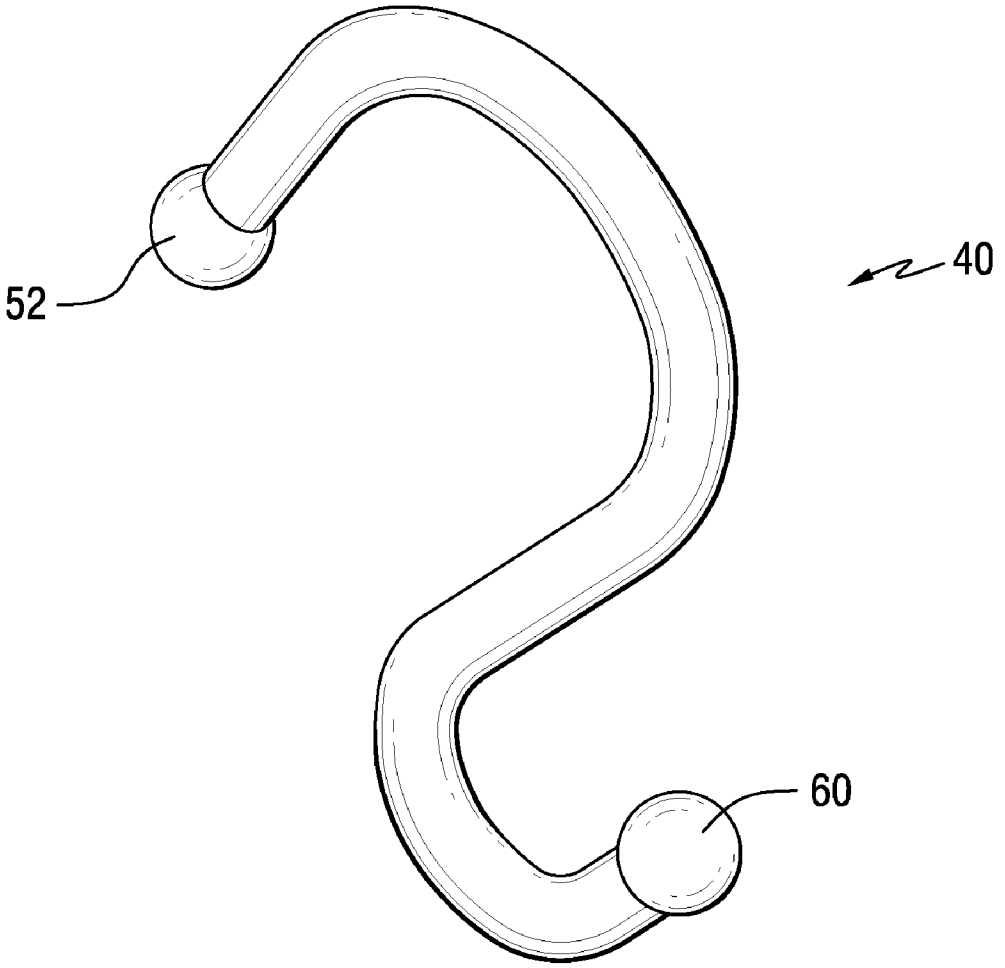


FIG. 3

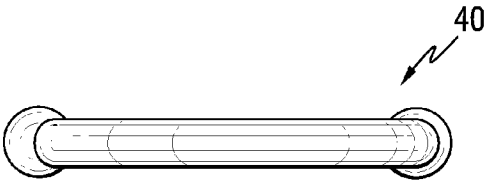


FIG. 7

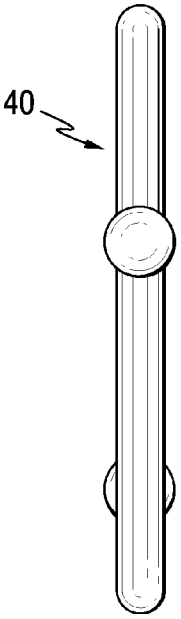


FIG. 5

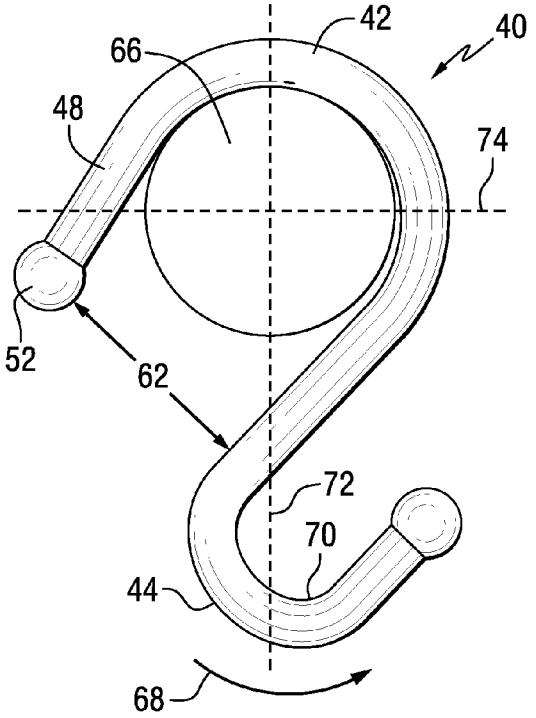


FIG. 4

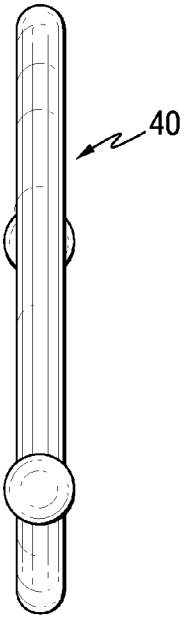


FIG. 6

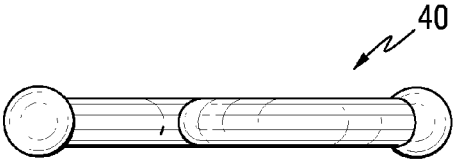


FIG. 8

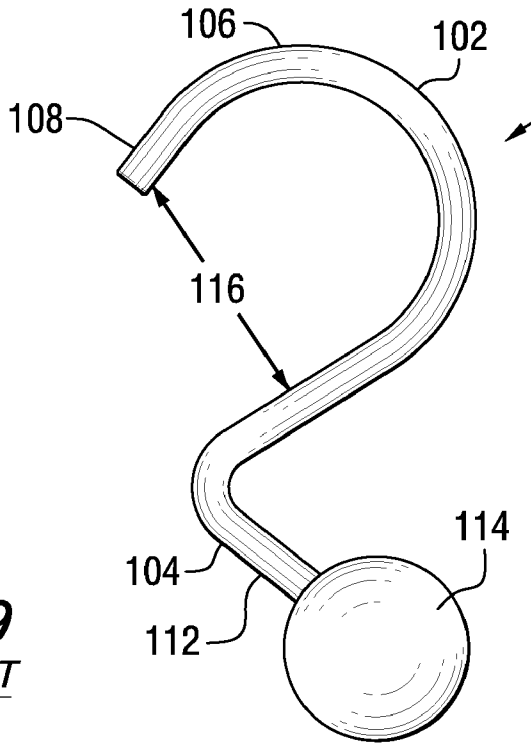


FIG. 9
PRIOR ART

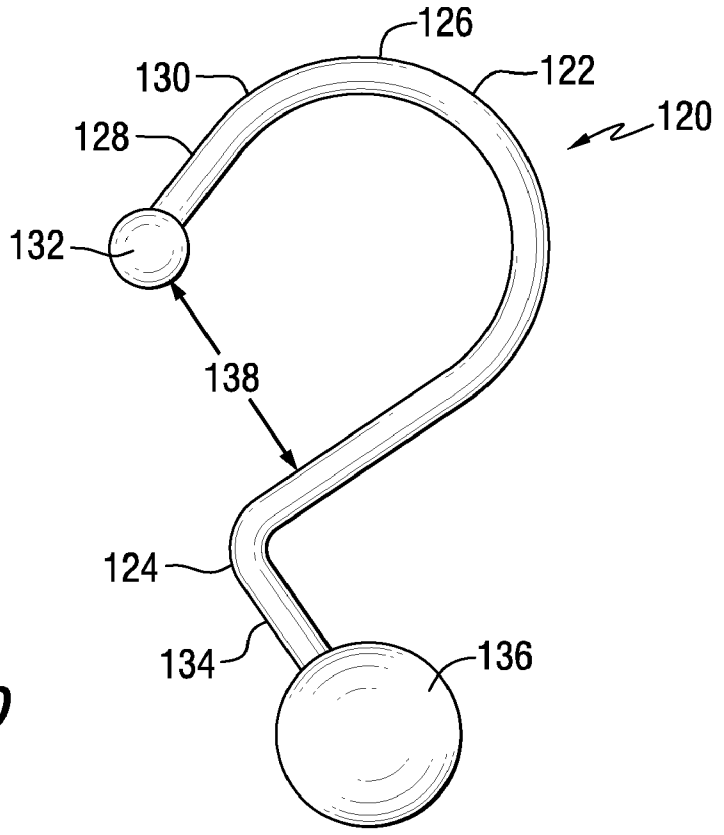


FIG. 10

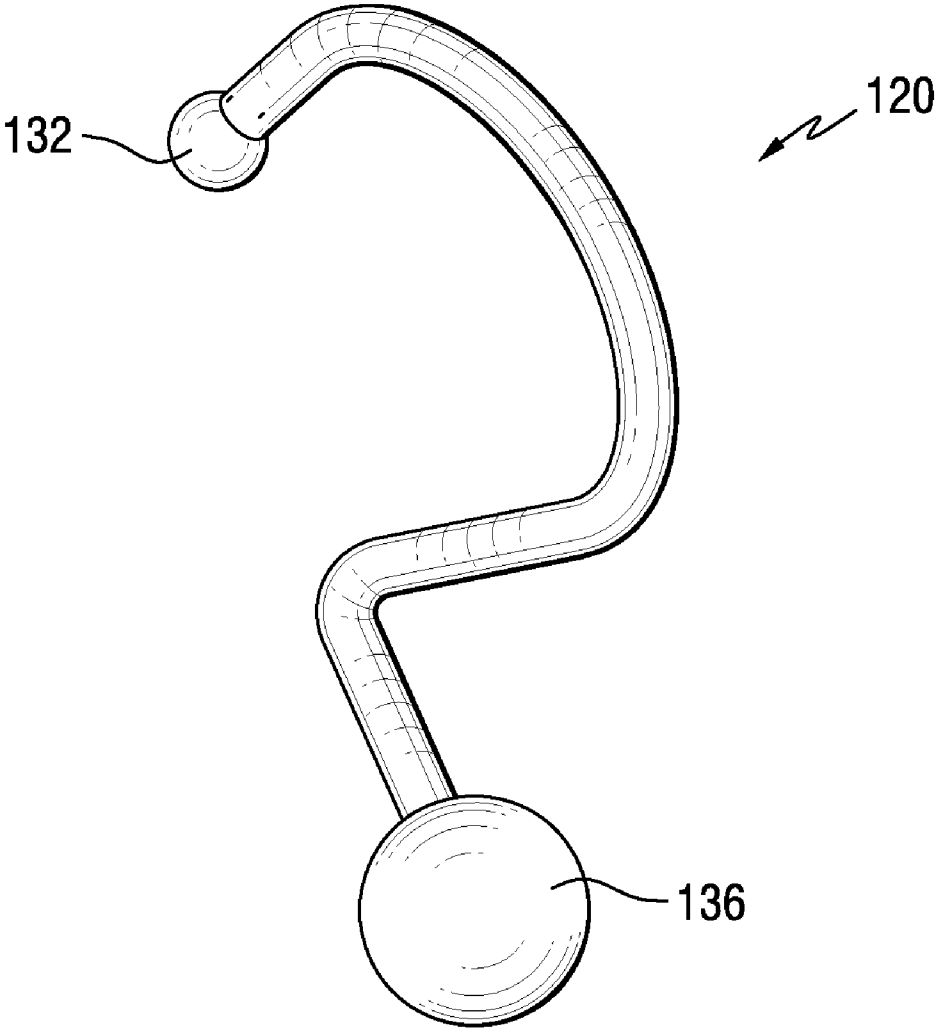


FIG. 11

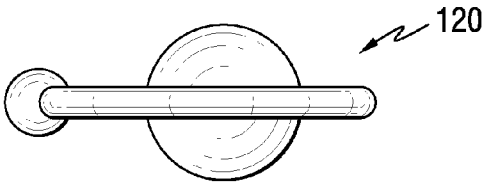


FIG. 15

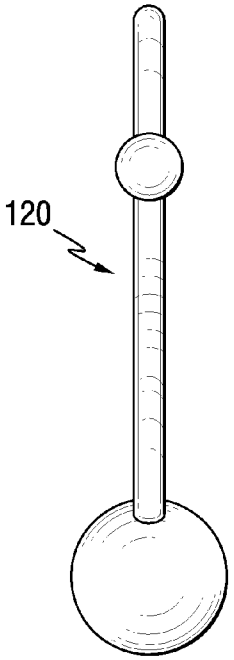


FIG. 13

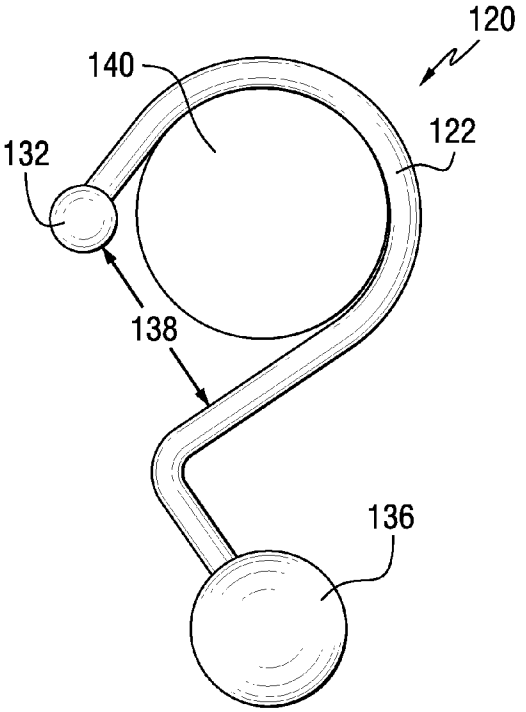


FIG. 12

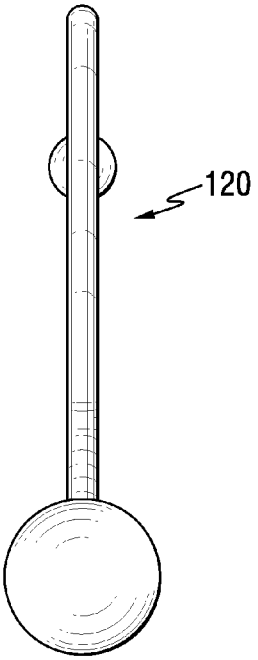


FIG. 14

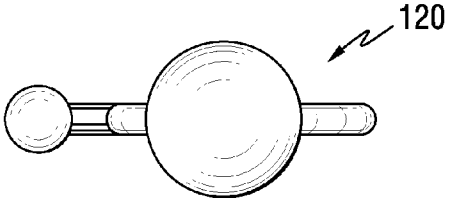


FIG. 16

SHOWER CURTAIN HOOKS

CROSS-REFERENCE TO RELATED APPLICATION

[0001] This application claims the benefit of U.S. Provisional Patent Application No. 61/486,454, filed May 16, 2011, for "Shower Curtain Hooks," which is hereby incorporated by reference.

BACKGROUND INFORMATION

[0002] Shower hooks are commonly provided to attach a shower curtain to a shower rod and to allow the shower curtain to be positioned along the rod. Existing "S-shaped" shower curtain hooks and "ball hook" shower curtain hooks are known to easily fall off shower rods when the shower curtain is moved.

SUMMARY

[0003] In a first aspect, the invention provides a shower curtain hook including a generally S-shaped member including a top portion configured to slideably engage a rod having a first diameter, and a bottom portion; the top portion including a curved section and a straight section extending from one end of the curved section; and a ball attached to an end of the straight section, wherein a distance between the ball and the bottom portion is smaller than the first diameter.

[0004] In a second aspect, the invention provides a shower curtain hook including a generally S-shaped member including a top portion configured to slideably engage a rod having a first diameter, and a bottom portion; the top portion including a curved section and a straight section extending from one end of the curved section; and a ball attached to an end of the straight section; wherein a distance between the ball and the bottom portion is substantially the same as the first diameter, and wherein a lowest point on the bottom portion and the ball attached to the straight section are on opposite sides of a vertical plane passing through a centerline of the rod when the hook is placed on the rod.

[0005] In a third aspect, the invention provides a shower curtain hook including a member having a top portion configured to slideably engage a rod having a first diameter, and a bottom portion; the top portion including a curved section and a straight section extending from one end of the curved section; a first ball attached to an end of the bottom portion; and a second ball attached to an end of the straight section; wherein a distance between the second ball and the bottom portion is smaller than the first diameter.

BRIEF DESCRIPTION OT THE DRAWINGS

[0006] FIG. **1** illustrates a conventional S-shaped shower curtain hook.

[0007] FIG. **2** illustrates an S-shaped shower curtain hook in accordance with an embodiment of the present invention.

[0008] FIGS. **3-8** show additional views of the S-shaped curtain hook of FIG. **2**.

[0009] FIG. **9** illustrates a conventional shower curtain ball hook with a lower ball to help secure the curtain.

[0010] FIG. **10** illustrates a ball hook shower curtain hook in accordance with another embodiment of the invention.

[0011] FIGS. **11-16** show additional views of the ball hook curtain hook of FIG. **10**.

DETAILED DESCRIPTION

[0012] In one aspect, the present invention provides improved configurations for shower curtain hooks. In some embodiments, the size of the opening at the top of the hook is reduced to lower the probability of the hook separating from the shower rod. In some embodiments, a small ball may be added to the upper end of the hook to remedy problems with prior ball hook designs. A section of the top portion of the hook can be lengthened to change the angle of the hook when it is mounted on a shower rod.

[0013] By adjusting the angle, the opening size, and/or adding a small ball to the ball hooks, the shower curtain hooks described herein set new standards of basic function when mounted on standard shower curtain rods.

[0014] FIG. **1** illustrates a conventional S-shaped shower curtain hook **10**. The shower curtain hook **10** includes a top portion **12** and a bottom portion **14**. The top portion includes a generally U-shaped section **16** and a straight section **18** extending from an end **20** of the U-shaped section. A ball **22** is affixed to the end of the straight section **18**. The bottom portion **14** includes a generally U-shaped section **24** and a straight section **26** extending from an end **28** of the U-shaped section. A ball **30** is affixed to the end of the straight section **26**.

[0015] The top portion is configured to slideably engage a shower curtain rod, not shown, and is shaped to define an opening **32**, which allows the hook to be positioned on the shower rod. The top and bottom portions are connected by a straight portion **34**. The opening **32** extends from the ball **22** to the straight portion **34**.

[0016] FIG. **2** illustrates an S-shaped shower curtain hook **40** in accordance with an embodiment of the present invention. The shower curtain hook **40** includes a top portion **42** and a bottom portion **44**. The top portion includes a generally U-shaped section **46** and a straight section **48** extending from an end **50** of the U-shaped section. A ball **52** is affixed to the end of the straight section **48**. The bottom portion **44** includes a generally U-shaped section **54** and a straight section **56** extending from an end **58** of the U-shaped section. A ball **60** is affixed to the end of the straight section **56**.

[0017] The top portion is configured to slideably engage a shower curtain rod (not shown) and is shaped to define an opening **62**, which allows the hook to be positioned on the shower rod. The top and bottom portions are connected by a straight portion **64**. The opening **62** of the hook of FIG. **2** is smaller than the opening **32** of the hook of FIG. **1**. In addition, the straight portion **48** of the hook of FIG. **2** is longer than the straight portion of the hook of FIG. **1**. These differences provide a significant performance benefit that reduces the probability of the hook falling off of a shower rod when the shower curtain is moved.

[0018] FIGS. **3-8** show additional views of the S-shaped curtain hook of FIG. **2**. FIG. **3** is a perspective view of the shower curtain hook **40** of FIG. **2**.

[0019] FIG. **4** is a plan view of the shower curtain hook **40** of FIG. **2**. FIGS. **5** and **6** are side views of the shower curtain hook **40** of FIG. **2**. FIG. **7** is a top view of the shower curtain hook **40** of FIG. **2**. FIG. **8** is a bottom view of the shower curtain hook **40** of FIG. **2**.

[0020] FIG. **4** illustrates unique features of the shower curtain hook **40**. The top portion **42** is configured to slideably

engage a shower curtain rod **66**. The opening **62** allows the hook to be positioned on the shower rod. In one example, the shower rod has a diameter of 1" (2.54 cm), and the length of the opening **62** is smaller than the diameter of the shower rod, e.g., less than 1" (2.54 cm). In one example, the hook can be used in combination with a telescoping rod having a wider side and a narrower side than slides into the wider side. In this case, the hook will splay/spring open between 1/16" and 3/32" when applied to the wider side of the rod. Then the hook will spring back after it is placed on the rod. Also, the hook can be placed on the narrower side of the shower rod, in which case it does not splay/spring open. In another example, the length of the opening **62** can be substantially the same as the diameter of the shower rod.

[0021] The weight of the extended straight section **48** and end ball **52** shift the center of gravity of the hook such that when the hook is mounted on the rod **66**, the bottom portion rotates in the direction of arrow **68**. This moves the lowest point **70** of the bottom portion to the right of a vertical plane **72** passing through a center line of the rod and also lowers the ball **52** below a horizontal plane **74** passing through the center line of the rod. When a shower curtain is attached to the bottom portion of the hook, the hook remains securely mounted on the rod. However, when the shower curtain is moved, the downward force of the shower curtain can be reduced, eliminated, or even reversed. Such movement of the shower curtain is known to dislodge the prior art hooks from the rod. This problem is solved by the embodiment of FIG. **4**, wherein the rotational force in the direction of arrow **68**, the narrow opening **62**, and the extended straight section **48** and ball **52** combine to keep the hook on the rod during movement of the shower curtain. The orientation of the hook with respect to the rod depends on variations of the ball/wire thickness. Such variations/combinations can include changes in the length of section **48** and the size and weight of the ball **52**, thereby changing the center of gravity of the hook.

[0022] FIG. **9** illustrates a conventional shower curtain ball hook **100**. The shower curtain hook **100** includes a top portion **102** and a bottom portion **104**. The top portion includes a generally U-shaped section **106** and a straight section **108** extending from an end **110** of the U-shaped section. The bottom portion **104** includes a straight section **112** and a ball **114** affixed to the end of the straight section **112**. The ball is included to help secure the curtain. The top portion is configured to slideably engage a shower curtain rod (not shown) and is shaped to define an opening **116**, which allows the hook to be positioned on the shower rod.

[0023] FIG. **10** illustrates a ball hook shower curtain hook **120** in accordance with another embodiment of the invention. The shower curtain hook **120** includes a top portion **122** and a bottom portion **124**. The top portion includes a generally U-shaped section **126** and a straight section **128** extending from an end **130** of the U-shaped section. A ball **132** is affixed to an end of the straight section **128**. The bottom portion **124** includes a straight section **134** and a ball **136** affixed to the end of the straight section **134**. The ball **136** is included to help secure the curtain. The top portion is configured to slideably engage a shower curtain rod (not shown) and is shaped to define an opening **138**, which allows the hook to be positioned on the shower rod. The opening **138** of the hook of FIG. **10** is smaller than the opening **116** of the hook of FIG. **9**. In addition, the straight portion **128** of the hook of FIG. **10** is longer than the straight portion of the hook of FIG. **9**. These differences provide a significant performance benefit that reduces the probability of the hook falling off of a shower rod when the shower curtain is moved.

[0024] FIGS. **11-16** show additional views of the ball hook curtain hook of FIG. **10**. FIG. **11** is a perspective view of the shower curtain hook **120** of FIG. **10**.

[0025] FIG. **12** is a plan view of the shower curtain hook **120** of FIG. **10**. FIGS. **13** and **14** are side views of the shower curtain hook **120** of FIG. **10**. FIG. **15** is a top view of the shower curtain hook **120** of FIG. **10**. FIG. **16** is a bottom view of the shower curtain hook **120** of FIG.

[0026] **10**.

[0027] FIG. **12** illustrates unique features of the shower curtain hook **120**. The top portion **122** is configured to slideably engage a shower curtain rod **140**. The opening **138** allows the hook to be positioned on the shower rod. In one example, the shower rod has a diameter of 1" (2.54 cm), and the length of the opening **138** is less than the diameter of the shower rod, e.g., less than 1" (2.54 cm). In one example, the hook can be used in combination with a telescoping rod having a wider side and a narrower side than slides into the wider side. In this case, the hook will splay/spring open between 1/16" and 3/32" when applied to the wider side of the rod. Then the hook will spring back after the hook is placed on the rod. Also, the hook can be placed on the narrower side of the shower rod, in which case, it does not splay/spring open. In another example, the length of the opening **138** can be substantially the same as the diameter of the shower rod.

[0028] The length of the straight section **128** shown in FIG. **10** and the size and weight of the ball **132** determine the center of gravity of the hook. This affects the orientation of the hook with respect to the rod. As shown in FIG. **12**, the position of the bottom of the ball **132** can be below a horizontal plane passing through the center line of the rod.

[0029] In various examples, the hook is deformed when the hook is placed on a rod, and the hook springs back into its original shape after it is on the rod. The tension applied to increase the opening when putting the hook on a rod is not great enough to splay the hook apart permanently. Thus, the hook returns to its original shape after it is placed on the rod, keeping the hook in place.

[0030] In various embodiments, the shower hooks of this invention can be made of materials that can be deformed to increase the opening when the hooks are placed in a rod, but returns to its original shape when the hook in on the rod. Such materials include plastic or metal.

[0031] Whereas particular embodiments of this invention have been described above for purposes of illustration, it will be evident to those skilled in the art that numerous variations of the details of the disclosed embodiments may be made without departing from the invention.

What is claimed is:

1. A shower curtain hook comprising:

a generally S-shaped member including a top portion configured to slideably engage a rod having a first diameter, and a bottom portion;

the top portion including a curved section and a straight section extending from one end of the curved section; and

a ball attached to an end of the straight section,

wherein a distance between the ball and the bottom portion is less than the first diameter.

2. The shower curtain hook of claim 1, wherein the ball attached to the straight section is below a horizontal plane passing through a center line of the rod when the hook is placed on the rod.

3. The shower curtain hook of claim 1, wherein a lowest point on the bottom portion and the ball attached to the straight section are on opposite sides of a vertical plane passing through a centerline of the rod when the hook is placed on the rod.

4. The shower curtain hook of claim 1, wherein the hook comprises a material capable of being deformed to increase the distance between the ball and the bottom portion, wherein the hook returns to its original shape after being placed on the rod.

5. A shower curtain hook comprising:

a generally S-shaped member including a top portion configured to slideably engage a rod having a first diameter, and a bottom portion;

the top portion including a curved section and a straight section extending from one end of the curved section; and

a ball attached to an end of the straight section,

wherein a distance between the ball and the bottom portion is substantially the same as the first diameter, and wherein a lowest point on the bottom portion and the ball attached to the straight section are on opposite sides of a vertical plane passing through a centerline of the rod when the hook is placed on the rod.

6. The shower curtain hook of claim 5, wherein the ball attached to the straight section is below a horizontal plane passing through a center line of the rod when the hook is placed on the rod.

7. A shower curtain hook comprising:

a member including a top portion configured to slideably engage a rod having a first diameter, and a bottom portion;

the top portion including a curved section and a straight section extending from one end of the curved section;

a first ball attached to an end of the bottom portion; and

a second ball attached to an end of the straight section,

wherein a distance between the second ball and the bottom portion is smaller than the first diameter.

8. The shower curtain hook of claim 7, wherein a bottom of the second is below a horizontal plane passing through a center line of the rod when the hook is placed on the rod.

9. The shower curtain hook of claim 7, wherein the hook comprises a material capable of being deformed to increase the distance between the second ball and the bottom portion, wherein the hook returns to its original shape after being placed on the rod.

* * * * *