

Laundry Pole Guider

Field of the Invention

This invention relates to a pole guide for a laundry pole holder. More particularly,
5 this invention relates to a pole guide to assist a user to insert a laundry pole into a laundry pole holder with ease.

Prior Art

Figure 1 shows a typical high-rise apartment 100. As shown in figure 1, each unit in
10 the high-rise apartment has at least one laundry pole holder 110 for holding laundry poles 120. Figure 2 shows a typical laundry pole holder 110. The laundry pole holder 110 includes a bracket 111 for mounting the laundry pole holder 110 to a side wall 150 of the high-rise apartment 100. The laundry pole holder 110 further comprises a tubular extension 112 extending from the bracket 111. The laundry pole 120 is inserted into the tubular
15 extension 112 through the entrance 113. Figure 3 shows a user attempting to insert the laundry pole 120 into the laundry pole holder 110 through entrance 113. As can be seen in figure 3, it is a challenge, especially to a short person, to hold on to one end of the laundry pole 120 and extending the laundry pole 120 out of the window 140 to insert the laundry pole 120 into the laundry pole holder 110. Furthermore, for user staying in a unit at a higher
20 floor, windy condition prevails and inserting the laundry pole into the laundry pole holder poses an even greater challenge. A further challenge is that the diameter of the laundry pole holder is just slightly larger than the diameter of the laundry pole. Thus, a user may have to bend forward and out of the window to have a look at the entrance of the laundry pole holder 110 in order to insert the laundry pole 120 into the laundry pole holder 110.
25 Even further, as wet laundries 310 are arranged on the laundry pole holder 110, the user needs to have strong arm power to hold the laundry pole while looking out of the window to insert the laundry pole 120 into the laundry pole holder 110.

Thus, those skilled in the art are constantly striving to derive a method or device to assists a user to insert the laundry pole into the laundry pole holder safely and with ease.

Summary of the Invention

5 The above and other problems are solved and an advance in the art is made by a pole guide in accordance with this invention. A first advantage of a pole guide in accordance with this invention is that the pole guide is simple in structure and can be easily manufactured. This inevitably leads to lower in cost to produce the pole guide. A second advantage of a pole guide in accordance with this invention is that the pole guide can be
10 used with existing laundry pole holder. Hence, redesign of laundry pole holder is not required. A third advantage of a pole guide in accordance with this invention is that the pole guide assists a user to insert the laundry pole into the laundry pole holder safely and with ease.

15 In accordance with embodiments of this invention, a pole guide for a laundry pole holder being mounted to a flat base is configured in the following manner. The pole guide includes a conical receptacle member and a tubular member. The conical receptacle has a wide open end defining an entrance and a narrow open end. The tubular member extends from the narrow open end of the conical receptacle member. The tubular member further
20 defines a passageway for a tubular extension of the laundry pole holder to be inserted therethrough. The conical receptacle member is arranged to guide a laundry pole into the laundry pole holder.

 In accordance with embodiments of this invention, the pole guide further includes an
25 adapter adapted to constrict movement of the pole guide in a face-up position in which the entrance is substantially perpendicular to the flat base, and a securing means for securing the adapter to the laundry pole holder. The adapter has a tubular body having a first open

end and a second open end. The first open end abuts a bracket of the laundry pole holder and the second open end has a certain contour adapted to form a mating joint with an open end of the tubular member for securing the pole guide between the face-up position and a face-down position in which the tubular member and the conical receptacle member are
5 rotated about the tubular extension at substantially 180 degrees from the face-up position. Preferably, the tubular body has the same diameter as the tubular member. In some embodiment of this embodiment, the tubular member is of certain mass such that the tubular member engages the adapter due to gravitational force.

10 In accordance with embodiments of this invention, the adapter includes a threaded through opening for the securing means to secure the adapter to the laundry pole holder. Preferably, the securing means is a screw having a ring adapted to assist rotating the screw.

In accordance with embodiments of this invention, the conical receptacle and the
15 tubular extension of the laundry pole holder share the same lowest tangential curvature.

In accordance with embodiments of this invention, a method of using the pole guide is provided.

20 **Brief Description of the Drawings**

The above and other features and advantages in accordance with this invention are described in the following detailed description and are shown in the following drawings:

Figure 1 illustrating a perspective of a high-rise apartment having laundry pole holders being arranged on the side wall of the high-rise apartment;

25 Figure 2 illustrating a perspective view of the laundry pole holder;

Figure 3 illustrating a side view of a person attempting to insert the laundry pole into the laundry pole holder;

Figure 4 illustrating a side view of a laundry pole being inserted into the laundry pole holder;

Figure 5 illustrating perspective view of a pole guide in accordance with an embodiment of this invention;

5 Figure 6 illustrating a side view of a pole guide in a face-up position in accordance with an embodiment of this invention;

Figure 7 illustrating a side view of a pole guide in a face-down position in accordance with an embodiment of this invention;

Figure 8 illustrating a cross section view of a pole guide in accordance with an
10 embodiment of this invention;

Figure 9 illustrating a side view of an adapter and a pole guide in a face-up position in accordance with an embodiment of this invention;

Figure 10 illustrating a side view of an adapter and a pole guide in a face-down position in accordance with an embodiment of this invention;

15 Figure 11 illustrating a side view of a laundry pole being inserted into the laundry pole holder with a pole guide in accordance with an embodiment of this invention; and

Figure 12 illustrating a side view of a pole guide after inserting the laundry pole into the laundry pole holder in accordance with an embodiment of this invention.

20 Detailed Description

This invention relates to a pole guide for a laundry pole holder. More particularly, this invention relates to a pole guide to assist a user to insert a laundry pole into a laundry pole holder with ease.

25 Figure 4 shows a cross section side view of a laundry pole holder 110 with a portion of laundry pole 120 being inserted into the laundry pole holder 110. As shown in figure 4, the internal diameter 410 of the tubular extension 112 of the laundry pole holder 110 is just

slightly larger than the diameter 420 of the laundry pole 120. Figure 5 shows a perspective view of a pole guide 500 in accordance with an embodiment of this invention. Pole guide 500 includes a conical receptacle member 510 and a tubular member 520. Conical receptacle member 510 is shaped of a cone with the narrow end angularly removed. In more particular, diameter of a wide open end 511 of the conical receptacle member 510 is larger than a narrow open end 512 of the conical receptacle member 510. The wide open end 511 of the conical receptacle defines the entrance of the pole guide 500. Tubular member 520 extends from the narrow open end 512 of the conical receptacle member 510 and defines a passageway for the tubular extension of the laundry pole holder. Tubular member 520 has an internal diameter larger than the external diameter of the tubular extension of the laundry pole holder. Conical receptacle member 510 and tubular member 520 are integral to each other. One skilled in the art will recognise that conical receptacle member 510 and tubular member 520 may also be separate pieces being connected together via some securing means or locking mechanism without departing from the invention.

To use pole guide 500, a user slides the tubular member 520 of the pole guide 500 over the tubular extension of the laundry pole holder until inlet 650 of the tubular member 520 abuts the bracket 111 of laundry pole holder 110. A pair of securing means 530 such as a screw is inserted through a pair of threaded through opening of the tubular member 520. This prevents the pole guide from any movements. One skilled in the art will recognise that one securing means may be sufficient to secure the pole guide 500 to the laundry pole holder 110 without departing from the invention.

Figure 6 shows a side view of the pole guide 500 when assisting a user to insert the pole into the laundry pole holder. As shown, when the pole guide 500 is connected to the laundry pole holder 110 and positioned in the face-up position in which the entrance of the

pole guide 500 is facing upwardly in the direction X. As shown in figures 2 and 3, the user standing behind the laundry pole holder can only see the tip of the entrance of the laundry pole holder, thus requiring him/her to guess the location of the entrance of the laundry pole holder before inserting the laundry pole into the laundry pole holder. Hence, having the entrance 511 of the pole guide 500 in the face-up position reduces the aiming requirement and eliminates guesswork that the current laundry pole holder expects from the user as the laundry pole holder entrance is now visible to user standing behind it. Furthermore, the conical receptacle enlarges the target to aim as the diameter of the conical receptacle is much larger than the diameter of the laundry pole holder, and thus reducing the aiming requirement.

Figure 7 shows a side view of the pole guide 500 after the laundry pole is inserted into the laundry pole holder. When not in used, the pole guide 500 can be turned or rotated about the tubular extension of laundry pole holder at substantially 180 degrees so that the entrance of the pole guide 500 is facing downwardly in the direction Y. This prevents collection of leaves, debris or water.

In the embodiment as shown in figures 6 and 7, only one securing means 610 is provided on the tubular member 520. Securing means 610 may include a ring 611 to aid the rotating of the securing means. When a user wishes to insert the laundry pole 120 into the laundry pole holder 110 as shown in figure 6, the pole guide 500 is position in the face-up position. Subsequently, securing means 610 is being driven towards the tubular extension of the laundry pole holder to secure the pole guide 500 to the laundry pole holder 110. By securing the pole guide 500 to the laundry pole holder 110 with the securing means 610, the pole guide 500 and the laundry pole holder share the same lowest tangential curvature as will be described below with reference to figure 8. This allows for a seamless transition as the user inserts the laundry pole 120 into the pole holder 110.

After the laundry pole is inserted into the laundry pole holder, the top securing means 610 is released so that the pole guide 500 can be rotated to the face-down position to prevent leaves or debris from being collected by the pole guide 500.

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Figure 8 shows a cross section of the pole guide 500. As shown, the securing means 610 is being tightened by driving towards the tubular extension of the laundry pole holder until the conical receptacle member 510, tubular member 520 and the laundry pole holder share the same lowest tangential curvature as illustrated by the dashed line 850. This allows for a seamless transition as the user inserts the laundry pole into the laundry pole holder.

When a user wishes to remove the laundry pole from the laundry pole holder, the conical receptacle member 510 provides support to the user. For example, during removal of the laundry pole 120 loaded with heavy laundry from the laundry pole holder, the users will experience an immediate downward force when the laundry pole exits the laundry pole holder. This force may cause the users to lose their grip on the laundry pole. Hence, the internal surface 860 of conical receptacle member 510 provides an intermediate interval or pause for users to be mentally prepared and to increase their grip before the complete removal of the laundry pole from the laundry pole holder.

The mass at the region 820 may be configured to be higher than the mass at other regions of the conical receptacle member 510 such that the pole guide will be caused to rotate and rest in the face-down position when the securing means 610 is loosened. The tubular member 520 is of certain mass so that inlet 650 abuts the bracket of the laundry pole holder 110 due to gravitational force.

Figure 9 shows a side view of pole guide 900. In this embodiment, the pole guide 900 comprises a conical receptacle member 910, a tubular member 920 and an adapter 930. Similar to the conical receptacle member 510 in figure 5, the conical receptacle member 910 is shaped of a cone with the narrow end angularly removed. In particular, diameter of a wide open end 911 of the conical receptacle member 910 is larger than a narrow open end 912 of the conical receptacle member 910. The wide open end 911 of the conical receptacle member 910 defines the entrance of the pole guide 900. Tubular member 920 extends from the narrow open end 912 of the conical receptacle member 910 and defines a passageway for the tubular extension of the laundry pole holder. Instead of the inlet 650 in pole guide 500, the tubular member 920 has an abutment surface 921. Conical receptacle member 910 and tubular member 920 are integral to each other. One skilled in the art will recognise that conical receptacle member 910 and tubular member 920 may also be separate pieces being connected together via some securing means or locking mechanism without departing from the invention.

The adapter 930 includes a tubular body 935 having the same diameter as the tubular member 920. The adapter 930 includes a first open end 931 configured to abut the laundry pole bracket and a second open end 932 having a certain contour. The adapter 930 further includes a threaded through opening at a sidewall for allowing a securing means 950 to be rotatably inserted therethrough for securing the adapter 930 to the laundry pole holder, preventing the adapter 930 from any movement. The second open end 932 of the adapter 930 cooperates with the abutment surface 921 of the tubular member 920 to secure the pole guide 900 in either the face-up position in which the entrance 911 of the pole guide 900 is facing upwardly in the direction X or face-down position in which the entrance 911 of the pole guide 900 is facing downwardly in the direction Y as shown in figure 10. In particular, the second open end 932 and abutment surface 921 are of certain contour to form a mating joint which is configured to secure the conical receptacle member 910 and tubular member

920 in either the face-up position or face-down position. Essentially, the use of the adapter 930 allows the pole guide to be easily rotated between the face-up position and the face-down position. Hence, the user only needs to secure the adapter to the laundry pole holder.

5 One skilled in the art will recognise that second open end 932 and abutment surface 921 can be any contours other than the one shown in figures 9 and 10 as long as the contours form a mating joint capable of allowing the conical receptacle member 910 and tubular member 920 to be easily secured between the face-up position and face-down position without departing from the invention.

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 To install the pole guide 900, the adapter 930 slides over the tubular extension of the laundry pole holder until first open end 931 abuts the bracket of laundry pole holder 110. The adapter 930 is adjusted such that the threaded opening is facing the user. The securing means 950 is then rotatably inserted to the threaded opening to secure the
15 adapter 930 to the laundry pole holder. The tubular member 920 and conical receptacle 910 slides over the tubular extension of the laundry pole holder until the abutment surface 921 of the tubular member 920 abuts the second open end 932 of the adapter 930 to form a mating joint.

20 Figure 11 shows a user attempting to insert the laundry pole 120 into the laundry pole holder through the use of pole guide 900 when in the face-up position. In the face-up position, the entrance 911 is substantially perpendicular to the side wall of the high-rise apartment. The conical receptacle enlarges the target to aim as the diameter of the entrance 911 is much larger than the diameter of the laundry pole holder. This reduces the
25 aiming requirement and eliminates guesswork that the current laundry pole holder expects from the user as the laundry pole holder entrance is now visible to user standing behind it.

Figure 12 shows the tubular member 920 and conical receptacle 910 being rotated about the tubular extension of laundry pole holder at substantially 180 degrees to the face-down position to prevent leaves or debris from being collected by the pole guide 900.

5 The above is a description of exemplary embodiments of a laundry pole guide in accordance with this invention. It is foreseeable that those skilled in the art can and will design alternative systems based on this disclosure that infringe upon this invention as set forth in the following claims.

Claims:

1. A pole guide for a laundry pole holder mounted to a substantially flat base, said pole guide comprising:

5 a conical receptacle member having a wide open end defining an entrance and a narrow angular open end; and

a tubular member extending from said narrow open end of said conical receptacle member, said tubular member defining a passageway for a tubular extension of said laundry pole holder to be inserted therethrough, wherein said conical receptacle member is
10 arranged to guide a laundry pole into said laundry pole holder and said pole guide being moveable between a face-up position in which the upper surface plane of said entrance is substantially perpendicular to said flat base and a face-down position in which said tubular member and said conical receptacle member are rotated about said tubular extension at substantially 180 degrees from said face-up position.

15 2. The pole guide according to claim 1 further comprising:

an adapter adapted to constrict movement of said pole guide in said face-up position;
and

a securing means for securing said adapter to said laundry pole holder.

20 3. The pole guide according to claim 2 wherein said adapter has a tubular body having a first open end and a second open end, said first open end abuts a bracket of said laundry pole holder and said second open end having a certain contour adapted to form a mating joint with an open end of said tubular member for securing said pole guide between said
25 face-up position and said face-down position.

4. The pole guide according to claim 3 wherein said tubular body has the same diameter as said tubular member.

5. The pole guide according to any one of claims 2-4 wherein said tubular member is of certain mass such that tubular member engages said adapter due to gravitational force.

6. The pole guide according to any one of claims 2-5 where said adapter includes a threaded through opening for said securing means to secure said adapter to said laundry pole holder.

7. The pole guide according to claim 6 wherein said securing means is a screw having a ring adapted to assist rotating said screw.

8. The pole guide according to claim 1 wherein said conical receptacle and said tubular extension of said laundry pole holder are tangentially in contact with each other.

9. The pole guide according to claim 1 further comprising a securing means for securing said tubular member to said tubular extension of said laundry pole holder at a required position.

10. The pole guide according to claim 9 wherein said tubular member has a threaded through opening adapted to cooperate with said securing means for securing said tubular member to said tubular extension of said laundry pole holder.

11. The pole guide according to claim 10 wherein said securing means is a screw having a ring adapted to assist rotating said screw.

12. The pole guide according to claim 1 wherein said tubular member is of certain mass such that tubular member abuts said bracket of said laundry pole holder due to gravitational force.

5 13. A method of installing a pole guide having an adapter, a conical receptacle, and a tubular member extending from a narrow open end of said conical receptacle member to a laundry pole holder mounted to a substantially flat base comprising:

sliding said adapter having a tubular body with a first open end and a second open end, over a tubular extension of said laundry pole holder until said first open end abuts a

10 bracket of said laundry pole holder;

securing said adapter to said laundry pole holder with a securing means;

sliding said tubular member over said tubular extension of said laundry pole holder until an abutment surface of said tubular member abuts said second open end of said adapter to form a mating joint.

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