

Clothes Hanging Device And Method Of Mounting Thereof

Field Of The Invention

[0001] The present invention relates to a clothes hanging device and a method of
5 mounting a clothes hanging device.

Background Of The Invention

[0002] A laundry cycle includes the washing, drying and ironing of various garments,
which include articles of clothing. The drying of clothes during the laundry cycle may
10 be automated using commercially available dryers or carried out manually by hanging
said clothes out to dry on a clothes rack, and subjecting them to the ambient
temperature, if possible.

[0003] It is a known practice to hang clothes onto clothes hanging rods, where the
15 clothes are suspended a distance above the ground by securing the hanging rods to an
elevated surface of sufficient height.

[0004] A known clothes hanging device is a hollow pipe attached to only one surface of
a wall. When the only one surface is an exterior of a high rise apartment and the hollow
20 pipe is accessible through a window above the hollow pipe, a user would have to
arrange clothes for drying and/or airing on a clothes hanger rod before attaching the
clothes hanging rod to the hollow pipe. In the context of a high rise apartment, it is
appreciated that it is dangerous as the user has to stretch his body and thus risk falling
out of the window, when attaching the clothes hanger rod to the hollow pipe. Such a
25 procedure poses even greater difficulties to a user who is invalid or wheelchair bound.
Further, the hollow pipe is prone to collecting rainwater, which does not evaporate
readily from within the hollow pipe, thereby posing a possible mosquito larvae breeding
ground in tropical areas and thus increasing the risk of spreading mosquito transmitted
diseases such as malaria or dengue fever.

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[0005] Accordingly, there is a need for a clothes hanging device that is safer to use in
conjunction with a clothes hanger rod. Further, there should be a reduction of the risk
of the clothes hanging device becoming a possible mosquito larvae breeding ground.

The clothes hanging device should at the same time be capable of being used externally or internally in a residence, compact and yet cost effective to manufacture.

Summary Of The Invention

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[0006] The above problems are solved by a clothes hanging device as defined in the respective independent claim.

[0007] According to an aspect of the invention, there is provided a clothes hanging
10 device removably mountable through a support structure, the clothes hanging device including a hollow pipe having a first end and an opposite end, wherein the first end protrudes, when mounted through the support structure, from a first surface of the support structure and the opposite end protrudes, when mounted through the support structure, from a second surface of the support structure, the second surface of the
15 support structure facing opposite to the first surface; and a first securing structure adapted to secure the hollow pipe to the support structure. Thus, in this aspect the invention is directed to a clothes hanging device or the parts thereof in unassembled form.

20 [0008] According to another aspect of the invention and in line with the first aspect of the invention, there is provided a method of mounting a clothes hanging device through a support structure, the clothes hanging device being removably mountable from the support structure, the method including: mounting a hollow pipe having a first end and an opposite end, wherein the first end protrudes, when mounted through the support
25 structure, from a first surface of the support structure and the opposite end protrudes, when mounted through the support structure, from a second surface of the support structure, the second surface of the support structure facing opposite to the first surface; wherein the hollow pipe is secured to the support structure via a first securing mechanism.

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Brief Description Of The Drawings

[0009] In order to aid in the further understanding of the present invention, the following exemplary embodiment, as illustrated in the accompanying drawings, is described in greater detail below, in which:

5 [0010] Figure 1A shows a side view of a clothes hanging device built in accordance with one embodiment of the invention.

[0011] Figure 1B shows a side view of a clothes hanging device built in accordance with one embodiment of the invention.

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[0012] Figure 2A shows a side view of a clothes hanger rod built in accordance with one embodiment of the invention.

[0013] Figure 2B shows a side view of a clothes hanger rod built in accordance with
15 one embodiment of the invention.

[0014] Figures 3A and 3B are photographs showing perspective views of a clothes hanging device built in accordance with an embodiment of the invention.

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Detailed Description

[0015] While embodiments of the invention have been particularly shown and described with reference to specific embodiments, it should be understood by those skilled in the art that various changes in form and detail may be made therein without departing from the spirit and scope of the invention as defined by the appended claims. The scope of
25 the invention is thus indicated by the appended claims and all changes which come within the meaning and range of equivalency of the claims are therefore intended to be embraced. It will be appreciated that common numerals, used in the relevant drawings, refer to components that serve a similar or the same purpose.

30 [0016] Figure 1A shows a side view of a clothes hanging device 100 built in accordance with an embodiment of the invention. The clothes hanging device 100 includes a hollow pipe 102 having a first end 102f and an opposite end 102o. A portion of the

exterior surface of the hollow pipe 102 from around a middle 102m to the opposite end 102o is threaded.

[0017] The clothes hanging device 100 further includes a first securing structure 104 and a second securing structure 106. In the embodiment shown in Figure 1A, the interior of the second securing structure 106 is threaded with respect to the threaded portion of the hollow pipe 102, so that the second securing structure 106 can be screwed onto the opposite end 102o of the hollow pipe 102. Further detail on the first securing structure 104 and the second securing structure 106 will be provided below.

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[0018] Figure 1B shows a side view of the clothes hanging device 100 mounted through a support structure 108. It will be appreciated that the clothes hanging device 100 is removably mountable from the support structure 108, where the support structure 108 has an opening extending through the thickness of the support structure 108, the opening having a dimension that is the same or larger than the diameter of the hollow pipe 102. The support structure 108 has a first surface 108f and a second surface 108s, where the second surface 108s of the support structure 108 faces opposite to the first surface 108f. The hollow pipe first end 102f protrudes, when mounted through the support structure 108, from the first surface 108f of the support structure 108. The opposite end 102o protrudes, when mounted through the support structure 108, from the second surface 108s of the support structure 108. The hollow pipe 102 is generally positioned in a perpendicular orientation with respect to either the first surface 108f or the second surface 108s of the support structure 108.

25 [0019] The first securing structure 104 is adapted to secure the hollow pipe 102 to the support structure 108.

[0020] In the illustrative embodiment shown in Figures 1A and 1B, the first securing structure 104 is a plate. The first securing structure 104 may also be any suitable structure such as, but not limited to, a flange joint plate, a mounting bracket or housing. The plate 104 is adapted to be disposed on the hollow pipe 102 between the first end 102f and a middle portion 102m of the hollow pipe 102. The plate 104 has dimensions larger than the support structure 108 opening. In this manner, the plate 104 is able to

engage the first surface 108f of the support structure 108, when the clothes hanging device 100 is mounted through the support structure 108. The plate 104 is secured to the first surface 108f of the support structure 108 through pins (not shown). It will be appreciated that other securing means such as screws and nails can also be used. The
5 plate 104 may be mig welded onto the hollow pipe 102. In another embodiment (not shown), the plate may not be welded onto the hollow pipe, but may be coupled, for example, as a separate structure, with the hollow pipe.

[0021] In another embodiment (not shown), the first securing structure is formed on the
10 hollow pipe exterior surface. The first securing structure may include any suitable structure such as, but not limited to, one or more of a group of structures consisting of corrugations, ridges, grooves and bumps. It will be appreciated that the group of structures consisting of corrugations, ridges, grooves and bumps increase the amount of friction between the hollow pipe exterior surface and the corresponding surface of the
15 support structure opening in contact with the group of structures, thereby securing the hollow pipe to the support structure. The corresponding surface of the support structure opening in contact with the group of structures may also be correspondingly structured to provide an interlocking fit with the group of structures, thereby providing a more secure mounting of the clothes hanging device to the support structure.

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[0022] In Figure 1B, the second securing structure 106 is screwed past the opposite end 102o of the hollow pipe 102 and towards the second surface 108s of the support structure 108. Screwing of the second securing structure 106 after it is in contact with the second surface 108s of the support structure 108 further secures the clothes hanging
25 device 100 against the support structure 108. In this manner, the second securing structure 106 is adapted to secure the hollow pipe 102 to the support structure 108, the second securing structure 106 being positioned, when the hollow pipe 102 is mounted, opposite to the location of the first securing structure 104 and relative to the hollow pipe 102.

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[0023] In the embodiment shown in Figures 1A and 1B, the second securing structure 106 is a flange joint plate. The second securing structure 106 may also be any suitable structure such as, but not limited to, a mounting plate, a mounting bracket or housing.

The flange joint plate 106 is adapted to be disposed on the hollow pipe 102 between the opposite end 102o and a middle portion 102m of the hollow pipe 102. The flange joint plate 106 has dimensions larger than the support structure 108 opening. In this manner, the flange joint plate 106 is able to engage the second surface 108s of the support structure 108, when the clothes hanging device 100 is mounted through the support structure 108. The flange joint plate 106 is secured to the second surface 108s of the support structure 108 by screwing the flange joint plate 106 onto the opposite end 102o of the hollow pipe 102. In another embodiment (not shown), the flange joint plate may be welded onto the hollow pipe.

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[0024] In the embodiment of Fig. 1, an (optional) drainage hole 112 extends through the hollow pipe 102 wall between an exterior surface of the hollow pipe 102 and a corresponding interior surface of the hollow pipe 102. The drainage hole 112 allows liquid, when present within the hollow pipe 102, to flow out of the hollow pipe through the drainage hole 112. The interior surface of the hollow pipe 102 may be machined such that the interior surface is inclined in a direction towards the drainage hole 112, to further facilitate liquid flow out of the hollow pipe 102 through the drainage hole 112. It will be appreciated that the drainage hole 112 seeks to prevent rain water from stagnating inside the hollow pipe 102, thereby reducing the risk of the hollow pipe 102 becoming a possible mosquito larvae breeding ground.

[0025] The clothes hanging device 100, as illustrated in Fig. 1, may further include a cap 116 adapted to cover either the first end 102f of the hollow pipe 102 or the opposite end 102o of the hollow pipe 102, the cap 116 further comprising a securing element 114 being able to engage the support structure 108. In the embodiment shown in Figure 1B, the securing element 114 is a chain secured at one end to the cap 116 and secured at the other end to a pin. The pin is in turn fastened to the support structure 108, so that the cap 116 remains attached to the support structure 108 when the cap 116 is not secured to the opposite end 102o of the hollow pipe 102. The interior of the cap 116 may also be threaded so that the cap 116 can be screwed unto the threaded portion of the opposite end 102o of the hollow pipe 102.

[0026] With reference to Figures 2A and 2B, the clothes hanging device 100 further includes a clothes hanger rod 202 or an adjustable clothes hanger rod 222, either of which is removably connected to the hollow pipe 102.

5 [0027] Further detail on how the clothes hanger rod 202/222 is used, in conjunction with the hollow pipe 102, to hang clothes for drying and/or airing follows. From the following description and with reference to Figures 3A and 3B, it will also be appreciated how the clothes hanger rod 202/222 may be removably connected to the hollow pipe 102.

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[0028] Clothes for drying and/or airing may first be slid through, in a sequential manner, along the protruding portion of the first end 102f of the hollow pipe 102. A first end 202f/222f of the clothes hanger rod 202/222 is then introduced through the hollow pipe 102 via the opposite end 102o of the hollow pipe 102. As the clothes
15 hanger rod 202/222 is slid along the hollow pipe 102, each piece of the clothes will then be secured (by for example, cloth pegs) to the clothes hanger rod 202/222 that exits from the first end 102f of the hollow pipe 102. The clothes can then be spaced along the portion of the clothes hanger rod 202/222 that extends from the first end 102f of the hollow pipe 102, to the extent where a second end 202s/222s of the clothes hanger rod
20 202/222 reaches the opposite end 102o of the clothes hanger rod 202/222. To retrieve the clothes hanging from the clothes hanger rod 202/222, the clothes hanger rod 202/222 is removed from the hollow pipe 102 by pulling the second end 202s/222s of the clothes hanger rod 202/222 from the opposite end 102o of the hollow pipe 102. The clothes can then be removed from the first end 102f of the hollow pipe 102. The clothes
25 hanger rod 202/222 will be completely removed from the hollow pipe 102 when the first end 202f/222f exits the opposite end 102o of the hollow pipe 102.

[0029] Consider a known clothes hanging device, which is a hollow pipe attached to only one surface of a wall (i.e. the hollow pipe does not extend through the wall), where
30 the only one surface is an exterior of a high rise apartment and the hollow pipe is accessible through a window above the hollow pipe. A user has to arrange clothes for drying and/or airing on a clothes hanger rod before attaching the clothes hanging rod to the hollow pipe. In the context of a high rise apartment, it is dangerous as the user has

to stretch his body, thereby risking falling out of the window, when attaching the clothes hanger rod to the hollow pipe. Such a procedure poses even greater difficulties to a user who is invalid or wheelchair bound. Thus, it will be appreciated that the clothes hanging device 100 built in accordance with an embodiment of the invention allows
5 users to more safely hang clothes to dry and/or air while remaining on the side that is facing the second surface 108s of the support structure 108. When the clothes hanging device 100 is used in a high rise apartment, the second surface 108s of the support structure 108 would face the interior of the apartment, while the first surface 108f would face the exterior of the high rise apartment.

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[0030] Figure 2B shows a side view of the clothes hanger rod 222 built in accordance with an embodiment of the invention. In comparison with the clothes hanger rod 202 of Figure 2A, the clothes hanger rod 222 of Figure 2B has an adjustable length. The clothes hanger rod 222 includes a plurality of segments 224, where each of the plurality
15 of segments 224 is in a telescopic arrangement with another adjacent one of the plurality of segments 224. A first of the plurality of segments 224 is extendible or retractable from an adjacent second of the plurality of segments 224, wherein the second of the plurality of segments 224 has a diameter that is larger than the first of the plurality of segments 224. This allows for the longitudinal extension or retraction of the clothes
20 hanger rod 222. Accordingly, in order for the telescopic mechanism to be implemented, the second of the plurality of segments 224 is hollow to accommodate therein the first of the plurality of segments 224.

[0031] The clothes hanger rod 222 further includes a rigid wire 226 disposed within the
25 clothes hanger rod 222 interior. The rigid wire 226 includes a plurality of segments, where each of the plurality of segments is in a telescopic arrangement with another adjacent one of the plurality of segments. Each segment of the rigid wire 226 is mechanically coupled with a respective adjacent one of the plurality of segments 224 of the clothes hanger rod 222. The mechanical coupling allows each segment of the rigid
30 wire 226 to respectively follow the extension or retraction of a corresponding one of the plurality of segments 224 of the clothes hanger rod 222. It will be appreciated that such a rigid wire 226 can also be disposed within the clothes hanger rod 202 interior.

[0032] The rigid wire 226 provides an additional safety feature, especially for the clothes hanger rod 222, should there be a breakage along the length of the clothes hanger rod 202/222. Should such a breakage occur, the rigid wire 226 ensures that the severed portion of the clothes hanger rod 222 remains coupled to the remaining intact
5 portion of the clothes hanger rod 222.

[0033] In another embodiment, a flexible element 226 may be used instead to achieve the additional safety feature. In this other embodiment, the clothes hanger rod further comprises a flexible element 226 disposed within the clothes hanger rod 222 interior,
10 wherein the flexible element 226 is coupled to each of the plurality of segments. The flexible element 226 may be selected from the group consisting of, but not limited to, nylon, rope and string.

[0034] With reference to Figures 1B, 2A and 2B, the clothes hanger rod 202/222 further
15 includes a mounting sleeve 206 disposed at one end (for example, the second end 202s/222s) of the clothes hanger rod 202/222. The clothes hanging rod 202/222 is removably connected to the hollow pipe 102 via the mounting sleeve 206.

[0035] The clothes hanging device 100 further includes a securing arrangement adapted
20 to secure the mounting sleeve 206 to the hollow pipe 102.

[0036] In the embodiment shown in Figures 1B, 2A and 2B, the securing arrangement spans across the structures of the mounting sleeve 206, the hollow pipe 102 and a locking pin 130. Specifically, the securing arrangement is achieved by first having a
25 first hole 206a extend through the mounting sleeve 206 wall between an exterior surface of the mounting sleeve 206 and a corresponding interior surface of the mounting sleeve 206. Secondly, a second hole 132 extends through the hollow pipe 102 wall between an exterior surface of the hollow pipe 102 and a corresponding interior surface of the hollow pipe 102. Subsequently, a locking pin 130 engages both the first hole 206a and
30 the second hole 132 to complete the securing arrangement. In the embodiment shown in Figure 1B, the second hole 132 extends through the portion of the hollow pipe 102 wall that is adjacent to the opposite end 102o.

[0037] In the embodiment shown in Figures 2A and 2B, the mounting sleeve 206 is a metal ring, the metal ring being of a length sufficient to engage the opposite end 102o (Figure 1B) of the hollow pipe 102 (Figure 1B). Further, the interior of the mounting sleeve 206 may also be threaded so that the mounting sleeve 206 can be screwed unto
5 the threaded portion of the opposite end 102o (Figure 1B) of the hollow pipe 102 (Figure 1B).

[0038] In accordance with an embodiment of the invention, a method of mounting a clothes hanging device through a support structure, the clothes hanging device being
10 removably mountable from the support structure, may involve the following. A first end of a hollow pipe protrudes, when mounted through a support structure, from a first surface of the support structure. An opposite end of the hollow pipe protrudes, when mounted through the support structure, from a second surface of the support structure. The second surface of the support structure faces opposite to the first surface. The
15 hollow pipe is secured to the support structure via a first securing mechanism.

[0039] Turning to Figure 1B, purely exemplary dimensions for the clothes hanging device 100 is as follows (it is noted in this context that is clear for the person skilled in the art that all of the dimensions given in the following and shown in the Figures can
20 vary depending on the location where the clothes hanging device is mounted and the desired load, for example, and can be adjusted easily). The hollow pipe 102 may have a length of around 385mm, where the tip of the first end 102f may protrude around 170mm from the first surface 108f of the support structure 108. The tip of the opposite end 102o may protrude around 90mm from the second surface 108s of the support
25 structure 108. The remaining around 125mm of the hollow pipe 102 is housed within the support structure 108. The hollow pipe 102 may have an internal diameter of around 32mm and an external diameter of around 40mm, giving the hollow pipe 102 a thickness of around 8mm. The threaded portion on the hollow pipe 102 may extend around 100mm from the tip of the opposite end 102o towards the first end 102f. The
30 drainage hole 112 may have a diameter of around 13mm. The second hole 132, extending through the hollow pipe 102 wall at the opposite end 102o, may have a diameter of around 8mm and accommodates the locking pin, which has a pin portion of diameter around 6mm. Both the plate 104 and the flange joint plate 106 may be square

shaped, where each side may be around 125mm long, where the thickness may be around 3mm. The cap 116 may have an exterior diameter of around 50mm or more.

[0040] Turning to Figure 2A, purely exemplary dimensions for the clothes hanging rod 5 202 is as follows. The length of the clothes hanging portion of the clothes hanging rod 202 may be around 2800mm. The diameter of the clothes hanging portion of the clothes hanging rod 202 may be around 28mm, but would be less than the internal diameter of around 32mm of the hollow pipe (Figure 1B). The mounting sleeve 206 may have a length of around 60mm to 80mm and may have an external diameter of around 40mm or 10 more. The first hole 206a may have a diameter of around 8mm, which is similar to the diameter of the second hole 132 (Figure 1B) extending through the hollow pipe 102 wall at the opposite end 102o.

[0041] Turning to Figure 2B, purely exemplary dimensions for the clothes hanging rod 15 222 is as follows. The length of the first of the plurality of segments 224 (i.e. the clothes hanging rod segment 224 immediately adjacent to the mounting sleeve 206) may be around 1600mm, while the length of the second of the plurality of segments 224 (i.e. the next adjacent clothes hanging rod segment 224) may be around 1200mm. The external diameter of the first of the plurality of segments 224 may be around 28mm, 20 while the external diameter of the second of the plurality of segments 224 may be less than 28mm (to facilitate the telescopic arrangement) and may be around at least 20mm. It will be appreciated that the external diameter of the first of the plurality of segments 224 would be less than the internal diameter of around 32mm of the hollow pipe (Figure 1B). The mounting sleeve 206 may have a length of around 60mm to 80mm and may 25 have an external diameter of around 40mm or more. The first hole 206a may have a diameter of around 8mm, which is similar to the diameter of the second hole 132 (Figure 1B) extending through the hollow pipe 102 wall at the opposite end 102o.

[0042] In Figures 1A, 1B, 2A and 2B, the hollow pipe 102, the first securing structure 30 104, the securing structure 106, the cap 116, the locking pin 130, the securing element 114, the clothes hanging rod 202/222 and the mounting sleeve 206 may be fabricated from metal. The metal may be selected from the group consisting of, but not limited to, aluminum, stainless steel, magnesium and alloys thereof. The support structure 108

may be any load bearing structure such as a pillar, a wall, a ledge, a window sill or a door, for example.

[0043] Figures 3A and 3B are photographs showing perspective views of a clothes hanging device 300 built in accordance with an embodiment of the invention.

[0044] In Figure 3A, a first end of a clothes hanger rod 302 has just exited from a first end of a hollow pipe 302 of the clothes hanging device 320. A piece of clothes 304 has been introduced onto the first end of the clothes hanger rod 320.

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[0045] Figure 3B shows a photograph of the clothes hanging device 300 as the clothes hanger rod 302 is slid further past the first end of the hollow pipe 302. Each further piece of clothes 304 is secured by a cloth peg onto the clothes hanger rod 320. It will be appreciated that the clothes hanging procedure is reversed to retrieve the clothes 304 hanging from the clothes hanger rod 320. The clothes hanger rod 302 is slid back towards the first end of the hollow pipe 302, and the cloth peg is removed from the clothes hanger rod 320. After the clothes hanger rod 302 has exited from an opposite end of the hollow pipe 302, each piece of clothes 304 can then be removed from the first end of the hollow pipe 302.

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[0046] While embodiments of the invention have been particularly shown and described with reference to specific embodiments, it should be understood by those skilled in the art that various changes in form and detail may be made therein without departing from the spirit and scope of the invention as defined by the appended claims. The scope of the invention is thus indicated by the appended claims and all changes which come within the meaning and range of equivalency of the claims are therefore intended to be embraced.

CLAIMS

1. A clothes hanging device removably mountable through a support structure, the clothes hanging device comprising:
 - 5 a hollow pipe having a first end and an opposite end, wherein the first end protrudes, when mounted through the support structure, from a first surface of the support structure and the opposite end protrudes, when mounted through the support structure, from a second surface of the support structure, the second surface of the support structure facing opposite to the first surface; and
 - 10 a first securing structure adapted to secure the hollow pipe to the support structure.
2. The clothes hanging device of claim 1, wherein the first securing structure comprises a plate, the plate adapted to be disposed on the hollow pipe between the first
15 end and a middle portion of the hollow pipe, so that the bracket is able to engage the first surface of the support structure.
3. The clothes hanging device of claim 2, wherein the plate is mig welded onto the
20 hollow pipe.
4. The clothes hanging device of claim 2, wherein the plate is coupled with the hollow pipe.
5. The clothes hanging device of claim 1, wherein the first securing structure is
25 formed on the hollow pipe exterior surface.
6. The clothes hanging device of claim 5, wherein the first securing structure comprises any one or more of a group of structures consisting of corrugations, ridges, grooves and bumps.
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7. The clothes hanging device of any one of the preceding claims, further comprising a second securing structure adapted to secure the hollow pipe to the support

structure, the second securing structure positioned, when the hollow pipe is mounted, opposite to the location of the first securing structure and relative to the hollow pipe.

8. The clothes hanging device of claim 7, wherein the second securing structure
5 comprises a flange joint plate, the flange joint plate adapted to be disposed on the hollow pipe between the opposite end and a middle portion of the hollow pipe, so that the bracket is able to engage the second surface of the support structure.

9. The clothes hanging device of claim 8, wherein the flange joint plate is mig
10 welded onto the hollow pipe.

10. The clothes hanging device of claim 8, wherein the flange joint plate is coupled with the hollow pipe.

11. The clothes hanging device of any one of the preceding claims, further
15 comprising a drainage hole extending through the hollow pipe wall between an exterior surface of the hollow pipe and a corresponding interior surface of the hollow pipe.

12. The clothes hanging device of any one of the preceding claims, further
20 comprising a cap adapted to cover either the first end of the hollow pipe or the opposite end of the hollow pipe, the cap further comprising a securing element being able to engage the support structure.

13. The clothes hanging device of any one of the preceding claims, further
25 comprising a clothes hanger rod removably connected to the hollow pipe.

14. The clothes hanging device of claim 11, wherein the clothes hanger rod
comprises a plurality of segments, where each of the plurality of segments is in a telescopic arrangement with another adjacent one of the plurality of segments.

15. The clothes hanging device of claims 13 or 14, wherein the clothes hanger rod
30 further comprises a rigid wire disposed within the clothes hanger rod interior, the rigid

wire comprises a plurality of segments, where each of the plurality of segments is in a telescopic arrangement with another adjacent one of the plurality of segments.

16. The clothes hanging device of claims 13 or 14, wherein the clothes hanger rod
5 further comprises a flexible element disposed within the clothes hanger rod interior, the flexible element coupled to each of the plurality of segments.

17. The clothes hanging device of claims 13 to 16, wherein the clothes hanger rod
further comprises a mounting sleeve disposed at one end of the clothes hanger rod,
10 wherein the clothes hanging rod is removably connected to the hollow pipe via the mounting sleeve.

18. The clothes hanging device of claim 17, further comprising a securing
arrangement adapted to secure the mounting sleeve to the hollow pipe.

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19. The clothes hanging device of claim 18, wherein the securing arrangement
comprises:

a first hole extending through the mounting sleeve wall between an exterior
surface of the mounting sleeve and a corresponding interior surface of the mounting
20 sleeve;

a second hole extending through the hollow pipe wall between an exterior
surface of the hollow pipe and a corresponding interior surface of the hollow pipe; and

a locking pin that engages both the first hole and the second hole.

20. The clothes hanging device of claims 17 to 19, wherein the mounting sleeve is a
25 metal ring.

21. A method of mounting a clothes hanging device through a support structure, the
clothes hanging device being removably mountable from the support structure, the
30 method comprising:

mounting a hollow pipe having a first end and an opposite end, wherein the first
end protrudes, when mounted through the support structure, from a first surface of the
support structure and the opposite end protrudes, when mounted through the support

structure, from a second surface of the support structure, the second surface of the support structure facing opposite to the first surface; wherein the hollow pipe is secured to the support structure via a first securing mechanism.