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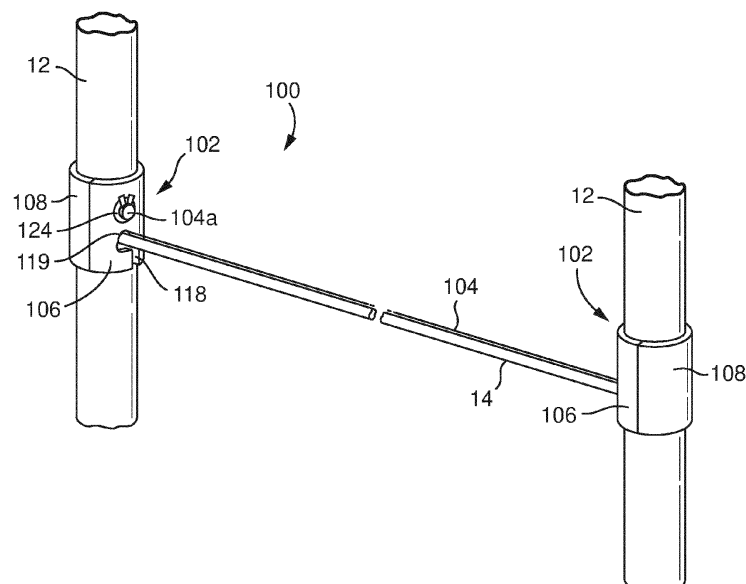
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(54) **A LAUNDRY SECURING DEVICE**

(57) A laundry securing device (100) for a drying rack, the device comprising two clips (102), each clip being coupled at a respective end of a cord (104), each clip being configured to be mounted on an upright portion (12) of a drying rack, and at least one of said clips (102) comprising means for selectively enabling said cord (104) to be tensioned between said clips (102) such that,

in use with said clips (102) mounted on opposing respective upright portions (12) of a drying rack and a hanging rung (14) extending between said upright portions (12), said cord (104) can be secured under tension between said clips (102) so as to extend along and adjacent said hanging rung (14).

Fig. 1



Description

[0001] The present invention relates to a laundry securing device for use with a drying rack.

Background to the invention

[0002] The use of drying racks in order to hang up wet laundry is common in day-today use. Laundry includes articles of clothing, garments, bedding, towels, and other household textiles. Drying racks include indoor and outdoor drying racks. Free-standing drying racks typically have a plurality of articulated frame members joined to make a frame which can be folded down when not in use. In use, the frame can be opened up to enable the user access to a plurality of hanging rungs which extend between upright portions of frame members on which (usually wet) laundry can be placed or hung. Hanging rungs may be rigid or flexible.

[0003] Pegs are commonly used to secure laundry to hanging rungs. However, pegs can be time-consuming to use, each garment requiring at least one or more pegs. Pegs comprising two grip members pivotally joined by a spring present their own issues. Where the clip parts are plastic the bias in the spring can cause the plastic parts to snap rendering the peg inoperative. Wooden pegs are prone to disintegration over time due to weathering and can impart splinters or small fibres to textiles, damaging the fabric. Furthermore, such pegs exert unnecessary force on textiles and can cause indentations or marking. Pegs comprising a single part with a slit can only be used with a single width of hanging rung, if the rung is too narrow, the peg does not exert enough force to secure the textile. If the rung is too wide, the peg is not usable at all. Therefore there is a desire to improve on how to secure textiles on a drying rack.

[0004] DE29902669 discloses a clothes line to which laundry items can be fixed without further aids, characterized in that at least one non-elastic cord or a non-elastic cord is connected to at least one elastic cord (tensioning cable) in such a way that there is pressure between the two strands or then arises when items of laundry are trapped. The non-elastic cord and the elastic cord are fixed on opposite sides. The elastic cord is wound spirally around the non-elastic cord.

[0005] Aspects of the present invention aim to address at least some of the above-described issues. In accordance with a first aspect of the present invention there is provided a laundry securing device comprising a laundry securing device for a drying rack, the device comprising two clips, each clip being coupled at a respective end of a cord, each clip being configured to be mounted on an upright portion of a drying rack, and at least one of said clips comprising means for selectively enabling said cord to be tensioned between said clips such that, in use with said clips mounted on opposing respective upright portions of a drying rack and a hanging rung extending between said upright portions, said cord can be secured

under tension between said clips so as to extend along and adjacent said hanging rung.

[0006] In an exemplary embodiment of the invention, each clip may have a channel extending therethrough such that, in use, an upright portion of a drying rack can extend through said channel thereby mounting said clip thereon.

[0007] Optionally, each clip may comprise a first part and a second part, each part defining a respective portion of said channel, wherein the first and second parts may be at least partially separated to enable the clip to be mounted on an upright portion of a drying rack. Optionally, at least one of the clip parts may comprise a slot in its outer wall configured to receive a portion of the cord.

[0008] In one exemplary embodiment of the invention, the slot may comprise a first longitudinal section that extends from an edge of the clip part in a first longitudinal direction, along a portion of the length of the clip part. Optionally, the slot may further comprise a stepped section which continues from the first longitudinal section, the stepped section comprising a laterally extending slot section.

[0009] In an exemplary embodiment, the slot may further comprise a narrow slot portion which continues from the stepped section, the narrow slot portion comprising a longitudinally extending slot section. Optionally, the narrow slot portion may have a diameter less than the diameter of the first longitudinal section and the stepped section.

[0010] In an exemplary embodiment of the invention, at least one of said clips may comprise a cord securing means for adjustably securing the cord under tension. The cord securing means may comprise a circular aperture having a concentric inner ledge, the aperture being of a diameter equal to or greater than the diameter of the cord such that, in use, an end of the cord may be inserted through the aperture tied in a knot so the knot abuts the concentric inner ledge. The cord securing means may optionally be longitudinally aligned with said slot.

[0011] In an exemplary embodiment, the first part may comprise a flange on at least one edge thereof, the flange may comprise at least one tooth extending therefrom, and wherein the second part may comprise a corresponding flange which may have at least one aperture therethrough. The at least one tooth and the at least one aperture may be shaped and configured to releasably engage for removably attaching the first and second parts.

[0012] In one embodiment, the cord may be elasticated.

[0013] In accordance with a second aspect of the invention, there is provided a clip for use in the laundry securing device of a first aspect of the invention, comprising a channel for receiving an upright portion of a drying rack in use, and a means for adjustably securing a cord, in use.

[0014] In an exemplary embodiment of the invention, the clip may comprise a first and second parts each part

defining a respective portion of said channel, optionally wherein the first and second parts may be at least partially separated to enable the clip to be mounted on an upright portion of a drying rack. At least one of the clip parts may optionally comprise a slot in its outer wall configured to receive a portion of a cord, in use.

[0015] In an exemplary embodiment of the invention, the slot may comprise a first longitudinal section that extends from an edge of the clip part in a first longitudinal direction, along a portion of the length of the clip part, a stepped section which continues from the first longitudinal section, the stepped section may comprise a laterally extending slot section, and a narrow slot portion which may continue from the stepped section, the narrow slot portion may comprise a longitudinally extending slot section. The narrow slot portion may optionally have a diameter less than the diameter of the first longitudinal section and the stepped section.

[0016] Optionally, the cord securing means may comprise a circular aperture having a concentric inner ledge, the aperture may be of a diameter equal to or greater than the diameter of the cord such that, in use, an end of the cord may be inserted through the aperture tied in a knot so the knot abuts the concentric inner ledge. The cord securing means may be longitudinally aligned with the slot.

[0017] In an exemplary embodiment, the first part may comprise a flange on at least one edge thereof, the flange comprising at least one tooth extending therefrom, and wherein the second part may comprise a corresponding flange having at least one aperture therethrough, the at least one tooth and the at least one aperture may be shaped and configured to releasably engage for removably attaching the first and second parts.

[0018] In accordance with a third aspect of the present invention, there is provided a kit of parts for securing laundry to a drying rack, comprising two clips according to a second aspect of the invention, and an elasticated cord.

[0019] Embodiments of the invention will now be described by reference to specific examples as illustrated in the accompanying drawings, in which:

Figure 1 is a schematic diagram of a laundry securing device according to an exemplary embodiment of the invention;

Figure 2 is a perspective diagram of a clip used in the laundry securing device of Figure 1;

Figure 3 is a front view of a first part of the clip of Figure 2;

Figure 4 is an end-on view of the first part of the clip of Figure 2;

Figure 5 is a front view of a second part of the clip of Figure 2;

Figure 6 is an end-on view of the second part of the clip of Figure 2; and

Figure 7 is a schematic drawing of a drying rack showing a plurality of laundry securing devices according to the invention, in use.

[0020] Referring to Figure 1 of the drawings, a laundry securing device 100 according to a first embodiment of the invention is illustrated. The securing device 100 includes a cord having a clip 102 secured at each end. Each clip 102 is configured to be attached to opposing upright portions of the frame members 12 of a drying rack 11 (illustrated in Figure 11), at or near to a hanging rung 14 of the drying rack 11, and the cord 104 is configured to run adjacent to a hanging rung 14, in use. The cord 104 may run substantially flush against the hanging rung 14 or may run adjacent to the surface of the hanging rung having a gap therebetween. A discontinuation is illustrated in Figure 1 to illustrate that the length of the cord 104 is not essential to the invention, other than to be substantially of a length similar to the hanging rung 14, but it will be clear to those skilled in the art that the cord 104 is continuous from a first clip 102 to a second clip 102.

[0021] The cord 104 is flexible and elasticated. It may be constructed from an elastic core comprising a single length of elastic material (rubber, spandex, etc.) which is wound by at least one protective layer of single or woven thread, e.g. cotton or synthetic thread. The thread, which wraps radially around the core, protects the core from becoming damaged and helps to limit the elasticity of the cord 104 so that the core is not stretched beyond its elastic capability, thus causing rupture or breakage. This also advantageously increases the usable life-time of the cord 104. Additionally, the outer protective layer helps to protect delicate textiles, for example silk, from catching on the frictional surface of the elastic core, thus protecting any textiles on which the securing device may be used. Suitable cords will be known in the art.

[0022] The cord has a diameter of approximately 1mm to 5mm. Preferably, the diameter of the cord is 2mm. The cord 104 has a circular cross-section, however the invention is not necessarily intended to be limited in this regard.

[0023] Each clip 102 is identical therefore to provide a clear description of the embodiment only a single clip 102 will now be described.

[0024] Referring additionally to Figure 2 of the drawings, the clip 102 comprises two removably connecting parts, a first part 106 and a second part 108. Both the first and second parts 106, 108 include a semi-cylindrical channel 109 constructing the inner surface. The first part 106 is configured to be connected to the second part 108 at corresponding edges of the semi-cylindrical channels 109. When the first part 106 and the second part 108 are connected the channels 109 combine to form an openended cylindrical channel for receiving the upright portion of a frame member 12 of a drying rack 11, in use.

In an alternative embodiment, the inner surfaces of each part may comprise a polygonal profile to accommodate an upright portion of a drying rack which does not have a cylindrical frame member. For example the channel might have a square cross-section, or other polygonal cross-section, and the invention is not intended to be limited in this regard.

[0025] Referring additionally to Figure 3 and 4 of the drawings, each edge of the semi-cylindrical channel 109 of the first part 106 comprises a flange 111 having a plurality of teeth 110 protruding therefrom. The teeth 110 extend in the same direction, substantially orthogonally to the flange 111. Each tooth 110 terminates in a substantially triangular-shaped head, having a narrower terminus and a flared base. Each tooth 110 is constructed from a material having some elasticity tolerance to allow the tooth 110 to bend slightly and return to its original position without being damaged, in use. For example, the teeth 110 may be constructed from plastic.

[0026] Referring specifically to Figure 3 of the drawings, the first part 106 further includes a stepped slot 118. The stepped slot 118 is configured to receive a hanging rung 14 of a drying rack and the cord 104 of the securing device 100 in use. The stepped slot 118 extends from an end of the first part 106 at a point near to the apex of the semi-cylindrical channel 109. The slot 118 comprises three parts, the first part of the slot 118 extends in a first direction, and the second part of the slot 118 extends in a second direction substantially perpendicular to the first direction. The third part of the slot 118, has a smaller diameter than the first and second parts of the slot 118 and continues in the first direction, defining a narrowed slot portion 119.

[0027] In Figure 3, the first direction is illustrated to be substantially parallel to the longitudinal axis of the first part 106, and the second direction is illustrated to be substantially perpendicular to the longitudinal axis of the first part 106, however the present invention is not necessarily intended to be limited to this. The stepped slot 118 defines two corners 120, 122, and is configured to prevent the clip 102 from slipping off a hanging rung 14 of a drying rack during use.

[0028] The narrow slot portion 119 is configured to receive the cord 104 when the securing device is assembled. The narrow slot portion 119 is of a diameter to prevent the hanging rung 14 from entering the narrowed slot portion 119. Thus, in use, the cord 104 is kept adjacent a hanging rung 14 of a drying rack when the clips 102 are secured to opposing upright portions of frame members of the drying rack.

[0029] The first part 106 further includes a circular aperture 124 having a concentric inner ledge 126 is configured to receive an end of the cord 104. The circular aperture 124 is aligned longitudinally with the stepped slot 118, but near the opposing end of the first part 106 of the clip 102. An end of the cord 104 is threaded through the circular aperture 124 and a knot is tied in the end of the cord 104 which abuts the ledge 126 and prevents the

end of the cord from going through the aperture 124 thus securing the cord within the clip 102. The cord 104 runs along the inner surface of the first part 106 longitudinally and exits the clip through the narrow slot portion 119.

5 The cord 104 is similarly secured at its opposing end to a second clip 102. The knot may be tied at any point along the cord 104 to change the length of the cord, and therefore the distance between the clips 102, enabling the laundry securing device 100 to be fully adjustable. 10 Alternatively, the cord may be secured at one end by being fused or otherwise fixed to one of the two clips 102, and secured at the other end by the knot means described above. The securing device 100 is still fully adjustable but now the cord 104 can be fixed at one end.

15 **[0030]** Referring additionally to Figure 5 and 6 of the drawings, each edge of the concave inner surface 109 of the second part 108 comprises a corresponding flange 114. The flange has a plurality of apertures 116 therethrough. Each aperture 116 is shaped and configured to receive the head of each tooth 110 when the first part 106 and second part 108 are connected.

[0031] In use, the user may push together the two parts 106, 108 until the narrow terminus of each tooth 110 meets an inner edge of the aperture 116. As pressure 25 continues to be applied the sloped edge of the triangular-shaped tooth forces the tooth 110 to bend slightly, until the flared base of the tooth 110 is pushed through the aperture, whereupon tooth 110 returns to its original position. The flared base of the tooth is now abutting the surface of the flange 114 which faces away from the flange 111. From here the clip 102 is secured in a closed configuration. To open, the user may simply push against 30 each tooth 110 simultaneously in a direction so that the flared base is no longer abutting the surface of the flange 114. The user may then push or pull the tooth 110 back through the aperture 116 to release the first part 106 and second part 108 from each other.

[0032] In an alternative embodiment, the first and second parts 106, 108 may be hingedly attached along an 35 edge, and the teeth 110 and apertures 116 are long along the opposing edge.

[0033] Referring to Figure 7, a drying rack 10 is illustrated including an articulated free-standing drying rack 11 and a plurality of laundry securing devices 100. The 40 drying rack 11 includes six frame members 12 being pivotally linked together by pivot points 13. Hanging rungs 14 extend between upright portions of each frame member 12. In Figure 7, five laundry securing devices 100 are illustrated though it will be apparent to those skilled in the art that any number of securing devices 100 may be 45 used.

[0034] In use, the user secures each clip 102 on an upright portion of a frame member 12 at a point where a hanging rung 14 joins the frame member 12 as described 50 above. A hanging rung 14 is received in the slot 118 and the cord 104 runs adjacent the hanging rung 14. The user may then lift the cord 104 which stretches to allow insertion of a portion of a laundry item to be received in the

space between the cord 104 and the hanging rung 14. The user releases the cord 104 which returns to its original position, clamping the laundry item in position. Alternatively, the user may place laundry items over the hanging rungs 14 first, then secure the clips 102 to the frame member 12 at a point where the hanging rung 14 joins the frame member 12. The hanging rung 14 is received within the slots 118 of the clips 102 at either end of the rung, and the cord 104 is adjacent the upper surface of the hanging rung 14. The laundry items are clamped therebetween.

[0035] The tautness of the cord 104 can be adjusted by changing the length of cord 104 between the two clips 102 as described above.

[0036] Therefore, the present invention provides a fully adjustable and efficient means for securing textiles to a drying rack by providing a laundry securing device 100 for use with a drying rack. A securing device 100 according to the invention may be used on other types of racks, for example a wall mounted drying rack, or other type of rack on which it is desirable to hang a textile or similar for it to dry. In particular, one advantage of a securing device according to the present invention is that it can be retrofitted to any existing drying rack.

[0037] It will be apparent to those skilled in the art that variations to the above-described exemplary embodiments may be made without departing from the scope of invention as defined by the appended claims.

Claims

1. A laundry securing device for a drying rack, the device comprising two clips, each clip being coupled at a respective end of a cord, each clip being configured to be mounted on an upright portion of a drying rack, and at least one of said clips comprising means for selectively enabling said cord to be tensioned between said clips such that, in use with said clips mounted on opposing respective upright portions of a drying rack and a hanging rung extending between said upright portions, said cord can be secured under tension between said clips so as to extend along and adjacent said hanging rung.
2. A laundry securing device according to claim 1, wherein each clip has a channel extending therethrough such that, in use, an upright portion of a drying rack can extend through said channel thereby mounting said clip thereon.
3. A laundry securing device according to claim 1 or 2, wherein each clip comprises a first part and a second part, each part defining a respective portion of said channel, wherein said first and second parts can be at least partially separated to enable the clip to be mounted on an upright portion of a drying rack, preferably, wherein at least one of said clip parts comprises a slot in its outer wall configured to receive a portion of the cord, more preferably, wherein the slot comprises a first longitudinal section that extends from an edge of the clip part in a first longitudinal direction, along a portion of the length of the clip part.
4. A laundry securing device according to claim 3, wherein the slot further comprises a stepped section which continues from the first longitudinal section, said stepped section comprising a laterally extending slot section, preferably, wherein the slot further comprises a narrow slot portion which continues from the stepped section, said narrow slot portion comprising a longitudinally extending slot section, more preferably, wherein the narrow slot portion has a diameter less than the diameter of the first longitudinal section and the stepped section.
5. A laundry securing device according to any of the preceding claims, wherein at least one of said clips comprises a cord securing means for adjustably securing the cord under tension.
6. A laundry securing device according to claim 5, wherein said cord securing means comprises a circular aperture having a concentric inner ledge, the aperture being of a diameter equal to or greater than the diameter of the cord such that, in use, an end of said cord can be inserted through the aperture tied in a knot so the knot abuts said concentric inner ledge.
7. A laundry securing device according to claim 5 or 6, when dependent on claim 3, wherein said cord securing means is longitudinally aligned with said slot.
8. A laundry securing device according to claim 3, wherein the first part comprises a flange on at least one edge thereof, the flange comprising at least one tooth extending therefrom, and wherein the second part comprises a corresponding flange having at least one aperture therethrough, the at least one tooth and the at least one aperture being shaped and configured to releasably engage for removably attaching the first and second parts.
9. A clip for use in the laundry securing device of claim 1, comprising a channel for receiving an upright portion of a drying rack in use, and a means for adjustably securing a cord, in use.
10. A clip according to claim 9, wherein the clip comprises a first and second parts each part defining a respective portion of said channel, wherein said first and second parts can be at least partially separated to enable the clip to be mounted on an upright portion of a drying rack.

11. A laundry securing device according to claim 10, wherein at least one of said clip parts comprises a slot in its outer wall configured to receive a portion of a cord, in use, preferably, wherein the slot comprises a first longitudinal section that extends from an edge of the clip part in a first longitudinal direction, along a portion of the length of the clip part, a stepped section which continues from the first longitudinal section, said stepped section comprising a laterally extending slot section, and a narrow slot portion which continues from the stepped section, said narrow slot portion comprising a longitudinally extending slot section, more preferably, wherein the narrow slot portion has a diameter less than the diameter of the first longitudinal section and the stepped section.
12. A laundry securing device according to any of claims 9 to 11, wherein said cord securing means comprises a circular aperture having a concentric inner ledge, the aperture being of a diameter equal to or greater than the diameter of the cord such that, in use, an end of said cord can be inserted through the aperture tied in a knot so the knot abuts said concentric inner ledge.
13. A laundry securing device according claims 11 or 12, wherein said cord securing means is longitudinally aligned with said slot.
14. A laundry securing device according to any of claims 10 to 13, wherein the first part comprises a flange on at least one edge thereof, the flange comprising at least one tooth extending therefrom, and wherein the second part comprises a corresponding flange having at least one aperture therethrough, the at least one tooth and the at least one aperture being shaped and configured to releasably engage for removably attaching the first and second parts.
15. A kit of parts for securing laundry to a drying rack, comprising two clips according to any of claims 9 to 14, and an elasticated cord.

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Fig. 1

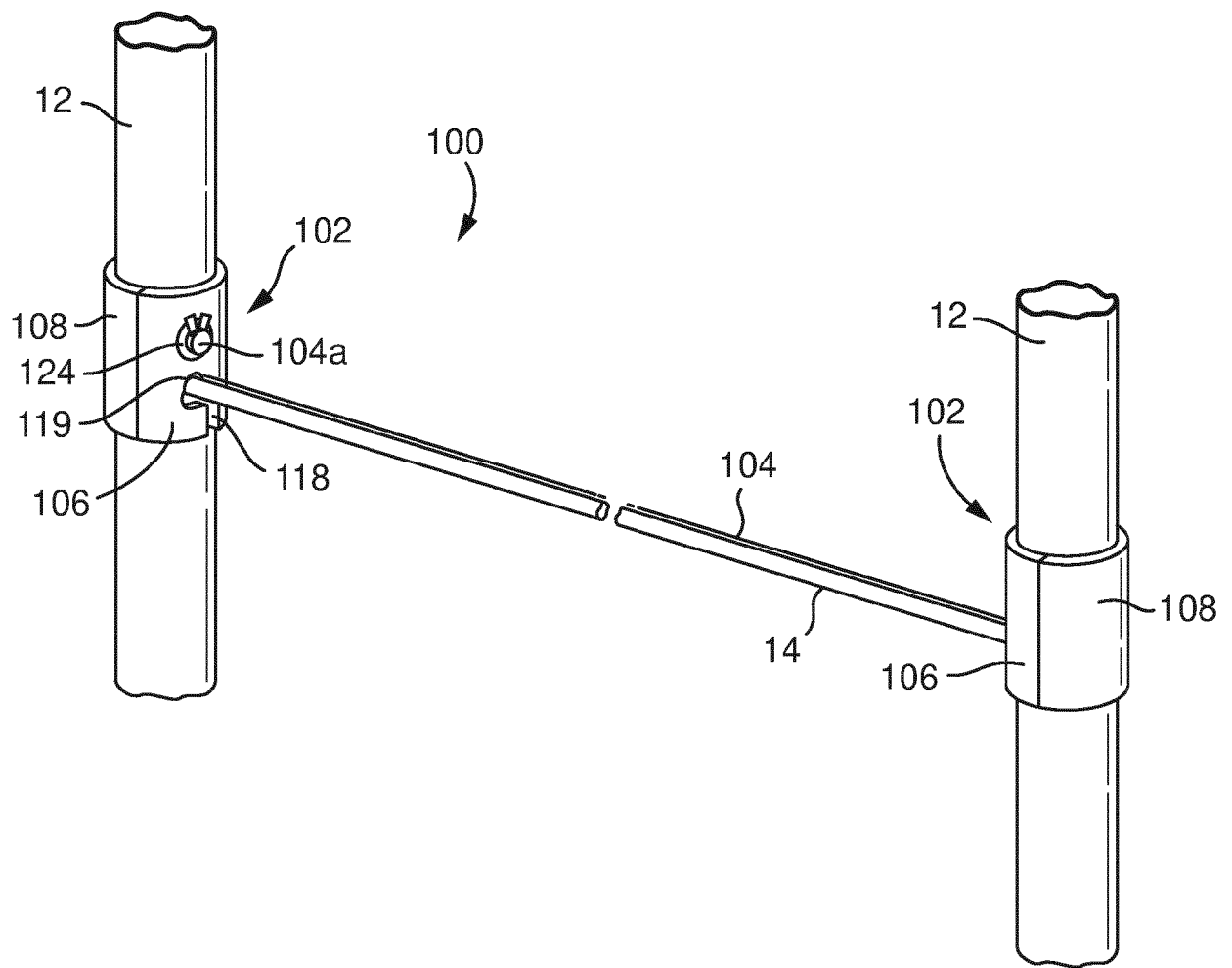


Fig. 2

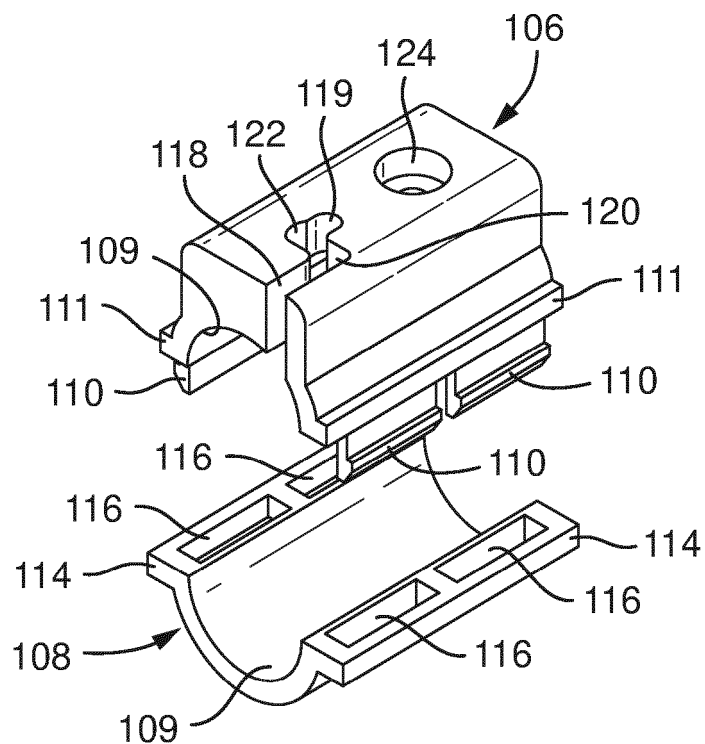


Fig. 3

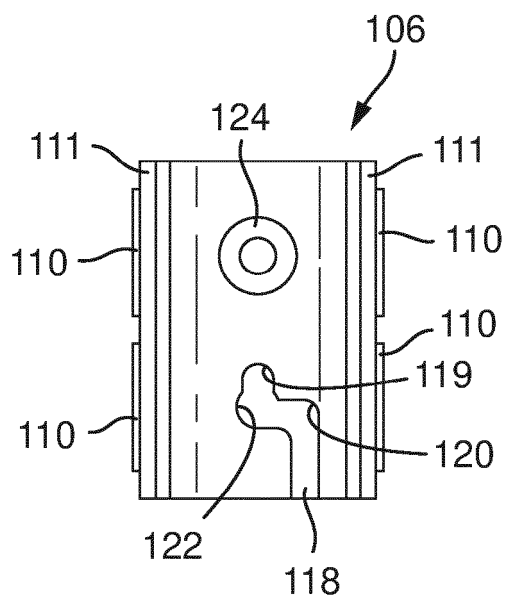


Fig. 4

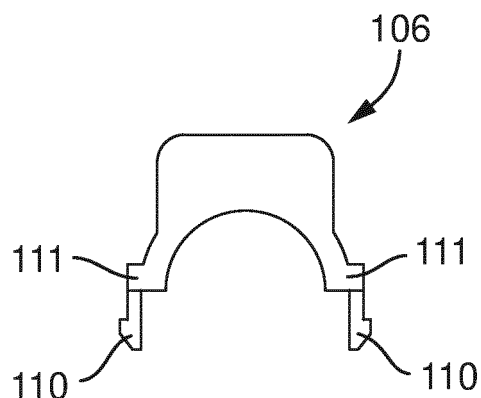


Fig. 5

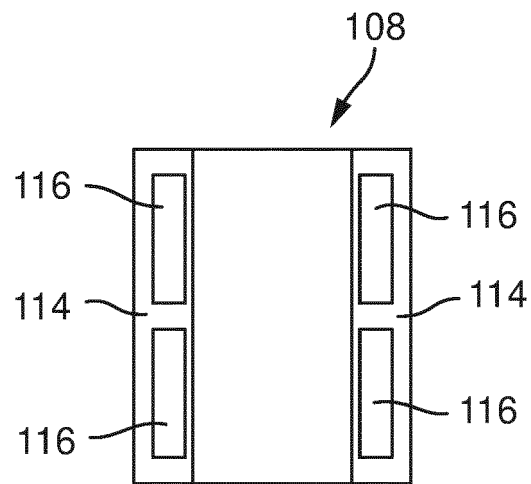


Fig. 6

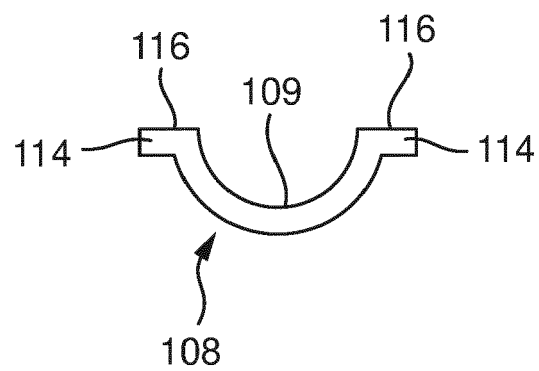
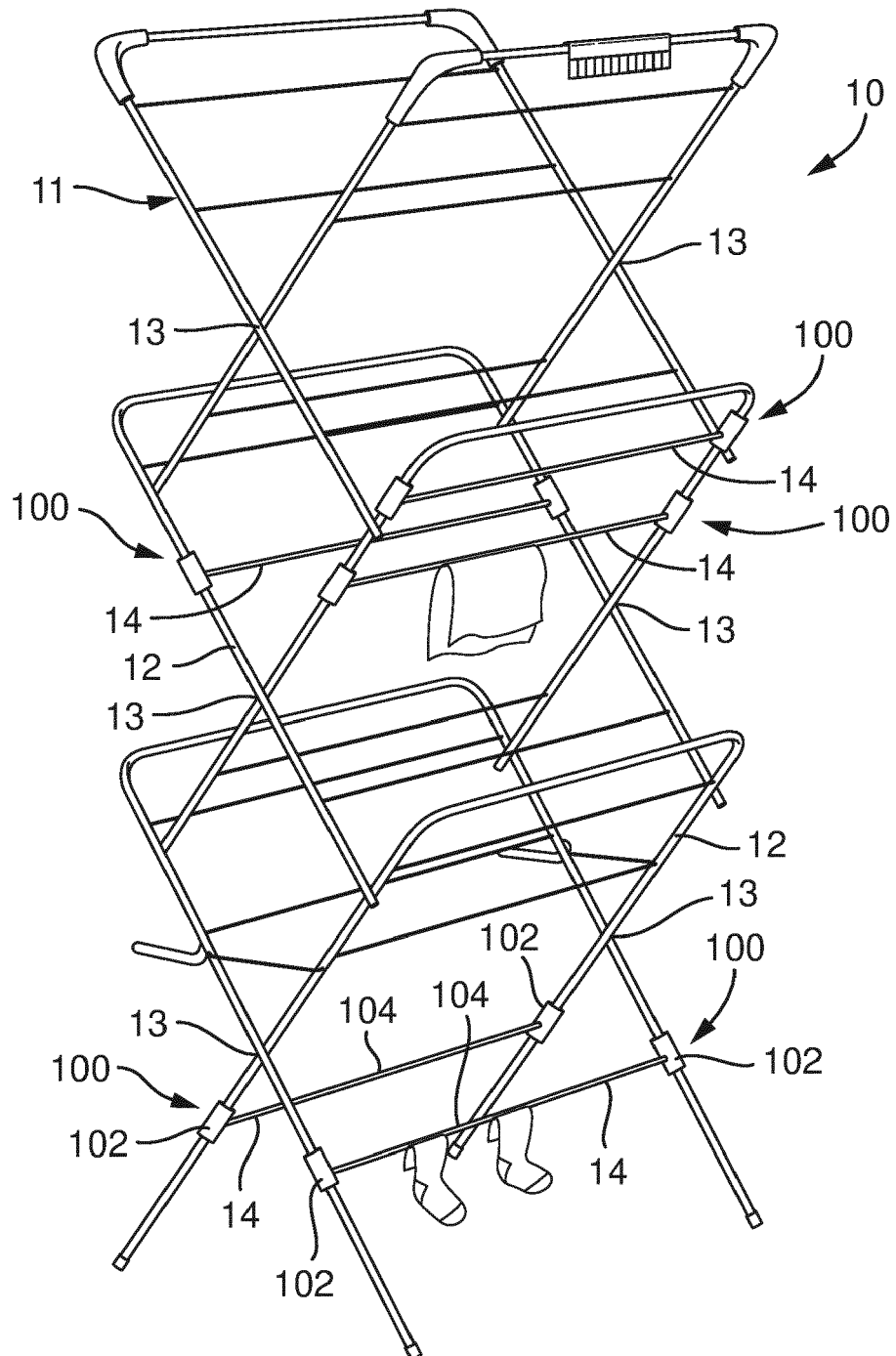


Fig. 7





EUROPEAN SEARCH REPORT

Application Number
EP 21 17 2456

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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			D06F
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 22 September 2021	Examiner Diaz y Diaz-Caneja
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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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The members are as contained in the European Patent Office EDP file on
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REFERENCES CITED IN THE DESCRIPTION

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