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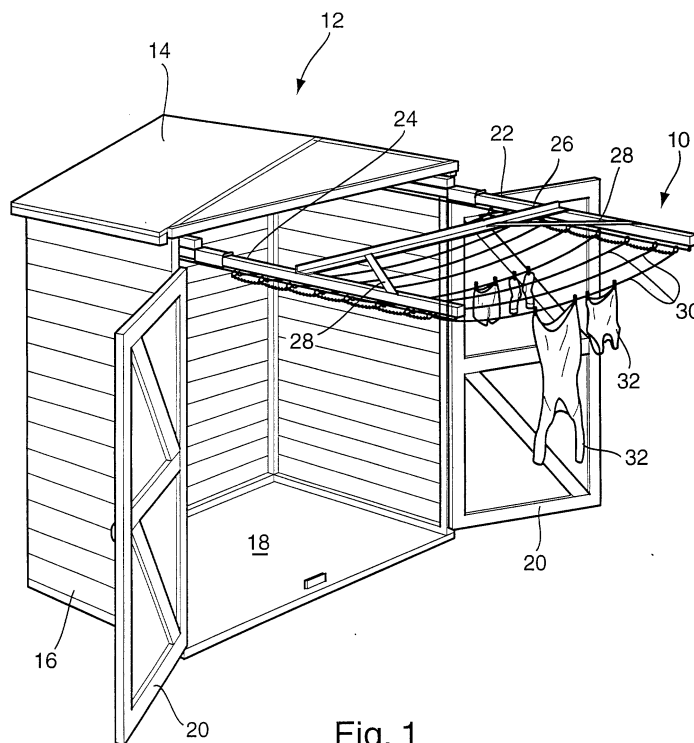
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**(54) Washing line unit**

(57) A washing line unit allows washing to be hung out to dry and then to be temporarily placed under cover if it rains. The unit has a cover structure 12 (which may be a shed or a tent) and rails 22,24 with hanging lines 30 between the rails. The hanging lines 30 can be slid

along the rails so that they are either spaced apart from one another outside the cover structure when wet clothes 32 can be hung on the lines to dry in the open air, or can be pushed back within the cover structure 12 when it rains, so that the partially or completely dry clothes are not made wet by the rain.



**Fig. 1**

## Description

**[0001]** The present invention relates to a washing line unit on which clothes are hung out to dry.

**[0002]** It is often the case that clothes hung up to dry on an outdoor washing line become wet because of rain. With conventional washing lines, it is necessary to remove the clothes from the line and place them in a sheltered place (usually indoors) in order to reduce their exposure to rainfall. This however can be a time consuming process, particularly if the clothes are secured to the line with clothes pegs which have to individually removed. Very often if the rain comes suddenly, the clothes can become significantly wet before they can be removed.

**[0003]** According to the present invention, there is provided a washing line unit comprising: a cover; a pair of spaced apart parallel rails extending in part beneath the cover; a plurality of hanging lines spanning between the rails, the hanging lines being slidably secured at each end to the rails such that the hanging lines can be moved between a sheltered position where the lines are beneath the cover and a drying position where the lines are away from the cover.

**[0004]** Clothes can be hung on the hanging lines and secured to these lines with clothes pegs in the normal way. When it is not raining, the hanging lines can be positioned along the rails such that they are spaced apart, in order to increase the exposure of the clothes to the wind and the sun. When it rains, the hanging lines with the clothes on them can be brought together to a position under the cover without detaching the clothes from the lines, so that the clothes are sheltered from the rain. When the rain has stopped, the hanging lines with the clothes on them can be brought out again into their spaced apart position.

**[0005]** Because the clothes need not be removed from the hanging lines in order to be sheltered from the rain, they can be quickly moved under the cover, thereby reducing the likelihood that they will become wet when it begins to rain. The fact that the clothes can remain on the lines also removes the inconvenience of having to replace them when the rain has stopped.

**[0006]** Preferably, the cover will be at one end of the washing line so that the hanging lines can be pushed or pulled to that end, in one direction, when the clothes need to be under cover.

**[0007]** Each rail may be formed from a rigid rod or bar (having a circular or shaped cross section) or alternatively may be a rope, cable or the like held under tension between two points. The rails will preferably be held in a substantially horizontal position when in use.

**[0008]** The hanging lines are preferably formed from conventional washing line material.

**[0009]** The rails are preferably mounted on a supporting structure such as posts or the like, so that the hanging lines are at a convenient height to have clothes pegged to them. Any convenient structure can be used

to support the rails. The rails can extend between a pair of transverse beams which hold the rails the correct distance apart. The beams may be secured at one or both ends on a tree, post, fence, wall, pergola or other structure having a supporting surface, such that the rails are raised from the ground. Alternatively, if the rails are secured individually, for example to spaced apart positions on a wall, there may be no need of a beam to hold the rails the correct distance apart.

**[0010]** If the rails are formed from cables, the cables should be tensioned to hold the cables taut, so that the hanging lines can slide along them in the manner of rails.

**[0011]** In a preferred embodiment, the rails are mounted in a rectangular frame, the frame having a first and a second cross beam to which the rails are secured at each end, and a first and a second side beam, the side beams being arranged between the cross beam, parallel to but outboard of the rails.

**[0012]** The supporting structure for the frame may also provide support for the cover and may for example be a garden shed. Alternatively the cover may be supported by a free standing structure, which may be the wall of an adjacent building, a fence, or a pergola or other trellis for climbing plants. In the latter case, the plants can disguise the cover. The supporting structure may also be a plastic structure.

**[0013]** The cover will preferably be substantially waterproof, and may be a solid roof, a canopy or blind, or a wooden or nylon covered lean-to.

**[0014]** To improve the appearance of the cover and its supporting structure, the cover (and its supporting structure) can be shaped and painted to resemble a large mushroom, a tree, a Wendy house, a weather house with a vane, a log cabin, a post box or a windmill. The cover may be formed by a tent structure, in which case the tent may be painted in the manner of a beach hut, for example with stripes.

**[0015]** The cover may be the roof of a shed, in which case the frame may be secured at one end to a wall of the shed, so that the shed roof overhangs part of the washing line structure. Alternatively the cover may be mounted on a wall and extend away from the wall surface, in which case the frame may also be mounted to the wall, such that one end of the frame is beneath the cover.

**[0016]** In one embodiment the frame may be supported by one support post on each side. If the post is at one end of the frame, it can also support the cover, and the opposite end of the frame can be cantilevered from the posts. A tent structure having an open front can be provided over one end the frame, with the uncovered part of the support frame extending through the open front of the tent structure.

**[0017]** In order for the hanging lines to be slidable on the rails, the hanging lines will preferably have sliders at each end mounted on the rails to run along the rails. The sliders may be rings threaded onto the rails.

**[0018]** On each rail, a draw string is preferably provided

ed which is attached to the slider rings at spaced apart attachment points along the draw string, so that when the draw strings are drawn, the slider rings on a rail are pulled into a position where they are spaced apart along the rail at intervals corresponding to the separation between the attachment points to the draw string. The slider rings may each have an attachment point to which the draw string can be attached in order to secure the slide rings to the draw string.

**[0019]** Each draw string will preferably be secured at one end, so that the draw string can be drawn by pulling the opposite end. Drawing the draw string will pull the hanging lines into a spaced apart position. Each draw string may also be releasably securable at the other end, with for example an open hook through which a loop in the draw string can be hooked, in order to retain the hanging lines in a spaced apart position.

**[0020]** To bring the hanging lines together, when for example they need to be brought under the shelter of the cover, the draw strings can be released at their releasable end and the hanging lines can simply be pushed back.

**[0021]** The intervals between the attachment points will preferably be the same for the draw string on each slide rail, so that when the draw strings are drawn, the hanging lines are spaced apart and parallel to one another.

**[0022]** The rails may each be mounted on a respective beam, and each beam may be individually releasably securable to a supporting structure such as wall or post, in the manner of a cantilever. A mounting bracket may be used to secure the beams to the supporting structure, the mounting bracket having upstanding tubes or recesses for receiving each beam. Alternatively, recesses may be provided in the supporting structure for receiving each beam.

**[0023]** The rails may each be formed from a cable looped around the long axis of each beam. The ends of the cable will preferably be connected together and will be made taut with tightening means on the upper side of the beam, so that the hanging lines can slide freely on the length of cable located on the under side of the beam.

**[0024]** The length of the rails will preferably have a length of up to ten metres. The length of the individual hanging lines may be between 1 m and 3 m, and the spacing between the hanging lines when in the spaced apart position will normally be between about 15 cm and 30 cm. The total combined length of the hanging lines may be about 100 m.

**[0025]** The invention will now be further described, by way of example, with reference to the following drawings in which:

Figure 1 is a perspective view of a first embodiment of a washing line unit in accordance with the invention; with the line in its extended position;

Figures 2 and 3 are vertical cross-sections through the unit of Figure 1, showing the line extended, for drying, and retracted;

Figure 4 shows the line in its stored position;

Figure 5 is a perspective view of the frame and hanging lines;

Figure 6 is a detail taken on the circle A from Figure 4;

Figure 7 is a perspective view of a second embodiment of the invention; and

Figure 8 is a side view of a third embodiment of the invention.

**[0026]** The washing line unit shown in Figure 1 comprises a washing line structure 10, the ends of which are mounted within a wooden shed-like protective structure 12. The shed 12 has a roof 14, walls 16, a floor 18 and doors 20. The shed can be constructed in the manner of a conventional garden shed. The doors can be closed when the washing line is not in use or, under certain circumstances, even when the washing line is in use.

**[0027]** The washing line structure connected within the shed 12 has two parallel rails 22, 24. The two rails are cantilevered out from supports within the shed 12, in a manner that will be described later. The rails are braced relative to one another by a cross-brace 26 with angled struts 28. Brace 26 and struts 28 maintain the rails 22, 24 in their correct, generally parallel relationship.

**[0028]** Spanning between the rails 22, 24 are a number of hanging lines 30. Items of clothing 32 are shown hanging from some of these lines. The clothes items 32 are pegged to the hanging lines 30 using conventional clothes pegs, or by draping clothes over the hanging lines, in a conventional manner.

**[0029]** Figure 1 shows the unit in its fully operational position, where the clothes on the hanging lines are exposed to sun and winds so that they dry.

**[0030]** Because of the cantilevered arrangement of the washing line structure 10, it will be necessary for the shed 12 to be sufficiently heavy to ensure that the unit does not tip over when heavy, wet clothes are hung. A shed 12 of substantial construction will normally be heavy enough, but it would also be possible to physically anchor the shed structure to the ground and/or to place heavy weights inside. Indeed, the interior of the shed maybe used for storing garden tools for mowers or the like, all of which will assist in ensuring the necessary stability.

**[0031]** It will also be noted that the doors 20 shown in Figure 1 have their top edges below the washing line structure 10. Thus it will be possible for the doors to be closed whilst the washing line structure 10 is extended

and has clothes hanging on it. Thus the washing can be left out to dry, whilst the shed and its contents can be closed and locked up.

**[0032]** Figures 2 and 3 illustrates what happens when it starts to rain. The clothes 32, on their hanging lines 30, can be slid back along the rails 22, 24 so that they are housed wholly within the shed 12 and under the protection of the roof 14. If necessary, the doors can then be closed. In this condition the rails 22, 24 continue to project out of the front of the shed.

**[0033]** Of course, the clothes on the line may also be slid back inside the shed when it is not raining, so that they are not visible. This may be necessary for example if there is a worry about clothes being stolen, or if clothes hanging out to dry would be aesthetically undesirable when other activities are going on in a garden.

**[0034]** Figure 4 shows the structure 10 in more detail. Each rail 22, 24 has a cable 34 stretched between its ends. Each cable is anchored at the inner end at 36 and at the outer end 38. The hanging lines 30 each end in a closed hook 40, and the hooks slide along the cables 34. Furthermore, the hooks 40 are each linked to the adjacent hook on the same cable 34 by a length of chain 42. This can be seen even more clearly in Figure 5.

**[0035]** It will be clear from a consideration of these drawings that the hanging lines can be pushed back from the position shown in Figure 4, so that all the lines sit close to one another, under the roof 12 of the shed 14. This can be done whether there are or are not clothes on the lines. Clearly, if there are clothes on the line and the hanging lines 30 are pushed back, the clothes will be contained within the shed, in the position shown in Figure 3.

**[0036]** To pull out the lines, all that is necessary is to pull on the leading line 30a, and all the other lines will follow, in their correct spacing. Once the lines are fully extended in the position shown in Figure 4, there will be some retention mechanism (not shown) to hold the outer line 30a at the end of the rails 22, 24. For example, this could be a Velcro tab which makes a connection with a corresponding Velcro component on the rails.

**[0037]** Figure 6 shows how the rails 22, 24 can be stored away, when the unit is not in use, for example during the winter.

**[0038]** Within the shed 12, there are two parallel support bars 48, 50. The outer ends of these bars have a projecting tongue 52 with an upward facing lip 54 at the outer end. These support bars 48, 50 are permanently fixed in position near to the roof of the shed 12.

**[0039]** The frame comprising the parallel rails 22, 24 and the bracing structures 26, 28 is hinged at the back of the shed 12, close to the roof. The rails can be lowered to the position shown in Figure 6 where they are out of the way so that the interior of the shed can be used for other purposes. The frame can however be lifted to the horizontal position, without the hinge 56, until the rails 22, 24 lie parallel to the support bars 49, 50. A tubular shoe 58 is captive on each of the rails 22, 24 and, when

the rails are horizontal, the shoe can be slid over the lip 54 onto the flange 52, so that the rails are held in a horizontal position, through the rigid mountings of the support bars 48, 50. Lowering the bars is a reverse of the procedure just described.

**[0040]** The cover for the structure does not have to be in the form of a shed as shown in Figure 1; it can take numerous different forms. For example, Figure 7 shows a unit attached to the wall 60 of a house. In this situation, all the working loads are carried by fixings made directly to the house wall, and the covering structure is only there to provide weather protection. Thus the support bars 48, 50 are fixed to the walls of the house, possibly with supporting bracketry to give the necessary strength, and the inner ends of the rails 22, 24 can also be mounted on hinged brackets fixed to the wall 60. A lean-to roof 62 and side wall 64 provide the necessary weather protection when the hanging lines are to be placed under cover, and a pull-up cover 66 can be raised to protect any washing on the (retracted) lines from the weather.

**[0041]** It will be appreciated that, in many cases, the rails 22, 24 will remain exposed even when there is no washing on the line or the washing is hidden away inside the cover. It may therefore be advantageous to support the outer ends of the rails 22, 24 by posts 68 (see Figure 8), and in this case the cover structure 10a does not need to support the cantilever loading of the rails and the wet clothing, and can be a tent-like structure with non-load supporting canvas walls.

**[0042]** As will be appreciated from the above description, this invention provides a simple way of keeping clothes out of the rain when they are drying, without having to remove them from the hanging lines, whilst making it a simple matter to put the clothes out in the open again after the rain has stopped. A substantial length of hanging line is available in a relatively small space.

## Claims

1. A washing line unit comprising a cover; a pair of spaced apart parallel rails extending in part beneath the cover; a plurality of hanging lines spanning between the rails, the hanging lines being slidably secured at each end to the rails such that the hanging lines can be moved between a sheltered position where the lines are beneath the cover and a drying position where the lines are away from the cover.

2. A washing line unit as claimed in Claim 1, wherein the cover is at one end of the parallel rails so that the hanging lines can be pushed or pulled to that end, in one direction, when the clothes need to be under cover.

3. A washing line unit as claimed in Claim 1 or Claim 2, wherein each rail is formed from a rigid rod or bar,

a cable is tensioned between the ends of the rails and the hanging lines have end fittings which slide along the cable, and the hanging line end fittings are connected by flexible, fixed length links which maintain a desired spacing between the hanging lines, when in the drying position. 5

**4.** A washing line unit as claimed in Claim 1 or Claim 2, wherein the rails are formed from flexible cables or the like which can be tensioned between two opposite fixed points. 10

**5.** A washing line unit as claimed in any preceding claim, wherein the cover is a structure with a roof and walls. 15

**6.** A washing line unit as claimed in Claim 5, wherein the cover has a door or doors.

**7.** A washing line unit as claimed in any preceding claim, wherein the rails can be moved between a horizontal orientation, and a vertical, stored position where they are positioned beneath the cover. 20

**8.** A washing line unit as claimed in Claim 7, wherein a pair of support bars are mounted wholly beneath the cover, inner ends of the rails are pivotally mounted adjacent inner ends of the support bars and the rails can be connected to and supported from the bars, substantially parallel thereto, to hold the rails in a horizontal orientation, or can be disconnected therefrom so that they can be pivoted into a vertical, stored position. 25 30

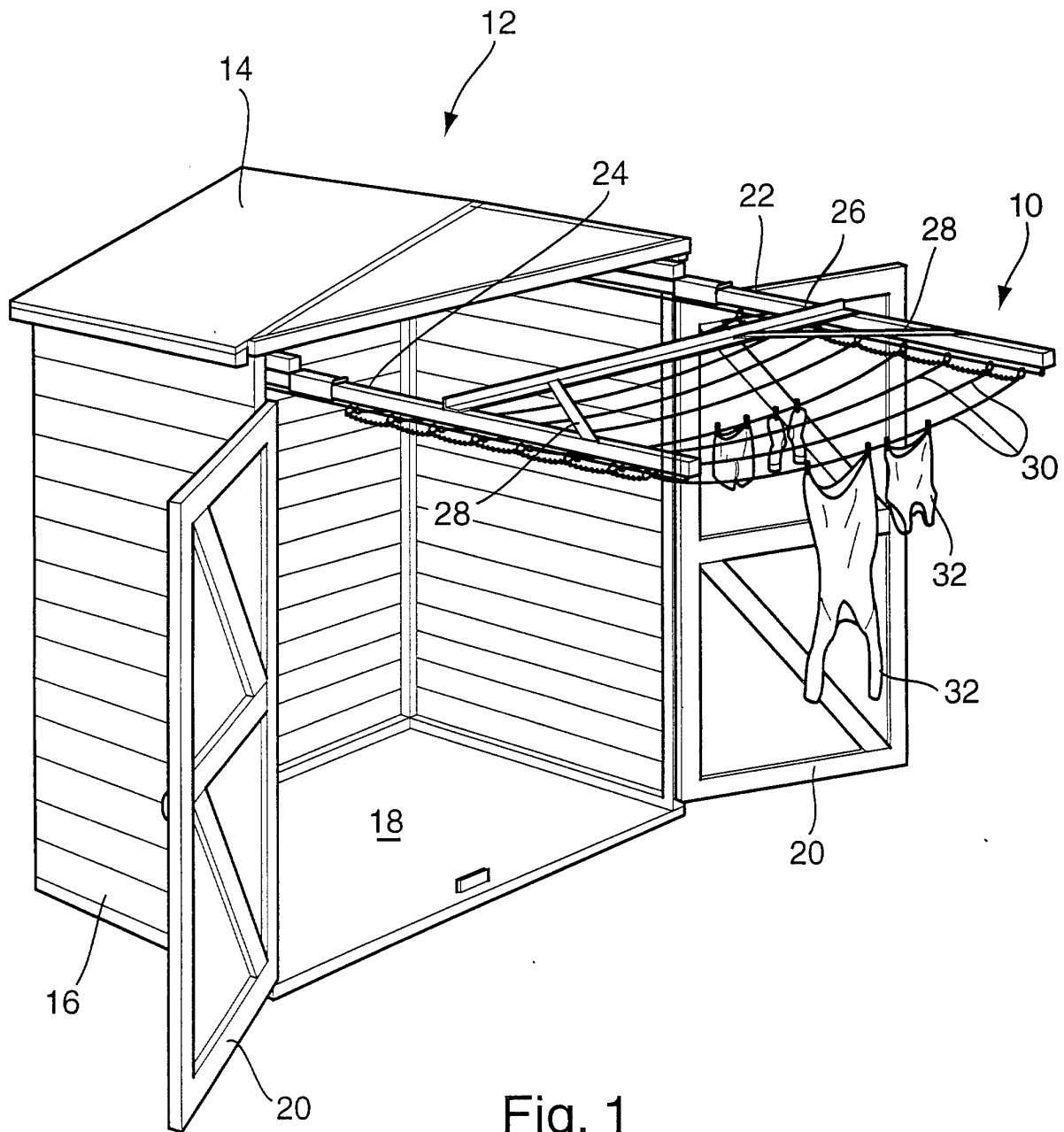
**8.** A washing line unit as claimed in any preceding claim, wherein a cross-bracing member joins the two rails to hold them in the desired spaced relationship. 35

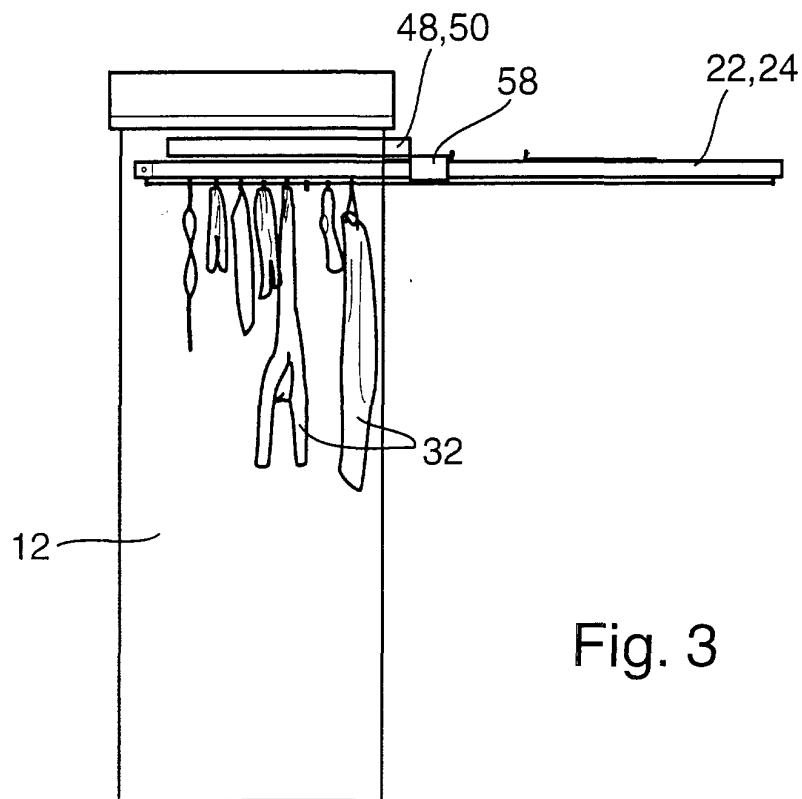
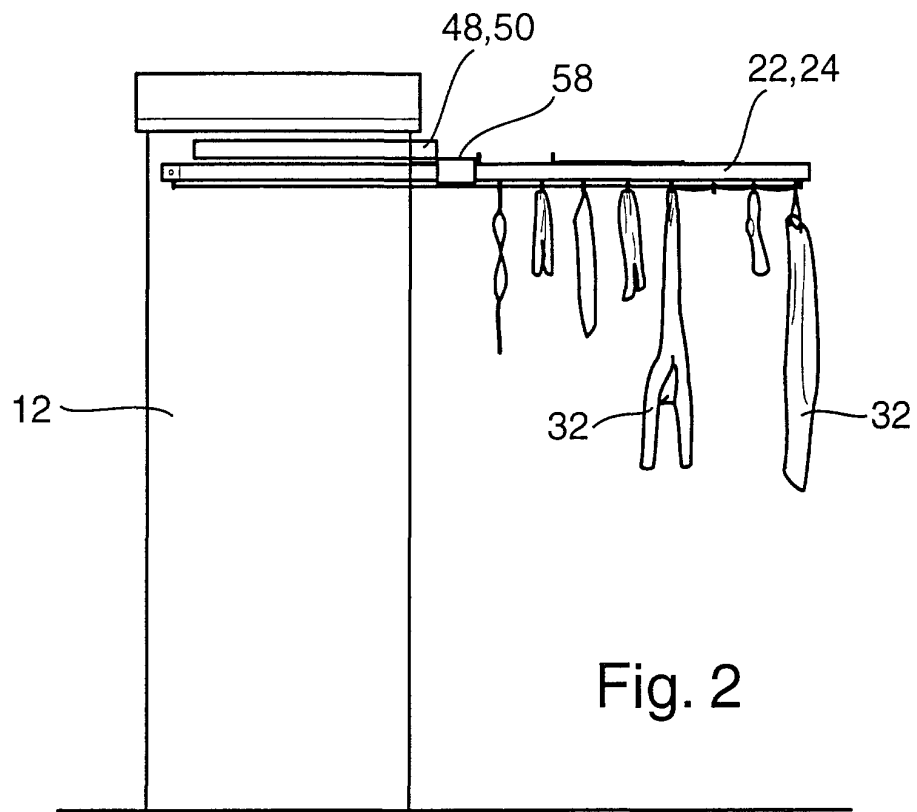
**9.** A washing line unit as claimed in Claim 3, wherein the fixed length links are chains, the hanging line end fittings are closed loops linked to the chains at regular intervals and sliding on a cable. 40

**10.** A washing line unit as claimed in Claim 9, wherein means are provided from locking the chain in its fully extended position. 45

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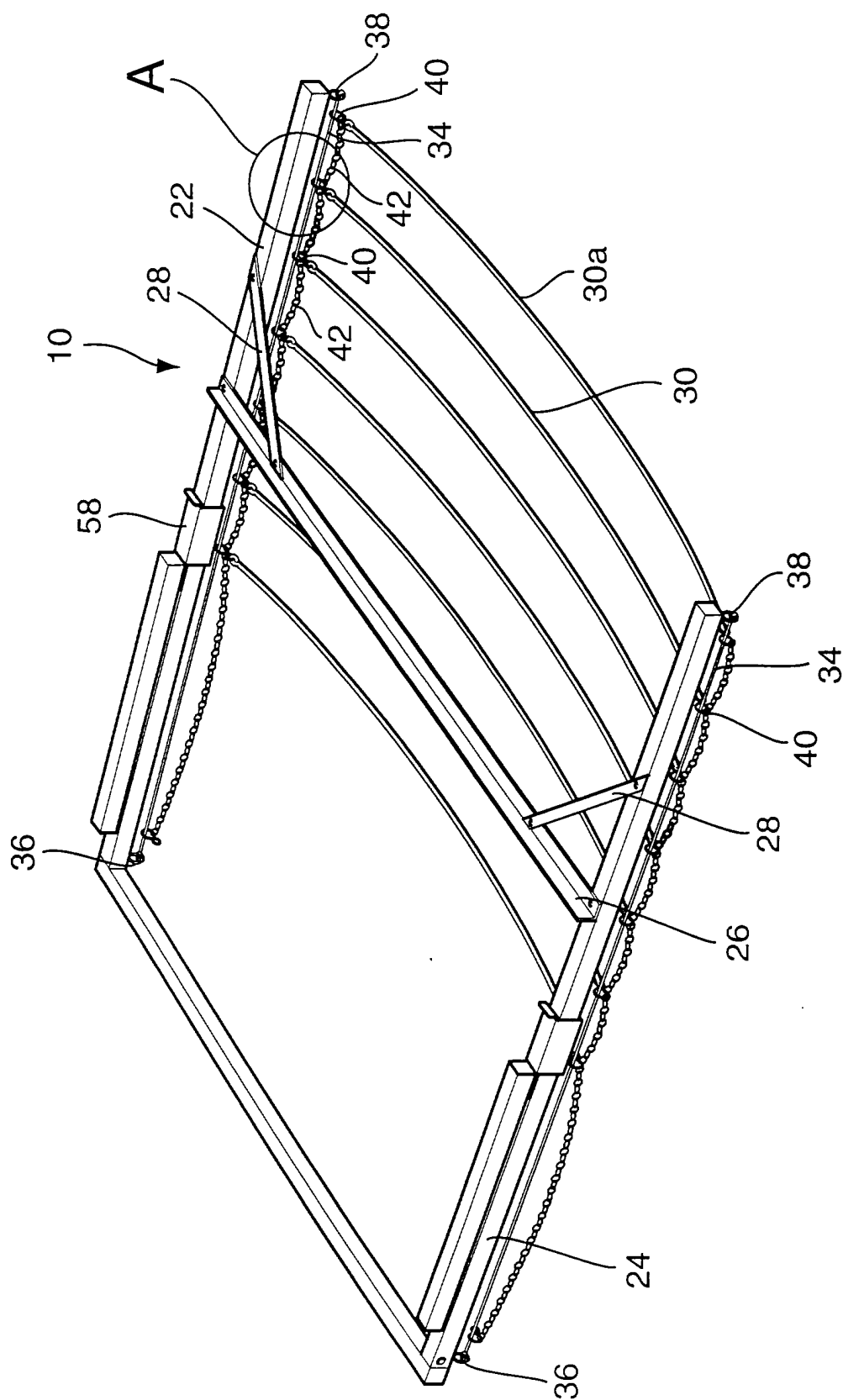


Fig. 4

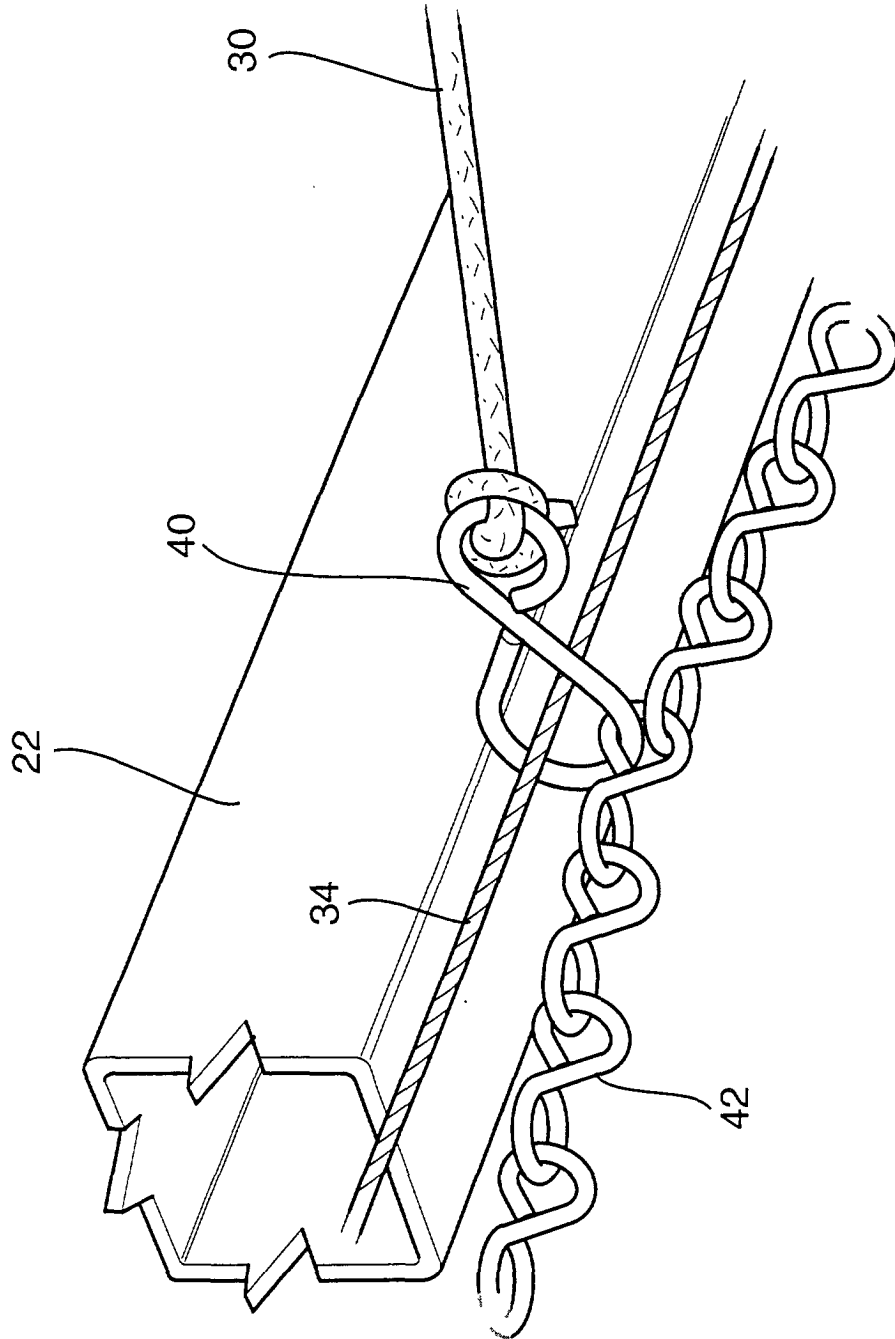


Fig. 5

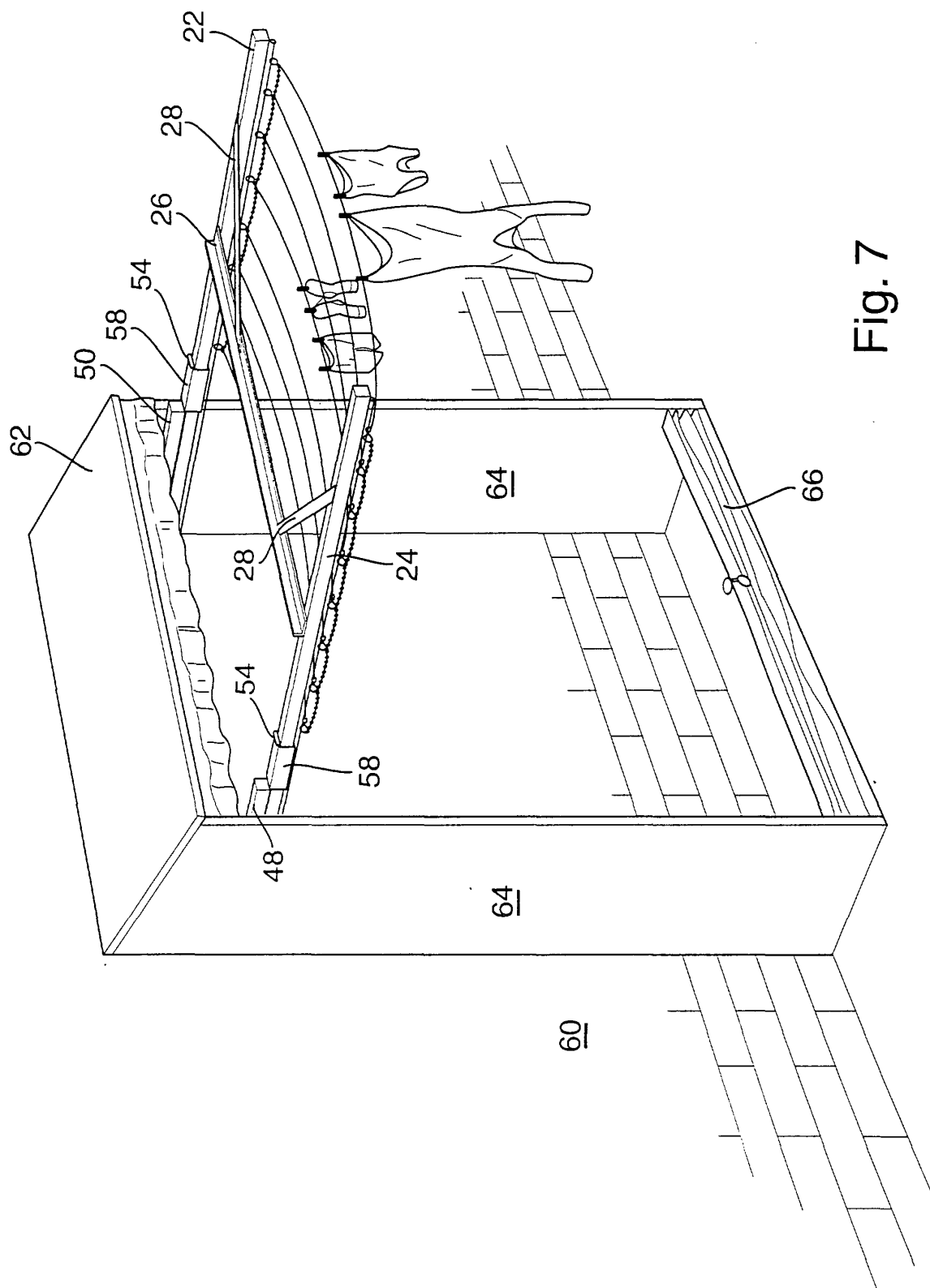


Fig. 7

