Aug. 19, 1958 C. C. GIBSON ET AL 2,848,118

OVERHEAD PORTABLE CLOTHES DRYER

Filed March 6, 1956

FIG_1

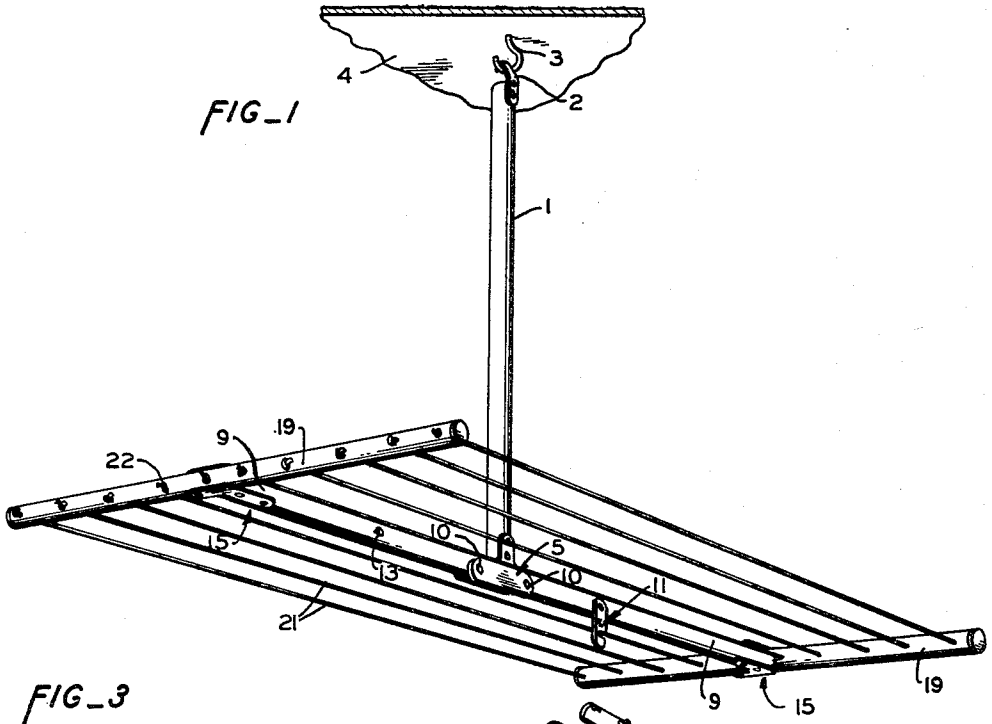


FIG_3

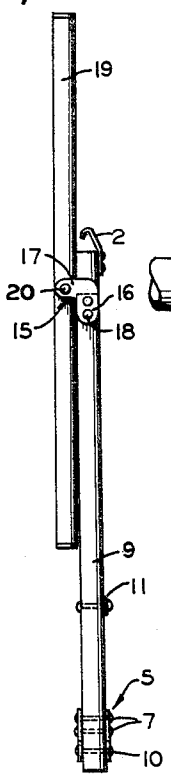


FIG_4

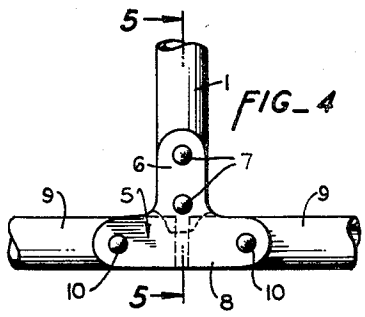


FIG_5

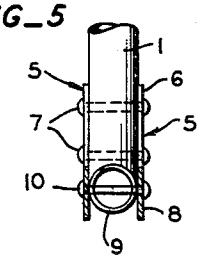
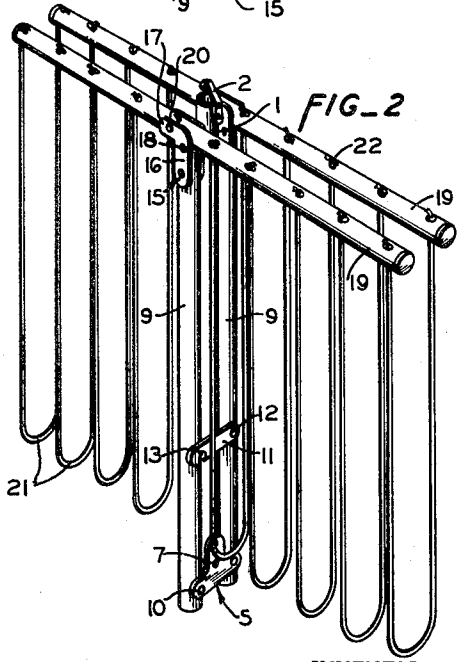


FIG_2



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OVERHEAD PORTABLE CLOTHES DRYER

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1 Claim. (Cl. 211—118)

This invention relates to an overhead portable clothes dryer and has for one of its objects the provision of a dryer that is adapted to be suspended from an overhead support, and which dryer has a substantial capacity for suspended clothes to be dried yet is collapsible to a relatively small compact size while it is suspended from such support.

Another object of the invention is an overhead dryer from which clothes are adapted to be suspended and which dryer itself is adapted to be suspended from an overhead support when in use and is adapted to be collapsed to a relatively small size while it is so suspended from said support, and is adapted to be collapsed to a still smaller compact size when removed from said support.

Normally there are one or more rooms in a house, or a place in a garage or building, in which a clothes dryer may be suspended from an overhead support such as a beam or ceiling, and where clothes may be dried during inclement weather or when there are no other available facilities. The present invention provides a dryer that may be removably suspended from a single hook or eye secured to such beam or ceiling, and when not in use, the dryer may be collapsed and left suspended from such beam or ceiling, or else, if desired, it may be removed from its support and collapsed for storage in a small space.

The clothes dryer of the present invention is adapted for use as above described and is very light in weight yet strong, economical to make, and easy to set up and to collapse.

Other objects and advantages will appear in the description and in the drawings.

In the drawings,

Fig. 1 is a perspective view of the dryer suspended from an overhead support for use.

Fig. 2 is a perspective view of the dryer in a collapsed position, and in which collapsed position it may remain suspended from the overhead support.

Fig. 3 is a side elevational view of the dryer of Fig. 2 removed from the overhead support and still further collapsed. The clothes lines are not shown in this view since they would confuse the showing, but said lines being flexible would merely hang vertically.

Fig. 4 is an enlarged fragmentary elevational view of the pivotal connection between the stem carrying the dryer arms and said arms.

Fig. 5 is a sectional view taken along line 5—5 of Fig. 4.

In detail, the dryer illustrated comprises a vertical tubular stem 1 that is provided with a hook 2 at its upper end. This hook is preferably rigidly secured in any suitable manner to the upper end of the stem 1 and projects above said stem.

The hook 2 is adapted to engage the eye 3 of a screw that is secured in a ceiling 4, beam or any other overhead structure. The screw eye thus provides an overhead support for the stem and from which the hook on the stem is

readily removable. Preferably, the hook is formed from a flat strip so that its flat side engages the eye thus helping to stabilize the hook and stem against rotation of the latter about its longitudinal axis. It is, of course, obvious that the eye 3 could be a hook and that the hook 2 could be in the form of an eye.

Rigidly secured to opposite sides of the lower end of the stem 1 is a pair of correspondingly shaped opposed inverted T-shaped plates 5. The leg 6 (Fig. 4) of the T of each plate 5 extends upwardly at each of the opposite sides of the stem 1 longitudinally of said stem, and rivets 7 rigidly secure said legs to said stem with the oppositely outwardly extending portions of the head 8 of the T plates disposed below the lower end of the stem 1 and perpendicular to said stem.

Two tubular arms 9, preferably of the same diameter as stem 1, extend at one of their ends between the opposite ends of the head 8 of the T plate and a pivot 10 secures the end of each arm 9 between said opposed heads with the adjacent ends of said arms extending below the lower end of the stem 1 and in engagement with said lower end when said arms are horizontal. Thus the lower end of stem 1 acts as a stop to hold the arms substantially in horizontal alignment when said arms are swung to said positions about pivots 10.

The pivots 10 are connected with the arms 9 at points spaced at opposite sides of the axis of stem 1 a sufficient distance to enable the arms 9 to be swung upwardly to positions closely alongside and parallel with the stem 1. The arms 9 will be substantially in engagement with the opposite sides of stem 1 when in this last mentioned position, and they can be so swung when the hook 2 is engaged in the eye 3 since the lengths of arms 9 is preferably less than that of the stem 1 (Fig. 2).

When said arms 9 are swung to said positions alongside stem 1 they may be held in said positions by means of a latch 11 that is pivoted at one end at 12 to a side of one arm 9 at a point spaced from the plates 5, but preferably closer to said plates than to the outer ends of the arms so that a person of average height standing on a floor below the dryer can operate the latch. The end of latch 11 that is opposite to pivot 12 is formed with a downwardly opening hook for engagement over a pin 13 secured to the other arm. The hook will stay in engagement with the pin under the influence of gravity.

From the foregoing description it will be seen that the arms 9 will swing from extended position to collapsed position and vice versa in a plane common to stem 1, and the opposed end portions of the heads 8 of the T plates 5 will guide the arms for swinging in this common plane and will hold them therein.

The latch 11 when in locking relation will extend across one side of the stem 1.

Secured to each of the outer ends of arms 9 is a pair of opposed, correspondingly shaped L plates generally designated 15. The legs 16 of said plates which are slightly longer than the bases 17 extend longitudinally of each arm 9 at opposite sides thereof. When the arms 9 are extended in horizontal position these L plates 15 are at the upper and lower sides, and a pair of rivets 18 or any other suitable means holds said legs 16 rigid with each arm 9.

The bases 17 of plates 15 extend to the same side of each arm 9 and beyond the outer end of each arm so that a tubular cross bar 19 may extend across the outer end of each arm perpendicular thereto and between the opposed pair of bases 17 for securement by a pivot 20 to said bases. Each pivot 20 will be offset to one side of the axis of the arm 9 adjacent thereto and slightly to one side of a point centrally between the ends of each cross bar so that said cross bars can swing from their positions perpendiuclarly to arms 9 and projecting equally to op-

posite sides of said arms to collapsed positions parallel with said arms and with one half of each cross bar in substantially engaging relation with one of the sides of each arm **9**.

The fact that the bases **17** extend to the same side of arms **9** when the latter are horizontal enables the cross bars **19** to be disposed in the same plane at one side of said arms (Fig. 3) when the cross bars are in collapsed position.

Extending between the cross bars **19** are a plurality of flexible clothes lines **21**. These lines may extend at their ends through openings formed in the cross bars at opposite sides of their central portions. The lines can be knotted at their outer ends at **22** so as to prevent their being pulled through the bars and the lengths of said lines are such that they are straight and parallel when **9** are in extended position (Fig. 1) and the cross bars **19** are perpendicular to the arms **9**. When in this extended position the lines **20** will hold the cross bars against swinging to collapsed position, but when the dryer is removed from the overhead support the cross bars may be quickly folded to collapsed position as soon as the arms **9** are moved to collapsed position. When both arms **9** and cross bars **19** are in collapsed positions and the latch **11** is locked, the dryer occupies a very small space and can readily be stored in a corner, closet or slipped into an elongated carton or receptacle.

In setting up the dryer from fully collapsed position, the cross heads are first swung from the fully collapsed position shown in Fig. 3 to the position shown in Fig. 2 and the hook **2** is then engaged in eye **3**. The latch **11** is then unlocked and the arms **9** will automatically swing down to the position shown in Fig. 1 and lines **20** will be straight and ready for use in suspending clothes therefrom.

When the dryer is through being used, the arms **9** can be swung up to the position shown in Fig. 2 without removing the stem **1** from eye **3**, and the latch **11** can then be engaged to hold the arms up. Since the overall length of the dryer when in the position shown in Fig. 2 is only about twenty-four inches, it will not interfere with a person of average height when suspended from an eight foot ceiling. The user can, of course, quickly detach the dryer from its overhead support, if desired, and store it away.

The length of the cross bars **19** may vary, but preferably they are such as to hold the lines **21** within the upwardly projected confines of a conventional bathtub in a bath room so that draining from clothes suspended therefrom will drop into the tub when the dryer is used in a bathroom.

It should be noted in Fig. 5 that the lower end of the stem **1** is arcuately cut to conform to the cylindrical contour of each of the ends of the arms **9**. This feature both stabilizes the arms and stem relative to each other and also distributes the pressure of the adjacent ends of the arms over the lower edges of the stem to preclude any likelihood of denting or distorting said adjacent ends when the lines **21** are loaded.

The foregoing detailed description is of a preferred form of the invention and is not intended to be restrictive of the scope of the invention.

We claim:

In a clothes dryer; a pair of arms, means connecting said arms at one of their ends and supporting said arms at said one of their ends for swinging their opposite outer ends from positions closely adjacent to each other and in which said arms are substantially parallel with each other to positions in which said opposite ends are widely spaced apart and said arms extend away from each other from said one of their ends and vice versa, said means including a pair of opposed plates between which said one of the ends of said arms extend for holding said arms in one plane during said swinging thereof, a pair of opposed end plates at opposite sides of the outer end portion of each arm of said pair at said outer end thereof and rigidly secured thereto, the said end plates of each pair thereof having corresponding, spaced, opposed extensions projecting laterally to one side of each arm and axially outwardly of the terminating outer end of each arm, a pair of cross bars respectively disposed between each pair of said extensions on each pair of said end plates extending perpendicularly across and substantially in engagement with the terminating outer ends of said arms at points on said bars approximately centrally between the ends thereof, pivots connecting said cross bars with said extensions at points offset laterally and axially outwardly of said arms substantially centrally between opposite ends of said bars for swinging said cross bars from their positions extending across the terminating outer ends of said arms to positions adjacent to and substantially parallel with said arms and vice versa, a plurality of parallel, spaced clothes lines connected with said cross bars at opposite sides of said pivots, said clothes lines being relatively straight when said cross bars are in positions extending across said outer ends of said arms and when said outer ends of said arms are in said positions widely spaced apart for holding said cross bars substantially perpendicular to said arms, and said lines being flexible and slack when said outer ends of said arms are swung to positions relatively close together to permit swinging said cross bars to their positions substantially parallel with said arms.

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