June 26, 1962 P. E. M. CREWS 3,040,903

DEVICE TO FACILITATE THE DRYING OF WOOLLEN ARTICLES AFTER LAUNDERING

Filed Nov. 19, 1959

FIG. 1.

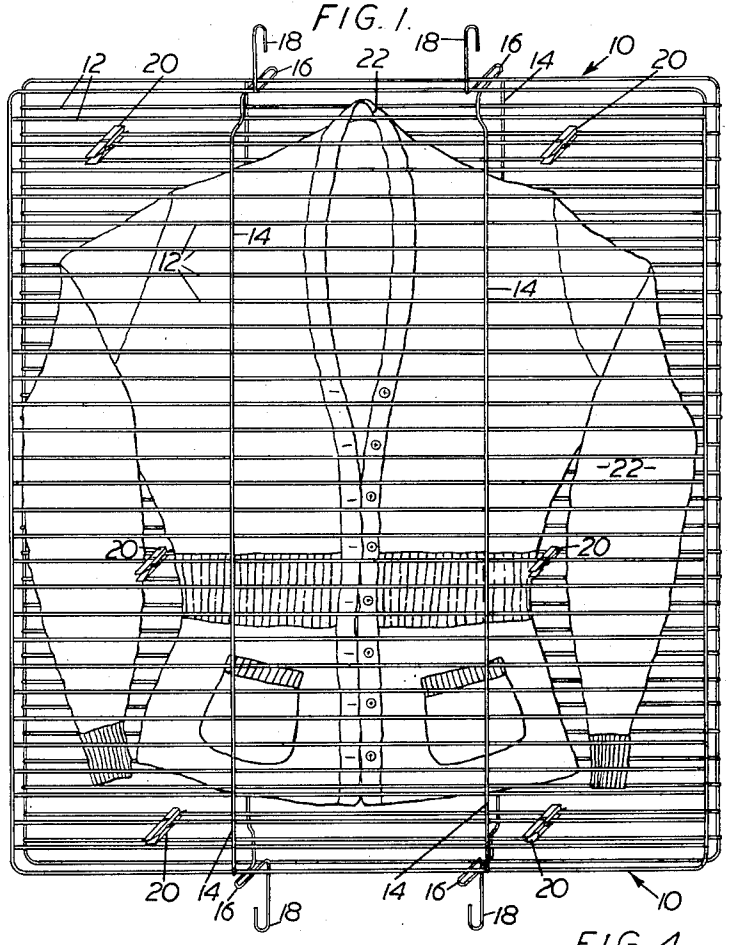


FIG. 2.

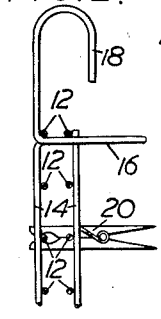


FIG. 3.

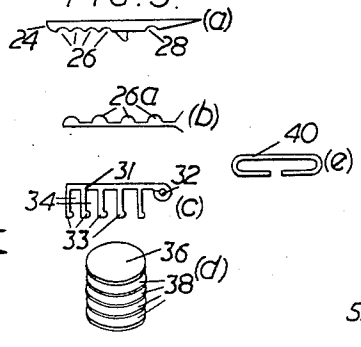


FIG. 4.

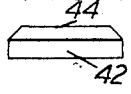
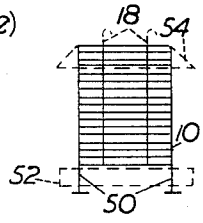


FIG. 5.



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DEVICE TO FACILITATE THE DRYING OF WOOLLEN ARTICLES AFTER LAUNDERING

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6 Claims. (Cl. 211—119)

This invention relates to a device for drying woollen articles such as skins after slaughtering, and garments after laundering, or for supporting articles which are liable to lose their shape if hung up after laundering.

As is well known, woollen garments tend to lose their shape if hung up to dry after having been washed, but tend to retain the shape in which they are laid out, if laid flat for drying.

It is an object of this invention to provide a device for the rapid drying of hides and laundered garments, and which will support them in their proper shape while being dried.

According to the invention, an article drying support includes a pair of frames each having a plurality of spaced thin transverse members, spacing means for maintaining the transverse members in face-to-face spaced relationship at variable distances between them, and support means for supporting the pair of frames upright in spaced relationship.

The invention may include one or more of the following features.

The material employed in the construction of the frames must be impervious to moisture and such that it will not mark or stain a damp woollen article when held in prolonged contact with it.

In addition, the area of contact between the article and the transverse members must be small so as to interfere as little as possible with the circulation of air. For these reasons the transverse members are preferably resiliently flexible and made from wire or cord material, e.g. fine galvanized wire, plastic-coated wire or aluminium alloy wire, drawn taut between outer frame members, which may be made of wood or metal, such as wire or a suitable aluminium alloy of any convenient cross-section.

The support means may include a stand or suspension means such as hooks, loops, or the like. A stand may include a drip-tray. If desired, a pair of frames adapted to be suspended from hooks, or the like may be provided along the bottom with a further hook or hooks for supporting a depending drip-tray.

Further featuures of the invention will become apparent from the following description of specific embodiments with reference to the drawings and is given by way of example only.

In the drawings:

FIGURE 1 shows a front elevation of a pair of frames with a woollen article supported between them;

FIGURE 2 shows a detail of a hook in sectional side elevation;

FIGURE 3 shows various forms of spacing means;

FIGURE 4 shows diagrammatically a front elevation of a suspendible drip-tray; and

FIGURE 5 shows diagrammatically, in front elevation, alternative embodiments of the invention.

Reference numeral **10** refers to a frame having a plurality of spaced thin transverse members **12** of plastic-coated resiliently flexible wire, and longitudinal stiffening members **14** bent to form shoulders **16** and hooks **18**. The shoulders **16** of the one frame are adapted to support the other frame, when the first frame is suspended from its hooks **18**.

The pair of frames **10** are maintained face-to-face, transverse members **12** towards each other in narrow spaced relationship by spacing means **20** in the form of clothes pegs to support a woollen article **22** between the frames **10**. The transverse members **12** are flexible and are adapted to permit slight variations in the spacing between the frames **10**, to allow the transverse members **12** to pass over varying thicknesses of the article **22**.

Referring to FIGURE 3(*a*), **24** refers to a special limb of a clothes peg type spacing spring clip, having a plurality of spaced recesses **26** adapted to receive opposing transverse members **12** of the frames **10** in spaced relationship, the recesses being spaced from the nose towards the spring (not shown) adapted to be received into recess **28**.

FIGURE 3(*b*) shows a clip **30** of blade spring type having spaced recesses **26***a*.

FIGURE 3(*c*) shows comb-like spacing means **31** having eye **32** adapted to pivot about a transverse member **12** of a frame **10** and having a plurality of spaced teeth **33** defining recesses **34** between them adapted to receive the transverse members **12** of the opposing frame.

FIGURE 3(*d*) refers to a round rubber plug **36** having axially spaced circumferential grooves **38** within which adjacent transverse members **12** of a frame are receivable.

FIGURE 3(*e*) shows a link-type hook **40** adapted to provide a fixed spacing between frames.

FIGURE 4 shows a drip-tray **42** having a handle **44** by means of which it is suspendible from a lower pair of hooks **18** below a pair of frames **10**. The drip-tray **42** may be dispensed with out of doors.

FIGURE 5 shows a pair of frames **10** supportable on a stand **50** which may include a drip-tray **52**. The frames may be provided with a hood **54** to provide shade in fierce sunlight to reduce fading of colours in a garment. This hood **54** may be provided whether the frames **10** are supported by a stand **50** or by hooks **18**.

In use, an article after laundering is placed in its shape between the frames, and clips spaced around the article outline to ensure the proper spacing apart of the frames. A lot of water in the article drips out and the remainer dries relatively quickly due to the large exposed area and free aid circulation. The transverse members **12** support the article **22** in its proper shape without sag and without exerting undue pressure.

Use of this invention in drying woollen garments can ensure quick drying without squeezing the garments thus reducing, matting, felting and shrinkage. And in the drying of skins, skins are dried more quickly and uniformly and with better retention of shape than with conventional methods. The quick drying reduces losses due to bacterial action.

I claim:

1. An article dryer comprising a pair of opposed resiliently flexible frames adapted to receive an article to be dried between them, a plurality of spaced thin resiliently flexible transverse members, secured to each of the frames, the opposed resiliently flexible transverse members of the frames being adapted to engage resiliently in wrap-around fashion the opposite sides of the article for holding it in position and for providing uniform support to it while permitting of its rapid drying due to ventilation upon both its sides, at least one outwardly projecting shoulder fast with at least one of the frames of the pair and adapted to support the other frame of the pair, spacing means engageable with the transverse members around the article periphery to maintain the frames in

closely spaced opposed face to face relation and the transverse members in wrap-around fashion on opposing sides of the article, and support means to support that frame, having the shoulder, in an upright position.

2. An article dryer comprising a pair of opposed resiliently flexible frames adapted to receive an article to be dried between them, a plurality of spaced thin resiliently flexible transverse members secured to each of the frames, the opposed resiliently flexible transverse members of the frames being adapted to engage resiliently in wrap-around fashion the opposite sides of the article for holding it in position and for providing uniform support to it while permitting of its rapid drying due to ventilation upon both its sides, a pair of laterally spaced outwardly projecting shoulders fast with at least one of the frames of the pair and adapted to support the other frame of the pair, spacing means engageable with the transverse members around the article periphery to maintain the frames in closely spaced opposed face to face relation and the transverse members in wrap-around fashion on opposing sides of the article, and support means to support in an upright position that frame having the shoulders and comprising suspension means which include at least one hook at one end of the frame having the shoulders, the hook having a shank end which is fast with the frame, there being provided a pair of resilient longitudinal members fast with the other frame and laterally spaced apart an amount corresponding to the lateral spacing between the pair of shoulders of the frame having the shoulders; whereby the opposed frames locate each other laterally in position by coaction between the shoulders of the one frame and the longitudinal members of the opposing frame when the frames are in opposed face to face coacting relationship.

3. An article dryer comprising a pair of opposed resiliently flexible frames adapted to receive an article to be dried between them, a plurality of spaced thin resiliently flexible transverse members secured to each of the frames, the opposed resiliently flexible transverse members of the frames being adapted to engage resiliently in wrap-around fashion the opposite sides of the article for holding it in position and for providing uniform support while permitting of its rapid drying due to ventilation upon both its sides, at least one outwardly projecting shoulder fast with at least one of the frames of the pair and adapted to support the other frame of the pair, support means to support in an upright position, that frame having the shoulders, and spacing means engageable with the transverse members around the article periphery to maintain the frames in closely spaced opposed face to face relation and the transverse members in wrap-around fashion on opposing sides of the article and comprising a plurality of spaced catches each having a plurality of spaced teeth and a plurality of spaces between the teeth and having an eye engaging with a transverse member of one of the frames, the opposing transverse member of the other one of the frames being receivable within any one of the spaces between the teeth to permit of variable spacing between the opposed transverse members.

4. An article dryer comprising a pair of opposed resiliently fllexible frames adapted to receive an article to be dried between them, a plurality of uniformly spaced resiliently flexible transverse members secured to each of the frames, the opposed resiliently flexible transverse members of the frames being adapted to engage resiliently in wrap-around fashion the opposite sides of the article for holding it in position and for providing uniform support to it while permitting of its rapid drying due to ventilation upon both its sides, at least one outwardly projecting shoulder fast with at least one of the frames of the pair and adapted to support the other frame of the pair, support means to support, in an upright position, that frame having the shoulder, and spacing means engageable with the transverse members around the article periphery to maintain the frames in closely spaced opposed face to face relation and the transverse members in wrap-around fashion on opposing sides of the article and comprising a plurality of resiliently flexible cylindrical plugs spaced around the article elevational contour, each plug having a plurality of axially spaced circumferential grooves, the thickness of a plug corresponding to the uniform spacing between the transverse members on the frames, the plug being receivable between a pair of adjacent transverse members of the one frame and between a pair of adjacent transverse members of the other frame and opposed to the first pair of adjacent transverse members, the plugs spanning the space between the opposed pair of transverse members and having grooves spaced a distance apart corresponding to the thickness of the article to be dried and engaging with the opposed pair of transverse members.

5. An article dryer comprising a pair of opposed resiliently flexible frames adapted to receive an article to be dried between them, a plurality of spaced thin resiliently flexible transverse members secured to each of the frames, the opposed resiliently flexible transverse members of the frames being adapted to engage resiliently in wrap-around fashion the opposite sides of the article for holding it in position and for providing uniform support to it while permitting of its rapid drying due to ventilation upon both its sides, a pair of laterally spaced outwardly projecting shoulders fast with at least one of the frames of the pair and adapted to support the other frame of the pair, spacing means engageable with the transverse members around the article periphery to maintain the frames in closely spaced opposed face to face relation and the transverse members in wrap-around fashion on opposing sides of the article, and support means to support in an upright position that frame having the shoulders and comprising suspension means which include a pair of hooks in laterally spaced relation at one end of the frame having the shoulders, each hook having a shank end fast with the frame, the shank end of each hook being shaped adjacent the end of the frame to form one of the outwardly projecting shoulders, there being provided a pair of resilient longitudinal members fast with the other frame and spaced laterally apart an amount corresponding to the lateral spacing between the pair of shoulders of the frame having the shoulders; whereby the opposed frames locate each other laterally in position by coaction between the shoulders of the one frame and the longitudinal members of the opposing frame when the frames are in opposed face to face coacting relationship.

6. An article dryer comprising a pair of identical opposed resiliently flexible frames adapted to receive an article to be dried between them, a plurality of spaced thin resiliently flexible transverse members secured to each of the frames, the opposed resiliently flexible transverse members of the frames being adapted to engage resiliently in wrap-around fashion the opposite sides of the article for holding it in position and for providing uniform support to it while permitting of its rapid drying due to ventilation upon both its sides, a pair of outwardly projecting shoulders fast with one of the frames of the pair and adapted to support the other frame of the pair, spacing means engageable with the transverse members around the article periphery to maintain the frames in closely spaced opposed face to face relation and the transverse members in wrap-around fashion on opposing sides of the article, and support means to support in an upright position that frame supporting the other frame and comprising suspension means which include a pair of hooks in laterally spaced relation at one end of each frame, each hook having a shank end secured to the frame, the shank end of each hook being shaped adjacent the end of the frame to form one of the outwardly projecting shoulders, there being provided a pair of resilient longitudinal members fast with each frame and spaced laterally apart an amount corresponding to the lateral spacing between the

pair of shoulders of the other frame; whereby the opposed frames locate each other laterally in position at opposite ends by coaction between the shoulders of the one frame and the longitudinal members of the opposing frame when the frames are in opposed coacting relationship, the shoulders and longitudinal members coacting top and bottom to locate the frames laterally in position top and bottom, and whereby the frame and spacing means combination together with an article clamped between them may be suspended by the hooks of the one frame, and whereby a drip tray may be suspended from the depending hooks of the other frame.

References Cited in the file of this patent

UNITED STATES PATENTS

815,061	Belloff et al.	Mar. 13, 1906
1,270,540	Morse	June 25, 1918
1,351,053	Macklem	Aug. 31, 1920
1,771,085	Hurff	July 22, 1930
2,466,284	Stinne	Apr. 5, 1949
2,521,100	Sublette	Sept. 5, 1950
2,577,397	Bailey	Dec. 4, 1951
2,664,899	Attias	Jan. 5, 1954
2,897,973	Sizemore	Aug. 4, 1959