July 11, 1944. J. S. THOMPSON 2,353,374

CLOTHES DRIER

Filed March 17, 1943 2 Sheets-Sheet 1

Fig. 1.

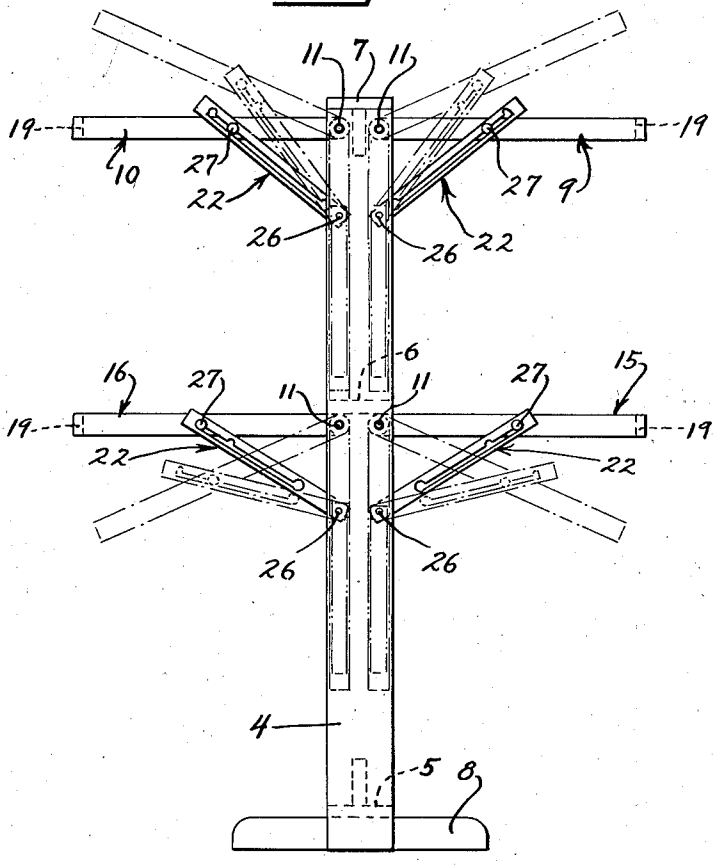
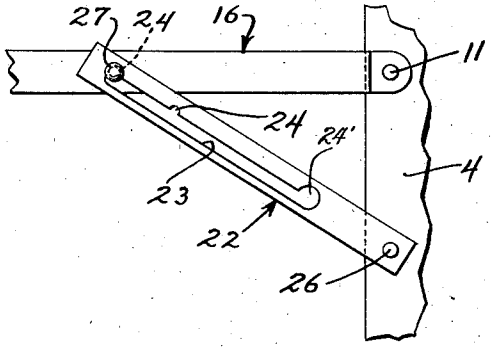


Fig. 4.



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Fig. 2.

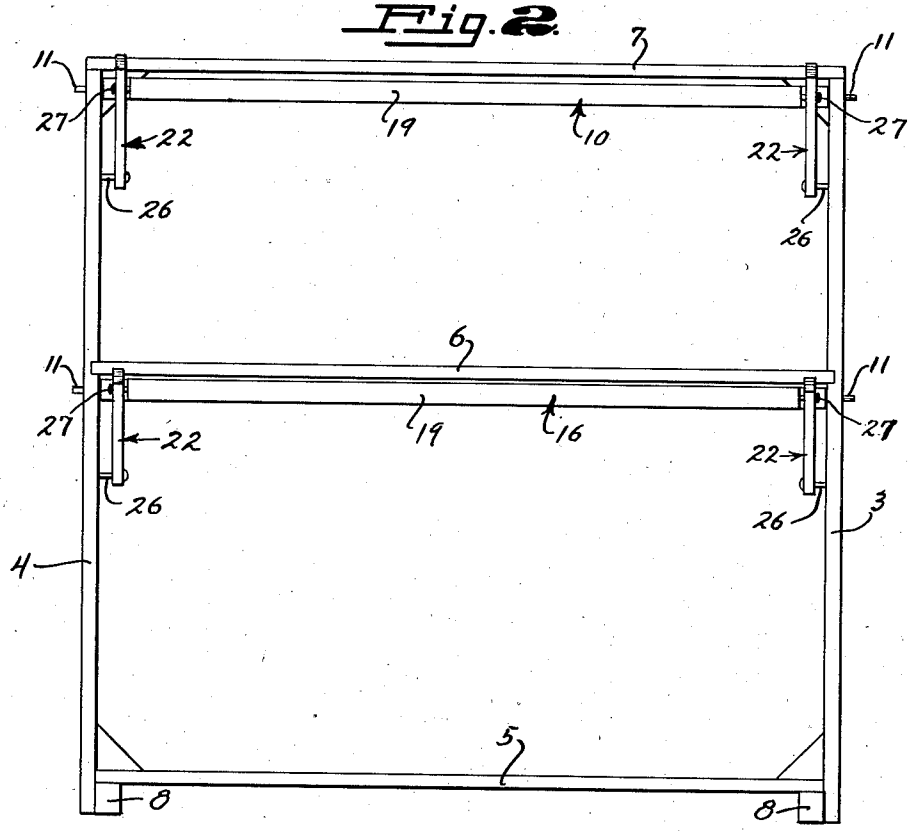
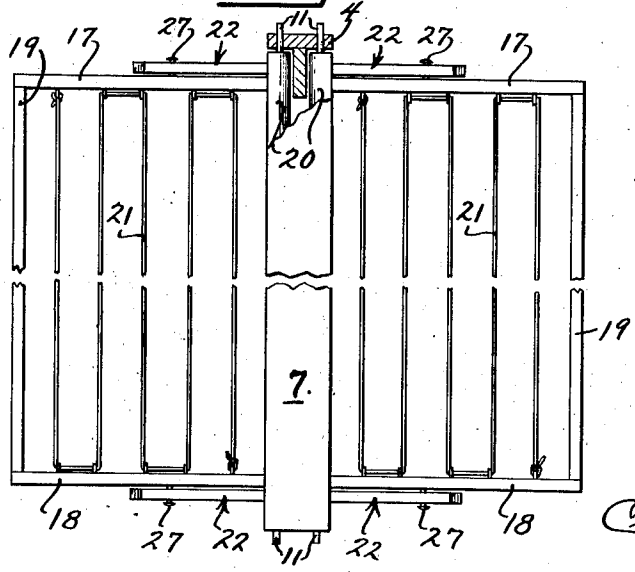


Fig. 3.



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CLOTHES DRIER

John S. Thompson, Palo Alto, Calif.

Application March 17, 1943, Serial No. 479,463

1 Claim. (Cl. 211—178)

This invention relates to clothes driers and, more particularly, to a novel, portable, foldable clothes drier.

So called portable clothes driers heretofore in use have been bulky in construction and, therefore, cumbersome to move about and difficult to store. Further, and among other things, heretofore known clothes driers do not afford the maximum hanging space for articles of clothing or other laundered articles, nor have heretofore known clothes driers of the so-called portable class been designed to utilize with maximum efficiency conventional clothespins.

Generally stated, the object of my invention is to provide a clothes drier which is not only easily portable but may be quickly folded to occupy a minimum space during storage and during transport. Other objects of my invention are to provide a clothes drier which can be easily and inexpensively manufactured and assembled from light materials; which is designed to be used with standard devices, such as clotheslines and clothespins; which affords a maximum accommodation for hanging clothes and other laundered articles in a minimum of space, which can be used and moved indoors or outdoors; which may be folded and moved with the laundered articles still in place on the drying racks; and which affords quick and thorough drying of laundered articles. Other objects and advantages of my invention will become apparent upon reference to the following description and drawings hereto annexed and made a part hereof.

With references to the drawings, in which similar characters of reference represent corresponding parts in the several views:

Fig. 1 is an end elevational view of my portable drier, showing the clothes racks in horizontal position in full line and in alternate positions in broken lines.

Fig. 2 is a side elevational view of my portable drier with the racks in horizontal position.

Fig. 3 is a top plan view of my drier, partially broken away and partially in section, showing the top racks in horizontal position.

Fig. 4 is a fragmentary view of my latch construction.

The portable drier comprises a frame composed of two vertical, upright support members 3 and 4, spaced apart from one another by horizontal brace members numbered, respectively, from bottom to top, 5, 6 and 7. The bottom horizontal brace member 5 has affixed thereto at the bottom opposite ends thereof base members 8 which are provided to maintain the frame in a vertical upright position.

A plurality of drying racks are pivotally mounted independently of one another between the vertical upright supports 3 and 4 in the manner now to be described.

A pair of top racks, indicated at 9 and 10, which are each generally rectangular in shape, are pivotally mounted between the upright supports 3 and 4 at two of their opposite corners, i. e., in an end piece thereof, by means of wooden pegs 11, loosely seated in bores, horizontally aligned with one another, provided in each of the upright support members 3 and 4 adjacent to the top thereof and aligned with similar bores provided in an end piece of the racks and into which the pegs 11 may be inserted. I prefer to have the pegs 11 project slightly outwardly beyond the upright support members in order to provide a fingerhold so that the pegs can be easily removed from the said bores. Further, I prefer to have the bores formed in the racks slightly smaller than the bores formed in the uprights. By this construction the pegs may be removed easily and thereby free the racks, as will shortly appear.

The top racks, because of their pivotal connection aforesaid, may be each swung independently of one another through an arc of approximately 120°, as illustrated herein, each on opposite sides of the support members. It is obvious that their arcs of travel may be greater or smaller, depending upon the precise construction utilized. When so mounted, the racks will hang vertically from their pivotal connections within the confines of the frame member.

The bottom racks 15 and 16, identical with the top racks, are mounted in the same manner as the top racks, except that they are positioned just below the middle brace member 6 and may each swing through an arc of approximately 90°, as herein illustrated. The said bottom racks may be swung downwardly to a vertical position within the confines of the frame. In the drawings, the wooden pivoted pegs used for the bottom racks are numbered 11 in conformity with the designation given the corresponding pivoted pegs employed for the top racks. It is obvious, of course, that the bottom racks may be swung through arcs greater than 90°, if it is found to be desirable or expedient.

The bottom and top racks which I have described as generally rectangular are each essentially a frame composed of side members 17 and 18 and end pieces 19 and 20. I preferably use clothesline 21 which is provided within the said rack frames in parallel rows. The said clothesline may be affixed to the inside surfaces of opposite side pieces of each rack and spaced from one another in any suitable manner. The method illustrated herein shows the use of a single length of clothesline for each rack frame which is laced through suitably spaced screw eyes. The use of clothesline in my novel structure enables the use of conventional clothespins to hang laundered articles therefrom. Hereto-

fore known devices generally utilized wooden rungs which prevented the use of clothespins and caused staining of the laundered articles by discoloration from the said wooden rungs.

I provide a latch, generally indicated at **22**, on each side of each rack in order to maintain adjustably the racks in a desired position. Each latch comprises a strip of wood or other material having a centrally disposed, longitudinal slot **23**. A plurality of offsets or notches **24** are provided in the slot. One end of each latch is pivotally connected, by means of a wooden peg **26**, or the like, to the inside surface of each upright. The pivotal point of connection of each latch to the upright is substantially in vertical alignment with the pivotal connection of the rack and upright to which a particular latch applies and below said rack connection.

A pin or detent **27** preferably having an enlarged head is provided on the side of each rack which is adapted to be slidably received within the slot **23** of the latch. The offset portions provided in the said slots in the said latches may be arranged as desired and serve the purpose of engaging the pins **27** when relative movement between the latch and rack bring a notch and pin into registry. An enlarged opening **24'** is provided near the pivotally mounted end of said latch, the purpose of which will be described later. It will be seen that when the rack is lifted, the pin is caused to drop into a notch and engage therewith, thus enabling the operator to position firmly any particular rack in a predetermined elevated position.

In order to provide a maximum of drying capacity, I generally prefer to hang any laundered articles, such as sheets, or the like, from the top racks in elevated position, such as illustrated in the broken line rack positions of Fig. 1. Further, while loading the drier I prefer to raise the upper racks and lower the bottom racks to the positions shown in broken lines in Fig. 1, in order to allow a maximum space, between the racks, in which to work.

It is obvious, of course, that the top pair of racks may be used alone or the bottom racks alone. Likewise, when only a few articles are to be dried and it is desirable to limit the area occupied by the drier, only the racks on one side of the apparatus need be employed and those on the opposite side may remain in a vertically depending inoperative position.

In order to provide a simple means for dismounting the various mounted racks from the upright supporting members whenever it is expedient to do so, as in the case of repair or replacement, I preferably make the pivotal pegs **11** of the racks removable from both the racks and the vertical supports in which they are seated, as has been pointed out above. By simply grasping the fingerholds of the projecting wooden pegs the said pegs may be withdrawn, thus releasing the racks.

In order to detach the racks completely from the apparatus, it is only necessary to move the racks so that the pins **27** may be disengaged from the slots in the said latches through the enlarged offsets **24'** provided therein.

It will be noted that by my special construction of the latches it is only necessary to lift the various drying racks by grasping them at any point in order to cause the notches and the latches to engage automatically the pins in the racks at a desired position of elevation. The racks will remain rigidly in such position until it is desired to change the position by means of a slight upward movement of the latches on both sides of the racks, which, obviously, disengages a pin **27** from an offset in which it is seated and allows the pin to slide along the slot **23**. While the drawings shown three offsets, it is obvious that any number may be utilized in order to provide any number of varying positions of elevation for the drying racks.

Because of the portability of my drier, I contemplate that it may be placed directly over or in the near proximity of a conventional floor heater or in the direct sunlight adjacent to a window, depending entirely upon the circumstances of use. However, as a further aid to drying articles of laundry suspended from the said drying racks, I propose to hang one or more curtains, such as sheets, from the outside margins of the top drying racks in order to encompass entirely the apparatus and the laundered materials therewithin, thus confining the heat when an artificial heating element is employed. I have found, in practice, that a simple heating coil placed on the bottom brace member of the frame of the drier with the heat reflected upwardly is sufficient to hasten appreciably the drying effect.

While I have shown in the drawings, to which I have made specific reference, only the preferred form of mounting the drying racks, in some instances it may be desirable to mount the said racks on pivots, centrally or otherwise located in the uprights; it being only necessary to so construct the apparatus that the racks are capable of being tilted from a horizontal position either upwardly or downwardly in order to make the clotheslines provided therein readily accessible.

While the invention has been illustrated and described in certain detail of embodiment for illustrative purposes, it is not intended that the invention be limited thereto but that modifications and changes in details of construction and arrangement of parts may be incorporated within the spirit and scope of the appended claim.

I claim:

In a clothes drier or the like, the combination of a frame member comprising a pair of spaced vertical upright support members, brace members and a base connected to said uprights to maintain said frame in vertical position, a plurality of pairs of removably independently pivotally mounted drying racks mounted between said upright members, said racks comprising rectangular frame members having spaced parallel rows of clothesline laced and secured therein, and independent latching means for each of said racks adapted to hold a rack independently of other racks in a plurality of predetermined position of elevation, said latching means including two independently operable latch members for each rack, each of said latch members pivotally connected to an upright member and slidably connected to a said rack member so that said latches are in operative contact with said racks when said racks are elevated or folded, the pivots of said racks and latch members being disposed within the margins of said upright member and in vertical alignment with each other, whereby said racks and latches may be folded within the confines of said frame.

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