April 9, 1957 N. L. WARINO 2,787,841

PORTABLE CLOTHES DRYER

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FIG. 1

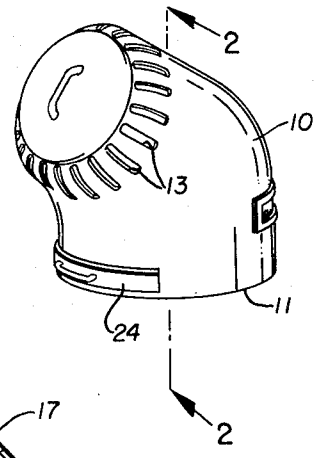


FIG. 2

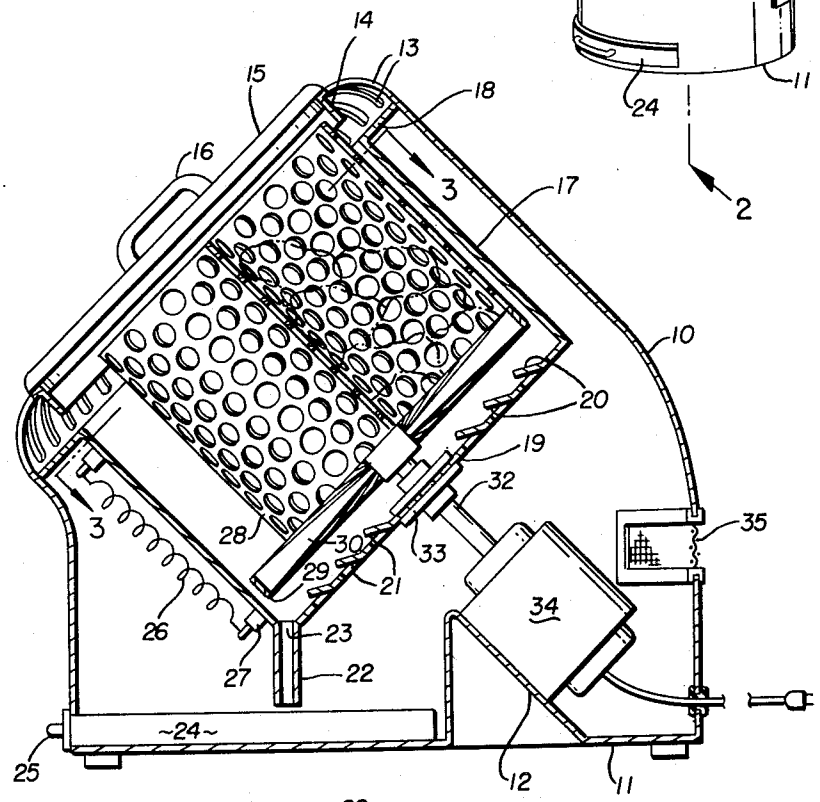
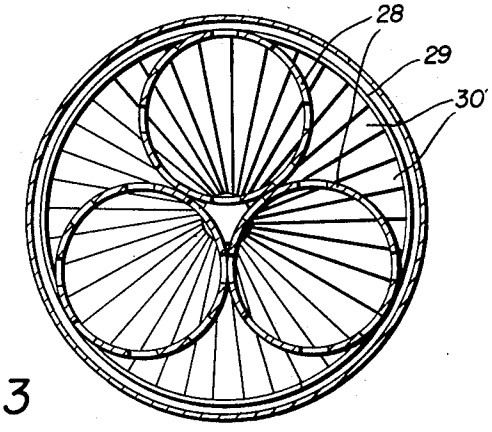


FIG. 3



INVENTOR.
NICHOLAS L. WARINO

BY W. B. Hayman

ATTORNEY

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PORTABLE CLOTHES DRYER

Nicholas L. Warino, Niles, Ohio

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5 Claims. (Cl. 34—58)

This invention relates to a clothes dryer and more particularly to a small portable device that can be used on a table or counter top for drying a few items of laundry.

The principal object of the invention is the provision of a small portable device for drying wet laundry.

A further object of the invention is the provision of a laundry dryer incorporating means for holding articles to be dried in spaced relation to one another.

A still further object of the invention is the provision of a laundry dryer for wet laundry incorporating means for moving air currents through laundry and at the same time revolving the laundry in a centrifugal manner.

A still further object of the invention is the provision of a laundry dryer which is usable as an extractor and dryer and has provision for receiving water from laundry positioned therein.

The small portable dryer disclosed herein is adapted to be positioned on a table or counter top and to receive a few articles of wet laundry and to spin the same in separate containers so as to extract the moisture therefrom by centrifugal force and simultaneously and successfully dry the laundry by introducing air currents therethrough and applying radiant heat to the same. The device is simple in form and construction and capable of being economically manufactured and used.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being the intention to cover all changes and modifications of the example of the invention herein chosen for purposes of the disclosure, which do not constitute departures from the function and scope of the invention.

The invention is illustrated in the accompanying drawing, wherein:

Figure 1 is a perspective view of the laundry dryer.

Figure 2 is an enlarged section taken on line 2—2 of Figure 1.

Figure 3 is a section taken on line 3—3 of Figure 2.

By referring to the drawings and Figures 1 and 2 in particular it will be seen that the dryer comprises an outer housing **10**, the base portion of which is preferably circular and provided with a flat bottom **11**, a portion of which is inclined upwardly and inwardly at an angle, as indicated by the numeral **12**.

The upper half of the outer housing **10** is disposed angularly with respect to the lower half and is of reduced diameter as compared therewith. A plurality of radially positioned circumferentially spaced vent openings **13** are disposed about the upper outer end of the outer housing **10** and defining an inwardly flanged opening **14** which receives a closure **15** which in turn is provided with a handle **16**.

An inner housing **17**, generally cylindrical in shape and having an annular flange **18** positioned outwardly from its uppermost end, is disposed within the outer

housing **10** with the flange **18** thereof secured to the outer housing **10** immediately below the plurality of vents **13**, heretofore referred to.

Additional support means for the inner housing **17** may be provided if desired. The innermost end wall **19** of the inner housing **17** is preferably provided with a plurality of inwardly turned louvers **20** paralleling a plurality of openings **21** and a drain pipe **22** communicates with a drain opening **23** in the lowermost corner of the inner housing **17** so that water extracted from laundry will be guided by the inner housing **17**, including the louvers **20** therein, to the drain pipe **22** through which it will drain into a receptacle **24**.

The front of the receptacle **24** extends through an opening in the outer housing **10** and is provided with a handle **25** so that it can be removed and emptied.

Electrical heating elements **26** are positioned on suitable insulating supports **27** on the exterior of the inner housing **17** so that they will heat the inner housing **17** which in turn will direct radiant heat toward the laundry which is positioned within the same in a plurality of perforated cylindrical baskets **28** secured to one another in an annular pattern and disposed on the upper surface of a disc **29** which has a plurality of fan blades **30** formed radially therein.

The disc **29** carrying the perforated cylindrical baskets **28** has a hub **31** which is mounted on a shaft **32** which in turn is journaled on a bearing **33** in the inner end wall **19** of the inner housing **17**, the shaft **32** being connected with means for rotating the same which may comprise an integral electrical motor and gear reduction unit **34** which is conveniently mounted on the inclined portion **12** of the bottom **11** of the outer housing **10**.

A secondary screened vent **35** is disposed in the outer housing **10** adjacent the motor **34** so that air circulation may take place through the interior of the housing **10**, the interior of the inner housing **17** and the interior of the plurality of perforated cylindrical baskets **28**.

It will be observed that the items of laundry are disposed directly in the perforated cylindrical baskets **28** which are mounted with their axes on a forty-five inclination with respect to vertical with the bottoms of the cylindrical baskets **28** opening directly against the fan blades **30** formed in the disc **29** so that air circulation through the individual pieces of laundry in the several baskets **28** is assured to the end that rapid drying of the same may be had.

It will thus be seen that the small portable laundry dryer meets the several objects of the invention.

Having thus described my invention, what I claim is:

1. In a portable laundry dryer, a plurality of perforated cylindrical baskets grouped together, a disc having a plurality of fan blades formed radially therein closing the inner ends of said plurality of baskets, a shaft supporting said disc and baskets, and means for rotating said shaft, and a housing about said disc and baskets, and means for heating the said housing to supply radiant heat to said baskets.

2. A portable laundry dryer as set forth in claim 1 wherein an outer housing having vent openings therein is disposed about said first mentioned housing, said outer housing having an access opening therein in registry with the opposite ends of said cylindrical baskets.

3. A portable laundry dryer as set forth in claim 1 wherein the first shaft is mounted on a forty-five degree inclination from vertical together with said baskets and disc, and said housing is similarly mounted thereabout and provided with a drain opening at its lowermost point.

4. A portable laundry dryer as set forth in claim 3 wherein the housing is provided with vent openings having louvers thereover.

5. A portable dryer comprising an outer housing hav-

ing a bottom including an inwardly and upwardly angled portion, a motor mounted on said inwardly and upwardly angled portion, an inner housing disposed within said outer housing in spaced relation thereto, said inner housing and outer housing having vent openings therein, a portion of said inner housing separating the vent openings in said outer housing, a drive shaft on said motor extending upwardly through said outer and inner housings on a forty-five degree inclination with respect to vertical, a disc secured to said shaft within said inner housing and adjacent an inner end thereof, said disc having a plurality of radially extending separated fan blades formed therein, a plurality of perforated baskets disposed on said disc about a common axis defining a longitudinal extension of said shaft, an access opening in said outer housing in registry with the opposite ends of

said baskets, a closure for said access opening, and heating means disposed around and about said inner housing, said inner housing having a drain opening formed in a low point therein, and a liquid receptacle in said outer housing on the bottom thereof and beneath said drain opening.

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