

Dec. 18, 1956

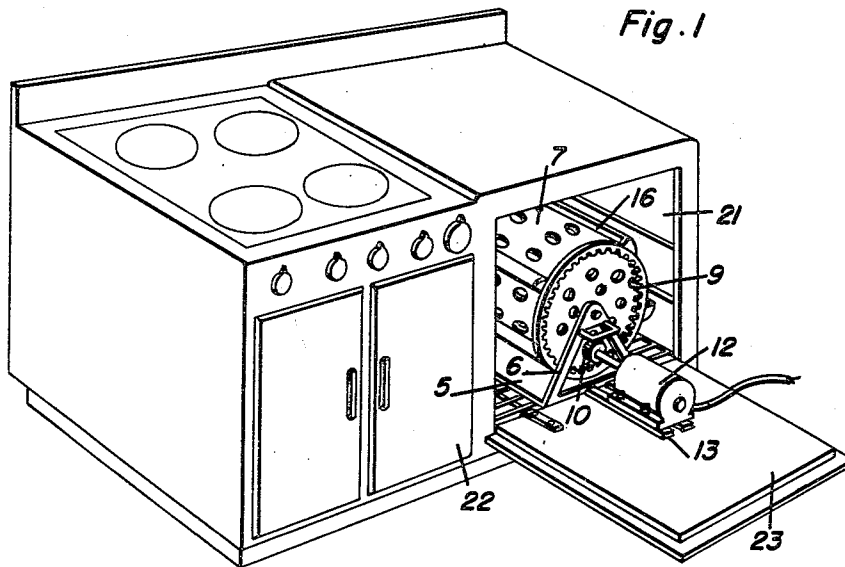
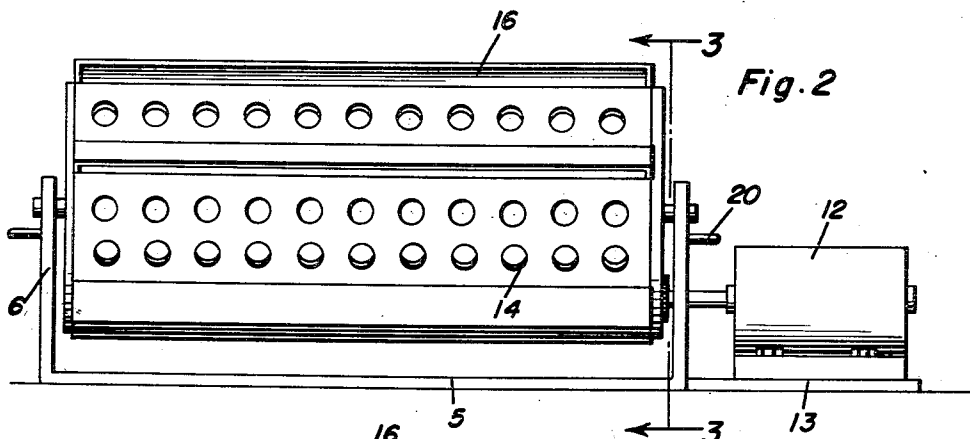
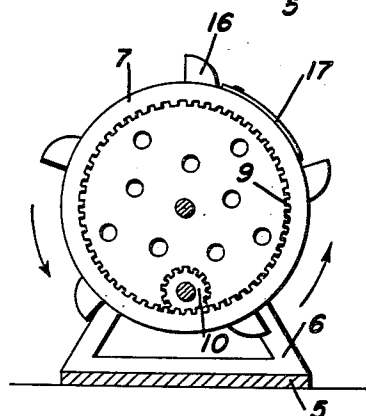
W. E. WORTH

2,774,148

PORTABLE CLOTHES DRYER

Filed June 3, 1954

2 Sheets-Sheet 1



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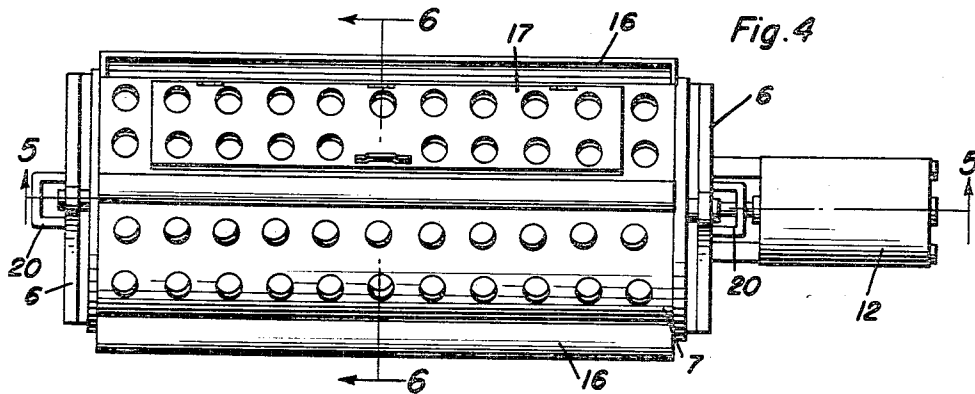
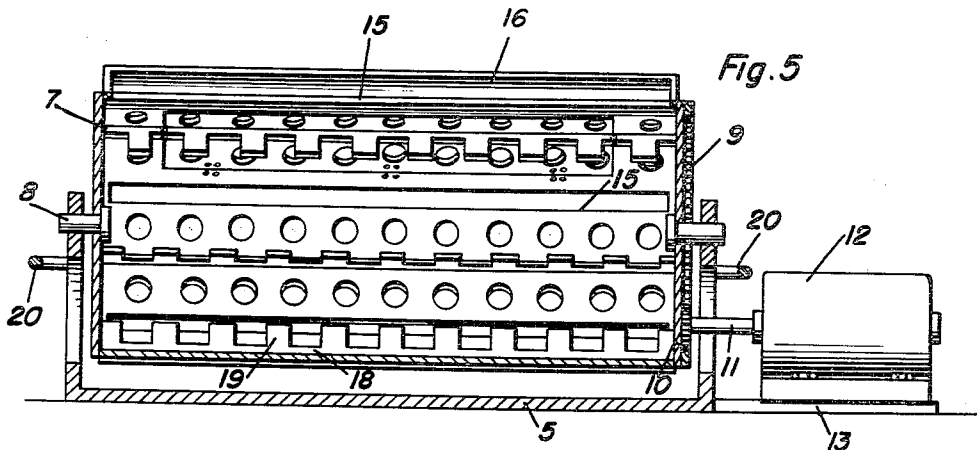
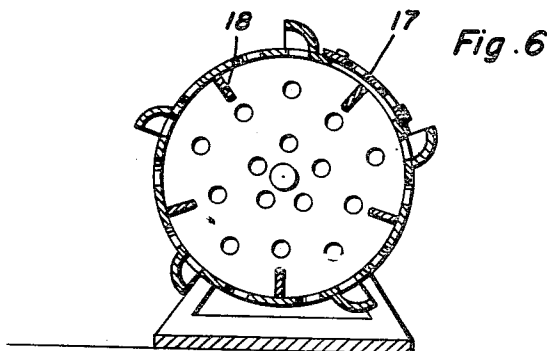
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W. E. WORTH
PORTABLE CLOTHES DRYER

2,774,148

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2 Sheets-Sheet 2



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2,774,148

PORTABLE CLOTHES DRYER

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Application June 3, 1954, Serial No. 434,129

1 Claim. (Cl. 34—133)

The present invention relates to new and useful improvements in clothes driers and more particularly to a portable dryer of this character adapted for placing in the oven of a cooking stove or range, or other heated enclosure, to utilize the heat therein for drying clothes placed in the dryer.

An important object of invention is to provide a portable rotary clothes dryer by means of which the clothes are agitated during the drying action.

Another object of invention is to provide a rotary drum mounted on a portable base with an electric motor for rotating the drum and constructing the drum with air scoops to pull heated air into the drum.

A still further object is to provide a device of this character of simple and practical construction, which is efficient and reliable in operation, relatively inexpensive to manufacture and otherwise well adapted for the purpose for which the same is intended.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a perspective view showing the drier placed in the oven of a cooking range;

Figure 2 is an enlarged side elevational view of the drier;

Figure 3 is a transverse sectional view taken on the line 3—3 of Figure 2;

Figure 4 is a top plan view;

Figure 5 is a longitudinal sectional view taken on a line 5—5 of Figure 4; and

Figure 6 is a transverse sectional view taken on a line 6—6 of Figure 4.

Referring now to the drawings in detail wherein for the purpose of illustration I have disclosed a preferred embodiment of invention, the numeral 5 designates a base having uprights 6 at each end thereof and in which a clothes drying drum 7 is rotatably supported by means of trunnions 8 projecting outwardly at each end portion of the drum.

One end of the drum is formed with an internal ring gear 9 with which a pinion gear 10 is engaged and which is secured to the outer end of a shaft 11 of an electric motor 12 which is supported on arms 13 projecting longitudinally outwardly at the adjacent end of the base 5. The arms 12 are welded or otherwise suitably secured to the base.

Openings 14 are formed in the drum to circulate air therein and a plurality of longitudinally extending slots

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15 are also formed in the drum adjacent to which arcuate air scoops 16 are supported and which are also positioned longitudinally on the outer surface of the drum.

A door 17 is hingedly connected to the drum for placing clothes therein and a plurality of agitator ribs 18 are suitably secured in a longitudinal position internally of the drum and are formed with radially inwardly projecting teeth or cleats 19 preferably arranged in staggered relation with respect to the teeth or cleats of an adjacent rib to effectively cause the agitation or tumbling of the clothes during the rotation of the drum.

Each of the uprights 6 on the base 5 is formed with a handle 20 to facilitate the carrying thereof and for the convenient handling of the drier for placing the same in the oven 21 of a cooking range 22 of a conventional type.

In the operation of the device after the drum 7 has been loaded with clothes to be dried the drum is placed in the oven 21 with the motor 12 at the outer end of the drum and which may rest on the open door 23 of the oven. The motor 12 is then plugged into a suitable electric circuit for rotating the drum whereupon the air scoops 16 will pull air into the drum through the longitudinal slots 15 therein to effectively dry the clothes and the air is permitted to escape from the drum through the openings 14.

As shown in Figures 3 and 6 of the drawings, the openings may be formed in the ends of the drum as well as in the side walls thereof.

From the foregoing, the construction and operation of the device will be readily understood and further explanation is believed to be unnecessary. However, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the appended claim.

What is claimed as new is as follows:

In combination with a heating chamber having a door swingable into an open horizontal position in front of the chamber, of a clothes dryer removably positioned in the chamber and comprising a unitary structure including a base having a pair of uprights, a perforated clothes drum rotatably supported on the uprights, a ring gear at one end of the drum, an extension coplanar with the base and resting on the open door of the chamber, a motor supported on the extension and having a pinion in driving engagement with the ring gear, and a longitudinally extending air scoop on the outer surface of the drum, said drum having an opening intermediately adjacent the air scooping side of said air scoop and through which air is deflected to the interior of the drum by the air scoop.

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