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1,751,841

CLOTHES DRIER

Filed Feb. 23, 1929

Fig. 1

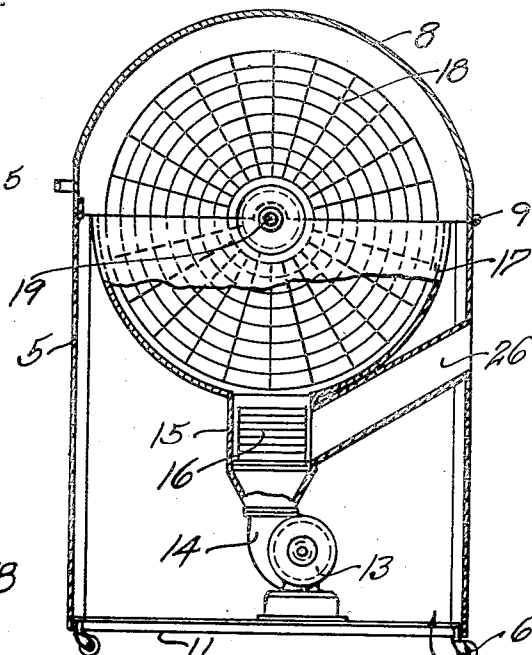
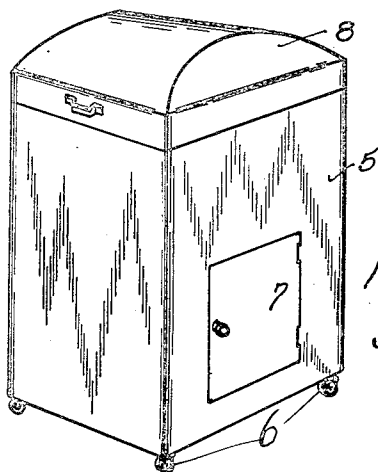


Fig. 2

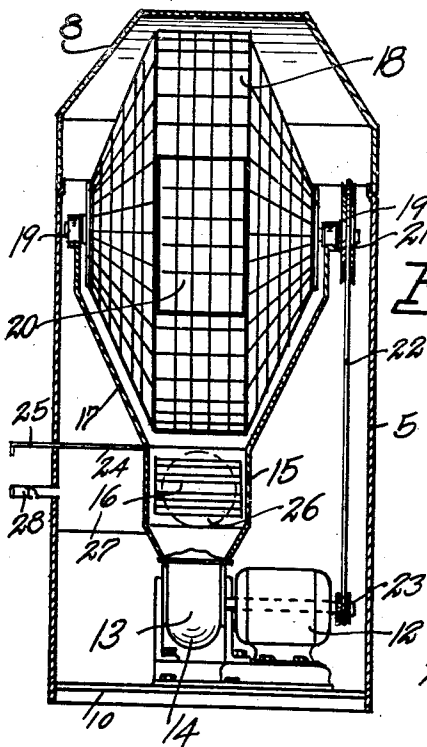


Fig. 3

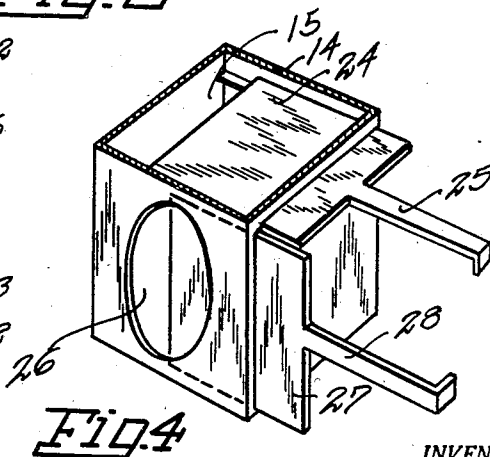


Fig. 4

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CLOTHES DRIER

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My invention relates to clothes driers and certain objects of the invention are to provide a clothes drier of simple construction and comprising a rotary basket mounted within a housing and which is electrically driven by a motor that also supplies power for a rotary fan and current for a heating element whereby the air, driven from the fan through a casing wherein the heating element is installed and thence to the clothes within the basket, supplies forced and heated air in addition to the centrifugal force of the basket for rapidly and effectively drying the clothes therein. Further objects are to provide novel damper arrangements whereby the device may be used for heating the room or other place where it is used.

With the above and other objects in view which will appear as the description proceeds, the invention consists of the novel construction, adaptation, combination and arrangement of parts hereinafter described and claimed. These objects are accomplished by devices illustrated in the accompanying drawings; wherein:—

Figure 1 is a view in perspective showing the exterior housing of the clothes drier;

Fig. 2 is a view partly in transverse vertical section and partly in elevation of the device;

Fig. 3 is a view partly in longitudinal vertical section and partly in elevation of the same; and

Fig. 4 is a detail view in perspective of the damper arrangement.

Referring to the drawings throughout which like reference numerals designate like parts, the numeral 5 indicates the housing of the device that may be mounted on castors 6 and provided with a door 7 for entry of the hands in attending to the mechanism therein. The numeral 8 designates the top that is hinged to said housing at 9 and which may be opened for the purpose of placing the clothes therein as more fully hereinafter set forth.

The bottom of the housing 5 is open as shown at 10 with the exception of cross members 11 that serve as supports for a motor 12 and a fan 13 fixed to the shaft of said

motor. Said fan is of the usual rotary type and is enclosed by a casing 14 which extends upwardly to form a chamber 15 wherein a heating element 16 is installed. Said heating element is of the well known construction and comprises resistance coils that are in circuit with the motor conduits which thus supply current for said element as will be understood.

From the chamber 15 the casing 14 extends upwardly and is expanded to form another compartment 17 adapted to receive a rotary basket 18. Said compartment envelops the lower half of the basket whose bearings 19 rest on its upper edges as shown in Fig. 3. Said basket is made of wire or other mesh and is provided with a slidable door 20 which is opened together with the top 8 when placing clothes therein. A pulley 21 is fixed to one of the bearings 19 and a belt 22 extends downwardly therefrom to another pulley 23 fixed to the shaft of the motor 12 thereby furnishing means for rotary motion of the basket.

As a means for regulating the draft of air in its passage from the fan 13 upwardly through the casing 14 to the basket 18, I have provided a damper 24 that is slidably mounted in the top of the chamber 15 and is provided with a handle 25 extending exteriorly of the housing 5 whereby said damper may be moved back and forth to control the passage of air through said casing as will be understood. As a means for supplying hot air to the room in which the device is used I have provided a conduit 26 extending from the chamber 15 through a wall of the housing 5. Another damper 27 slidably mounted in one side of the chamber 15 and provided with a handle 28 extending exteriorly of the housing provides means whereby said conduit may be opened and closed as desired.

In the use of my device the clothes, after going through a wringer, are placed in the basket 18 and the motor 12 is set in motion. The motor performs the following threefold function; first in rotating the basket whereby the centrifugal force set up will dry the clothes; second in rotating the fan 13 whereby forced air is provided for additionally dry-

ing the clothes; and third in supplying current for the heating element 16 whereby the forced air is heated and thus serves as a still further means for drying the clothes. It
5 will now be obvious that I have provided a device that is very effective in operation and simple in construction. In drying clothes the damper 24 is usually wide open and the damper 27 is entirely closed. For using the
10 device as a heater said dampers are placed in the reverse positions as will be understood.

Having thus described my invention, it being understood that minor changes may be resorted to in its structural details without
15 departing from its scope and spirit, what I claim and desire to secure by Letters Patent of the United States is:—

A clothes drier comprising a housing having an open bottom, a hinged top, a rotary
20 basket within top portion of the housing having a door, a motor in the bottom of the housing arranged to rotate the basket, a fan actuated by said motor disposed vertically below the basket, a casing extending from said fan
25 to envelop a portion of the gasket, a heating element within said casing actuated by the current for said motor, a damper for said casing, a conduit extending from said casing through said housing, and a damper for said
30 conduit.

In testimony whereof I affix my signature.
CLAUDE A. PICKENS.

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