

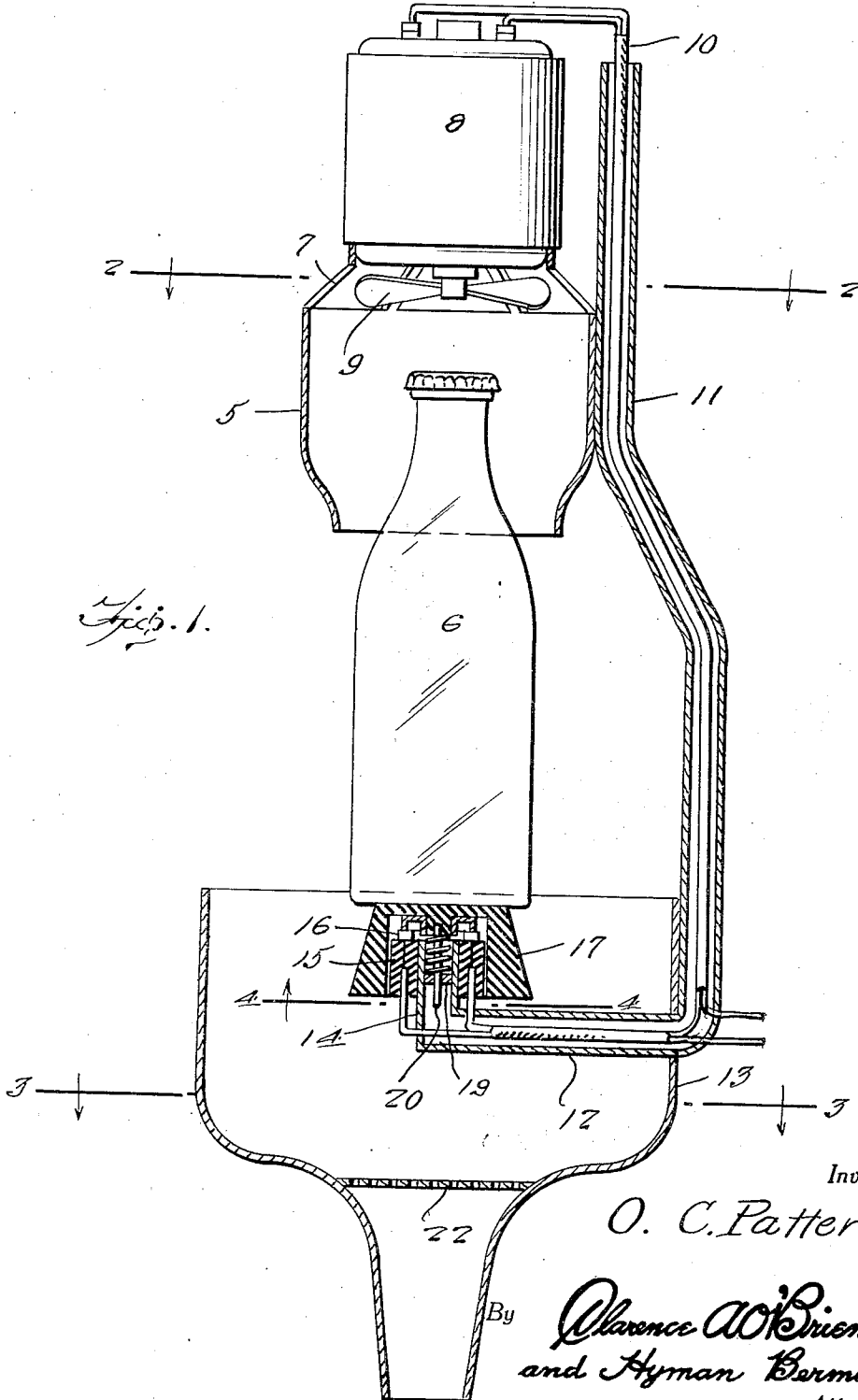
July 9, 1940.

O. C. PATTERSON
BOTTLE DRYING APPARATUS

2,207,331

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2 Sheets-Sheet 1



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Fig. 2.

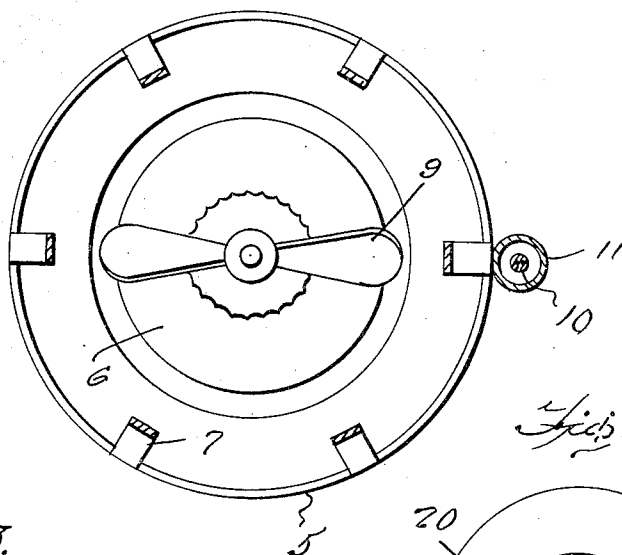


Fig. 3.

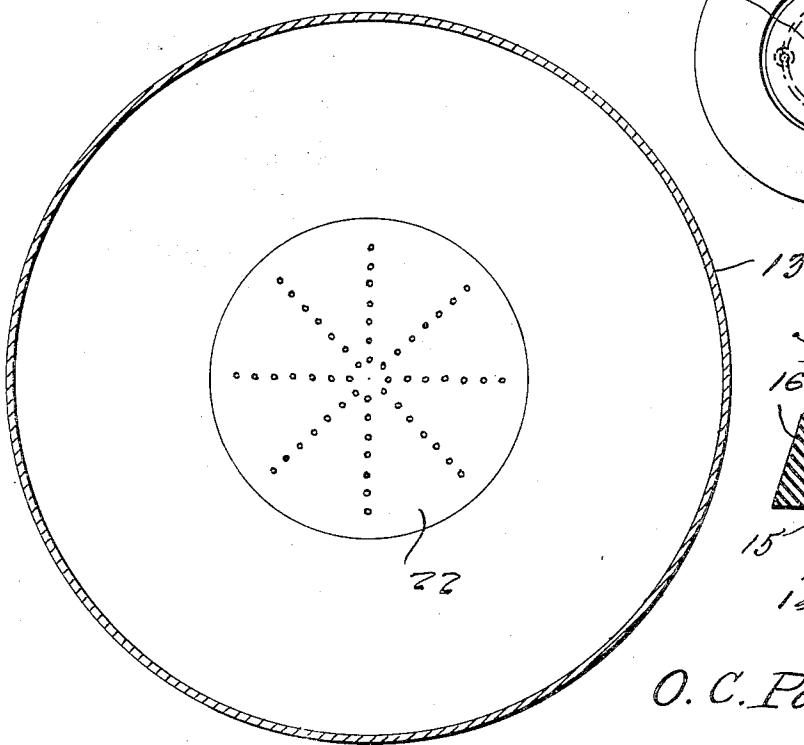


Fig. 4.

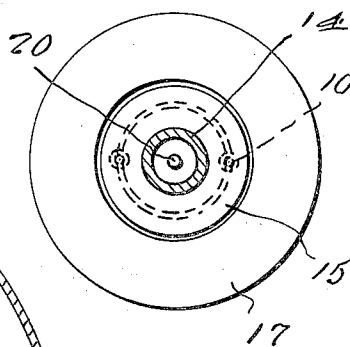
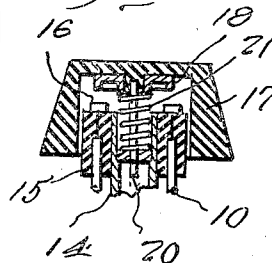


Fig. 5.



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BOTTLE DRYING APPARATUS

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3 Claims. (Cl. 34—26)

The present invention relates to apparatus for drying bottles of soft drinks and other beverages which have been cooled by placing the same directly on ice and has for its primary object to provide an electrically operated fan positioned so as to blow a draft of air against the bottles for removing the moisture therefrom.

A further object of the invention is to provide a switch device for the electric motor of the fan adapted for closing the circuit leading to the motor by the weight of the bottles placed on the switch.

A still further object is to provide an apparatus of this character of simple and practical construction, which is efficient and reliable in performance, relatively inexpensive to manufacture, and otherwise well adapted for the purposes for which the same is intended.

Other objects and advantages reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming part hereof wherein like numerals refer to like parts throughout and in which:

Figure 1 is a vertical sectional view.

Figure 2 is a transverse sectional view taken substantially on a line 2—2 of Fig. 1.

Fig. 3 is a similar view taken substantially on the line 3—3 of Fig. 1.

Fig. 4 is a sectional view through the support for the switch taken substantially on the line 4—4 of Fig. 1, and

Fig. 5 is a vertical sectional view through the switch.

Referring now to the drawings in detail, wherein for the purpose of illustration, I have disclosed a preferred embodiment of the invention the numeral 5 designates a hood open at its bottom and within which the neck of the bottle 6 is adapted for insertion in spaced relation from the walls of the hood, the upper end of the hood being likewise open and having a plurality of supports 7 rising therefrom for supporting an electric motor 8 above the hood. The shaft of the motor is disposed vertically and on the lower end of the shaft is the fan blade 9 which is positioned in the region of the open top of the hood for blowing air downwardly over the surface of the bottle.

The circuit wires connected to the motor are indicated at 10 and extend downwardly through a vertical tubular support or pipe 11, to which the hood is secured, the lower end of the support extending horizontally inwardly through the walls of a funnel 13, the support being secured to

said funnel. The inner end of the support terminates in an upright extension 14 and to which is secured an external rubber or insulation ring 15 and through which the circuit wires 10 extend and terminate in contacts 16 disposed on top of the ring.

Slidably mounted on the ring 15 is a rubber or other insulation cap 17, to the under side of which is secured an annular contact member 18 adapted to bridge the pair of contacts 16. To the inside of the upstanding extension 14 is secured a disk 19 through which a stem 20 is slidably supported, the upper end of the stem being secured to the under side of the cap 17 and mounted on the stem is an expansible coil spring 21 to yieldably urge the cap upwardly with the contacts out of engagement.

The top of the cap is flat and thus forms a support for the bottle 6 which, when placed on the cap closes the circuit between the contacts 18 and 16 and thus energizes the motor 8. Obviously the motor is connected to a suitable source of power.

Within the funnel 13 is fitted a screen 22 and the moisture removed from the bottle by the fan may be drained through the funnel into any suitable receptacle or other drainage system.

From the foregoing it will be apparent that the moisture which clings to the bottle 6 when the same is removed from an ice box will be blown by the bottle upon the energization of the motor 8 and the moisture will drain into the funnel 13 for suitable disposal.

It is believed that the details of construction and manner of use of the device will be readily understood from the foregoing without further detailed explanation.

Having thus described the invention, what I claim is:

1. In a bottle drying apparatus, a hood adapted for receiving the neck of the bottle, said hood having converging walls at its bottle receiving end, an electrically operated blower positioned at the other end of the hood for directing air against the bottle, and a switch adjacent the hood and having a circuit connection with the blower and operable through the medium of a bottle placed upon the switch to close the same, the space between the hood and the switch being bridged by the bottle when positioned on the switch.

2. A bottle drier comprising in combination, a hood adapted to receive one end of a bottle, an electrically operated blower in the hood for blowing air against the bottle, a receptacle in the path of the air for receiving moisture blown from the

bottle and a switch for the blower positioned in the receptacle and adapted for circuit closing movement through the medium of a bottle engaging the switch.

- 5 3. A bottle drier comprising an upstanding support, a hood secured to the upper end of the support, an electric fan mounted in the top of the hood for blowing air downwardly through the

hood, a funnel secured to the lower portion of the support, an upstanding extension on the lower end of the support and positioned in the funnel, and a switch mounted on said extension having circuit connection with the fan, said switch being arranged for circuit closing movement by the weight of a bottle placed thereon. 5

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