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W. C. GLOVER

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DEODORIZER AND DRIER

Filed Oct. 21, 1927

Fig. 1.

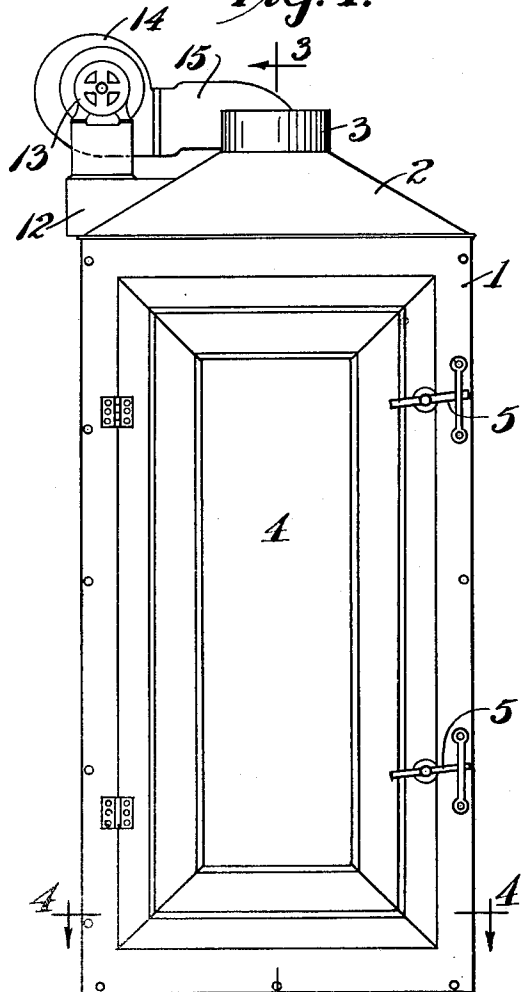


Fig. 2.

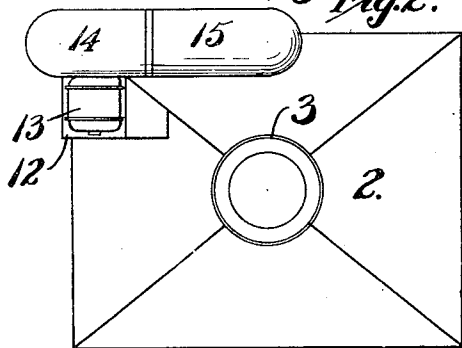


Fig. 3.

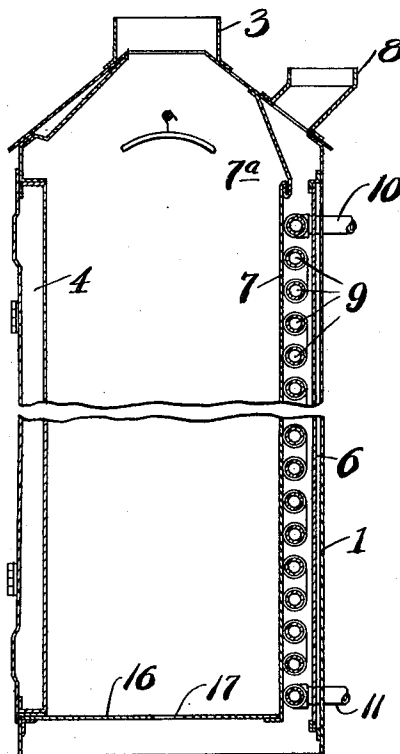
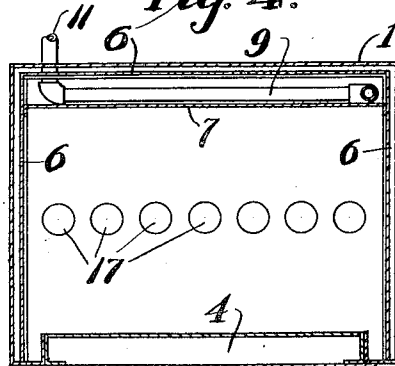


Fig. 4.



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DEODORIZER AND DRIER

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This invention relates to improvements in clothes driers, and refers more particularly to a drier construction used by dry cleaners to deodorize garments by passing heated air through garments.

The present methods of drying clothes consist principally in placing the garments in a drying room and passing heated air through the room, or placing the garments in a tumbler and forcing heated dry air through the tumbler while the clothes are turned over and over. The latter method considerably reduces the shrinkage as compared with the drying room method, as they are damaged in the rotation of the tumbler and buttons often torn or lost from the clothes.

The present drier consists of a cabinet like container in which the garments are hung and heated air passed upwardly through the clothes.

In drying the clothes in this manner the liquid or a dry cleaning fluid gravitates to the lower portions of the garments, and due to the fact that the heated air is introduced from below, the hottest air comes in contact with the wettest portions of the garments.

Furthermore the air introduced centrally of the cabinet has the effect of blooming the garments and prevents to a great extent the tendency to shrink.

Referring to the drawings:

Fig. 1 shows a front elevational view of the drier;

Fig. 2 is a top view:

Fig. 3 is a central sectional view taken along the line 3—3 in Fig. 1, and

Fig. 4 is a sectional view taken along the line 4—4 in Fig. 1, looking in the direction of the arrows.

Referring to the drawings, the casing or cabinet 1 has a tapered or pyramid shaped top portion 2, which terminates in a cylindrical discharge pipe 3. The air tight hinged door 4 swings on the front of the cabinet and permits the worker to easily place within the cabinet or remove from the cabinet garments to be dried. The door is held in an air tight latched position by means of latch members 5, 5.

The interior of the cabinet or drier is equipped with a double wall arrangement, shown at 6, with a dead air space between the outer and inner walls, which serves as an insulating space. The door 4 is also double walled, as shown in Fig. 4.

In the rear of the drier is a false back 7, which is extended to the interior of the top by means of a plate 7^a, so that the space behind the false back is connected to the inlet pipe 8. In the space behind the false back is a steam coil 9, equipped with a steam inlet pipe 10, and a steam outlet pipe 11. On one side of the top is a motor stand 12, upon which is mounted a motor 13, which drives the blower fan positioned within the housing shown at 14. The discharge from the motor is connected by a pipe 15 with the inlet 8.

In the bottom of the drier is a false bottom 16, perforated by centrally positioned apertures or holes 17. In place of the single row of holes a single slot extending across the false bottom or holes of any suitable configuration in the false bottom may be used to permit the air to flow upwardly from the space below the false bottom through the garments in the cabinet, and out through the discharge pipe 3.

In operation garments which have been cleaned and are to be dried, are placed on hangers in the cabinet. These hangers are suspended by any type of rack which will hold the garments centrally in the drier. Steam is circulated through the coil 9 and the fan is started which introduces fresh air through the inlet 8 and forces it over the heated pipe coil 9. During this circulation the air passes in the space between the false back 7 which is connected to the air space below the false bottom 16.

The heated air is discharged upwardly through the hole 17, blowing through the garments which are hung in the drier and the air, more or less saturated with the cleaning fluid which has been absorbed or taken up by the heated air from the garments, is discharged through the top discharge line 3.

As the garments hang in a vertical position the cleaning fluid runs to the bottom of the

garments and is met in the bottom of the drier by the air which is at the highest temperature. Thus, the best drying effect is procured as the drying operation is more uniformly carried out and there is less tendency towards shrinkage.

Furthermore the effect of the air blown directly through the bottom of the drier is to bloom out the garments, eliminating the wrinkles and folds which cause considerable difficulty in drying with the tumbler or in the normal type of dry room.

The present device has, of course, the obvious advantage of drying in one compartment, or cabinet, all different types of garments, including the flimsy material with the heavier coarser materials.

I claim as my invention:

A drier for garments comprising an insulated casing enclosing a clothes hanging chamber, means for suspending garments in said chamber, a false side forming with the casing a heating compartment in the casing having closed sides and open upper and lower ends, a heating element in said compartment, a false bottom forming a lower distributing compartment communicating with the lower end of the heating compartment, centrally disposed discharge ports in the false bottom forming the only outlet for the distributing compartment and placing the air distributing compartment in communication with the clothes chamber, an air outlet at the top of the clothes chamber, and air propelling means independent of said air outlet and adapted to discharge air in a positive forced draft circulation through the heating compartment to produce a once-through circulation in the clothes chamber.

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