

Mar. 3, 1925.

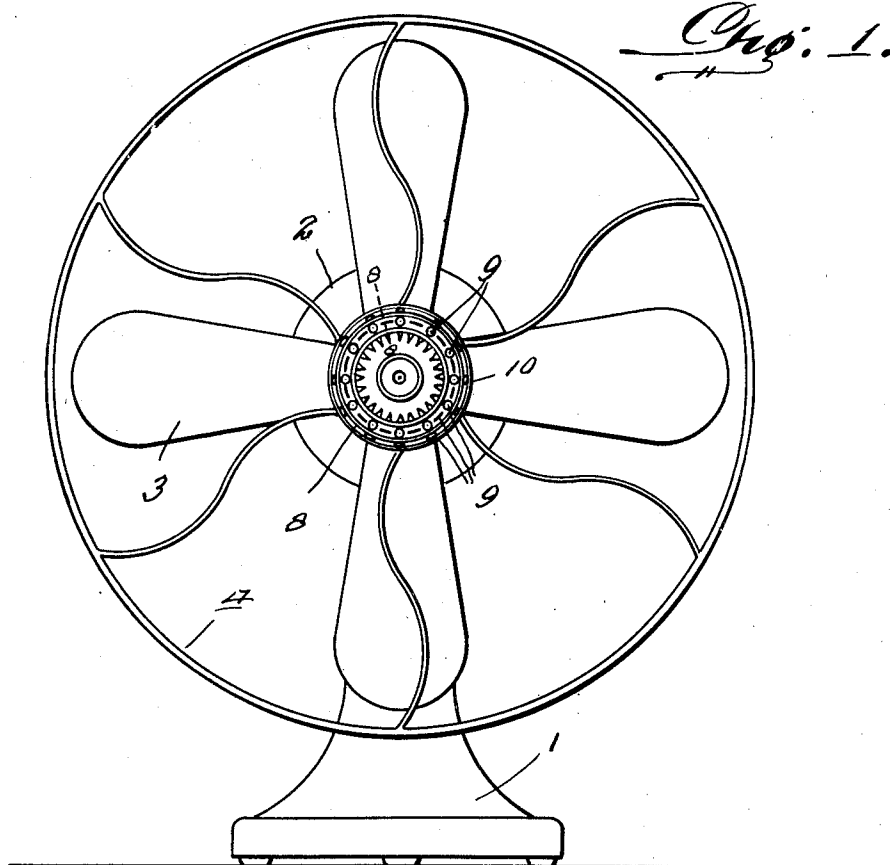
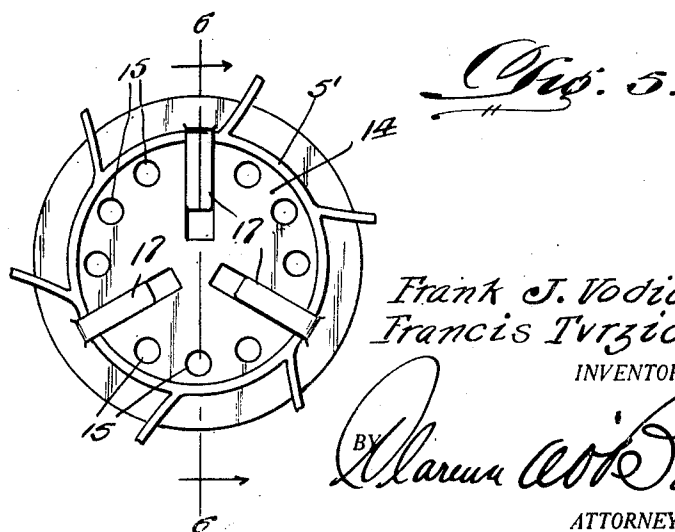
1,528,640

F. TVRZICKY ET AL

DEODORIZER

Filed Nov. 22, 1922

3 Sheets-Sheet 1



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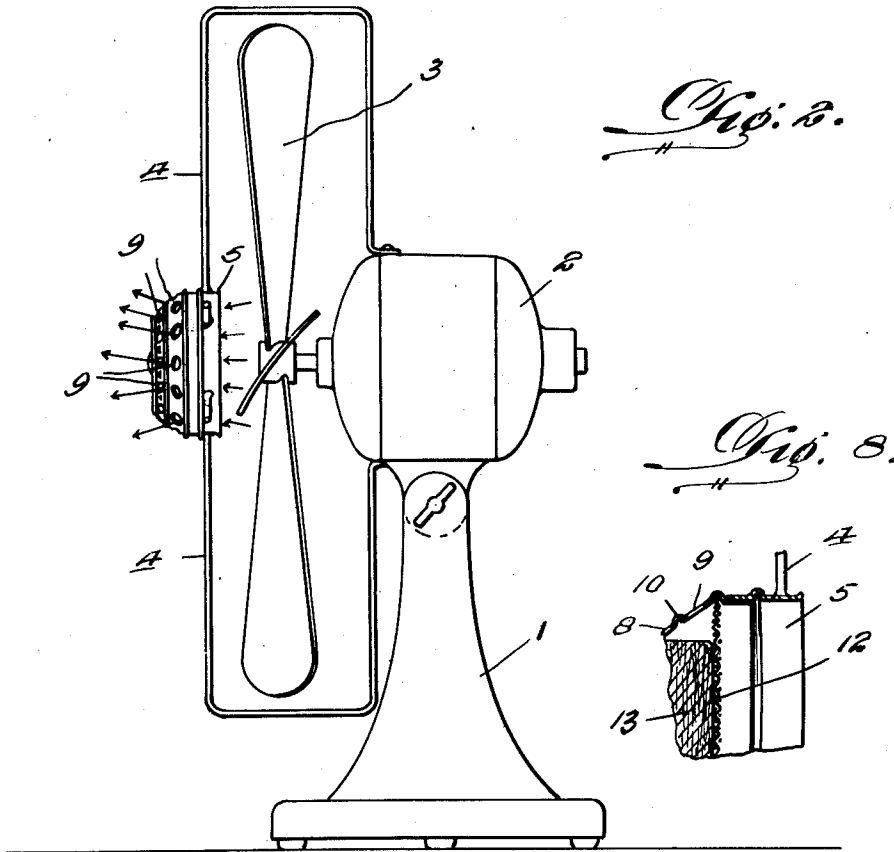
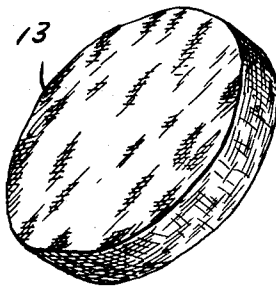
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DEODORIZER

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3 Sheets-Sheet 2



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3 Sheets-Sheet 3

Fig. 3.

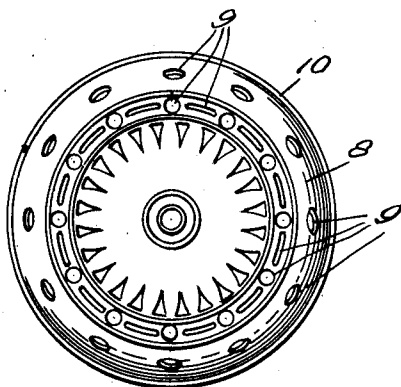


Fig. 4.

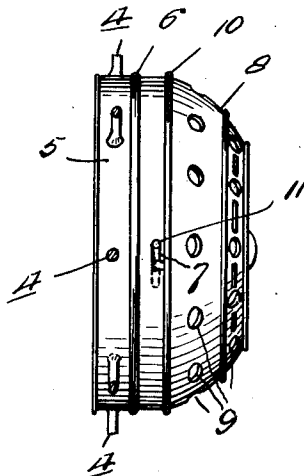
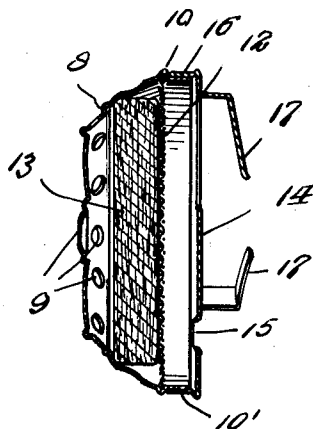


Fig. 6.

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UNITED STATES PATENT OFFICE.

FRANCIS TVRZICKY AND FRANK J. VODICKA, OF CHICAGO, ILLINOIS.

DEODORIZER.

Application filed November 22, 1922. Serial No. 602,603.

To all whom it may concern:

Be it known that we, FRANK J. VODICKA and FRANCIS TVRZICKY, citizens of the Republic of Czechoslovakia, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Deodorizers, of which the following is a specification.

Our invention relates to what is known in the art as deodorizers, and has for the primary object thereof, the provision of such an article that may be advantageously attached to a conventional type of electric fan, or other draft creating means, whereby the air may be completely and thoroughly saturated with a deodorant, such as perfume or a disinfectant substance.

A further object of our invention resides in the provision of such an article that is not only applicable to conventional types of electric fans, but may be as readily applied to radiators of the hot air type, or in fact any place where there is a natural or an artificial draft, whereby there is mixed with the air a suitable deodorant, a still further object of the invention residing in the provision of such an article that is of simple construction, comparatively inexpensive of manufacture, and highly useful of purpose.

The nature and advantages of the invention will be better understood when the following detailed description is read in connection with the accompanying drawings, the invention residing in the construction, combination, and arrangement of parts as claimed.

In the drawings forming part of this application, like numerals of reference indicate similar parts in the several views, and wherein:—

Figure 1— is a front elevational view of a conventional type of electric fan, showing our improved deodorizer applied thereto.

Figure 2— is a side elevational view of the fan and deodorizer shown in Figure 1.

Figure 3— is an enlarged front plan view of our deodorizer per se.

Figure 4— is a side elevational view thereof.

Figure 5— is a rear elevational view of a slightly modified form of the invention, showing the same as applied to an electric fan provided with a particular type of wire guard frame.

Figure 6— is a vertical cross sectional view upon the line 6—6 of Figure 5, the

same being shown as removed from the fan guard.

Figure 7— is an enlarged perspective view of the absorbent pad per se employed in connection with the deodorizer, and

Figure 8— is a fragmentary cross sectional view upon the line 8—8 of Figure 1.

Referring to the drawings, there is disclosed an electric fan of a conventional type and embodying the usual supporting standard 1, electric motor 2, fan 3, and usual wire fan guard 4.

In the preferred embodiment of the invention the usual front wire arms of the guard 4 have connected thereto at their free ends and substantially centrally of the fan 3, a ring or collar 5, which is flat in cross section as more clearly shown in Figure 8. This ring or collar 5 is provided with a central, annular bead 6, and the portion of the collar outwardly of the bead 6 is provided with a pair of diametrically disposed bayonet slots 7. Our deodorizer includes a substantially ball-shaped casing 8 having a plurality of spaced perforations 9 therein. Adjacent the inner end of this ball-shaped casing 8, the same is provided with an annular bead 10, whereby the inner end of the casing 8 defines a sleeve portion 10'. Suitably formed at diametrically opposite points upon this sleeve portion 10' of the casing 8, are vertically projecting pins 11 adapted for engagement within the bayonet slots 7 of the ring or collar 5 when this sleeve portion of the casing is received within the ring or collar 5, as more clearly shown in Figure 4. In view of the pins 11, and bayonet slots 7, it will be readily appreciated that the casing 8 may be attached and detached from the ring or collar 5, at will.

Disposed within the casing 8, and preferably within the groove formed by the bead 10 thereon is a wire mesh cover 12 in the form of a disk. This wire mesh disk 12 cooperates with the interior of the side wall of the casing 8 for supporting therein a padding of suitable absorbent material 13. It is to be understood that this absorbent disk 13 is to be thoroughly saturated with a deodorant such as perfume or a disinfectant, and when the casing 8 is disposed upon the guard frame 4 of the fan as shown in Figures 1 and 2, it will be readily understood that air forced forwardly by the fan 3 will pass through and within the casing 8, and the padding of absorbent material 13 where-

by the deodorant or disinfectant within this material will be thoroughly mixed with the air.

In the modification shown in Figures 5 and 6, the wire fan guard 4 is provided with the usual central wire ring 5', and in this instance, we have provided for attachment upon this ring, a closure plate 14, provided with an annular row of spaced perforations 15 and further with a forwardly projecting annular flange 16. This cover 14 has formed thereon a plurality of spaced, inwardly extending, struck out, spring arm members 17 adapted for springing engagement over the ring 5' of the fan guard 4 for retaining this cover in a rigid position thereon. The flange 16 of the cover 14 is also provided with diametrically opposite bayonet slots for receiving the diametrically opposite projecting pins 11 on the sleeve 10 of the casing 8 for securing this casing to the cover 14.

We have shown and described our invention as being primarily adapted for application to an electric fan, but as before set forth, it is nevertheless to be understood that minor changes may be made in the invention so as to adapt the same for application to other supports such as hot air radiators, or the like, whereby the air therefrom

will pass through the deodorizer for effectively extracting some of the deodorant from the pad 13 for purposes above set forth.

What we claim as new is:--

A deodorizer comprising an annular collar, means provided upon the collar for attaching the same to a fan guard, a casing shaped like a truncated cone detachably connected with the collar and having a screen located in its larger end and spaced from the edge thereof, a disc shaped pad housed within the casing and having one of its sides bearing against the screen and its edge at the opposite side bearing against the inner surface of the cone shaped casing whereby the peripheral surface of the pad is spaced from the inner surface of the casing, the casing being provided with openings between the screen and the line of contact of the pad with the inner surface thereof said casing being also provided with openings beyond the outer surface of the pad.

In testimony whereof we affix our signatures.

FRANCIS TVRZICKY.
FRANK J. VODICKA.