

Oct. 18, 1955

A. T. MANGELS

2,721,098

DEODORIZERS FOR VEHICLES AND OTHER INCLOSED AREAS

Filed Sept. 27, 1954

FIG. 1.

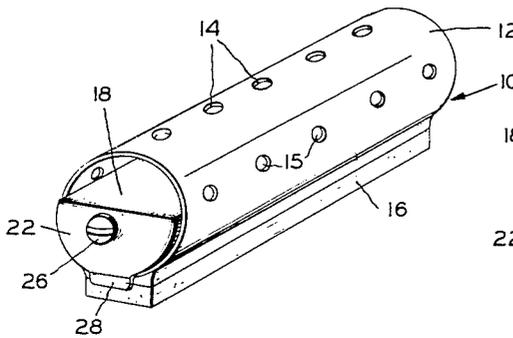


FIG. 2.

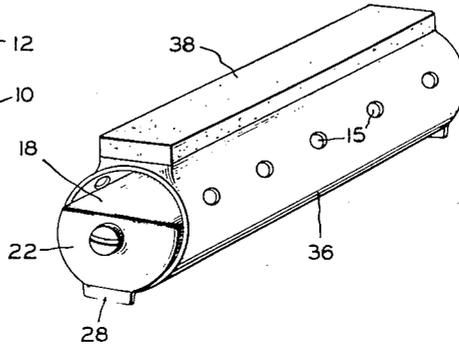


FIG. 3.

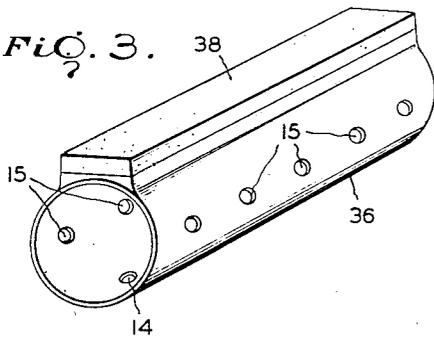


FIG. 4.

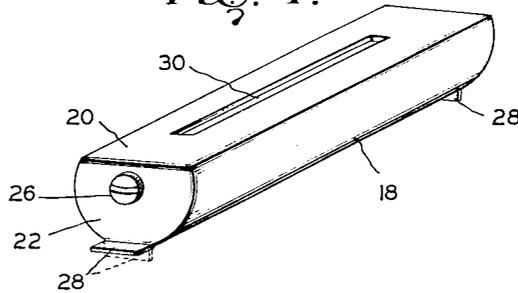


FIG. 5.

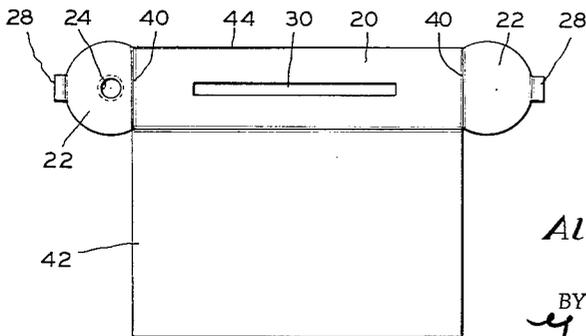
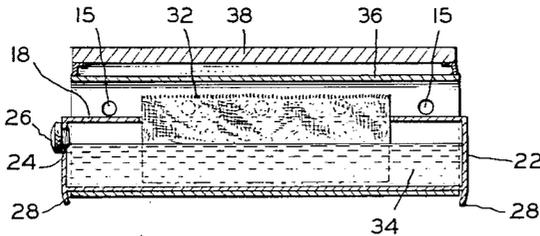


FIG. 6.

INVENTOR

Aller Theophil Mangels

BY *Gustave Miller*

ATTORNEY

1

2,721,098

**DEODORIZERS FOR VEHICLES AND OTHER INCLOSED AREAS**

Allen T. Mangels, Glendora, Calif.

Application September 27, 1954, Serial No. 458,420

5 Claims. (Cl. 299—20)

This invention relates to deodorizers for tobacco fumes, gasoline fumes and the like, and particularly relates to deodorizers for automobiles and the like.

Many people who drive or ride as passengers in automobiles smoke cigarettes, cigars or pipes. The resulting tobacco fumes are not only unpleasant to other persons in the car but, after an interval of time, settle within the upholstery and lining of the car and cause a permanent, unpleasant odor. The discomfort due to these fumes is particularly acute in winter or in bad weather when the windows of the car are, for the most part, closed.

It is one object of the present invention to provide a deodorizing device which is particularly adapted for automobiles or like vehicles.

Another object of the present invention is to provide a deodorizing device which may be easily attached to any convenient place within the vehicle.

Another object of the present invention is to provide a deodorizing device which can be mounted in various positions without danger of spilling the contents.

Another object of the present invention is to provide a deodorizing device which can easily be refilled with deodorizing material when necessary.

Another object of the present invention is to provide a deodorizing device which consists of very few parts and which is extremely simple in construction.

Other objects of this invention are to provide an improved deodorizing device of the character described, that is easily and economically produced, which is sturdy in construction, and which is highly efficient in operation.

With the above and related objects in view, this invention consists in the details of construction and combination of parts as will be more fully understood from the following description, when read in conjunction with the accompanying drawing in which:

Fig. 1 is a perspective view of a deodorizing device embodying the present invention.

Fig. 2 is a perspective view with the magnet arranged in reversed position.

Fig. 3 is a perspective view of the outer shell of the device of Fig. 1.

Fig. 4 is a perspective view of the inner tray portion, such as shown in both Figs. 1 and 2.

Fig. 5 is a longitudinal sectional view of the device as arranged in Fig. 2.

Fig. 6 is a top plan view of a blank which may be used to form the inner tray.

Referring now in greater detail to the drawing wherein similar reference characters refer to similar parts, there is shown in Fig. 1 a deodorizing device, generally designated 10. This device 10 comprises a cylindrical outer shell 12 having open ends and may have a series of holes 14 arranged along the top thereof. At the bottom of the cylindrical shell 12 is attached an elongated bar magnet or the like 16.

Within the outer shell 12 is positioned an elongated tray 18. This tray 18 is shown in greater detail in Fig. 4. The tray 18 is shown as somewhat longer than the outer

2

shell and, when positioned therein, extends slightly beyond the open end of the shell at either end. The tray 18 is semi-cylindrical or, in other words, semi-circular in cross-sectional shape.

The bottom and side walls of the tray are formed by a circular wall while the top portion is in the form of a flat plate 20. The ends of the tray 20 are closed by semi-circular plates 22, at least one of which is provided with a refill opening 24. A screw plug or the like, as shown at 26, is adapted to close the refill opening 24. Each end plate 22 is also provided with a tab 28 which is adapted to be bent over around the rim of the open end of the outer shell to hold the tray in assembled condition.

In the top plate 20 is provided an elongated slot 30 through which is adapted to project the end of a wick 32. The bottom portion of the wick, which is generally rolled up into at least several turns, is immersed in a deodorizing fluid 34. This fluid 34 may be any one of a variety now available on the market and, by itself, forms no part of the present invention. Preferably it is of the type which goes by the trade-name "Air-wick" and may include chlorophyll and formaldehyde, or any other suitable deodorant.

In Figs. 2, 3 and 5, a second way of mounting the invention is shown which is exactly the same as that of Fig. 1 except that the outer shell has been rotated 180° to the position at 36 and has the magnet positioned on its uppermost side at 38 instead of on the lowermost side, while the holes 14, which are not shown, are located on the underside. Obviously, additional series of holes 15 may be located 120° from the holes 14, so that at least one series of holes would always be in operative position, if desired, irrespective of the relative angular position of the container and the supporting magnet so that it may be attached to any ferrous member at any angle.

In Fig. 6, there is shown a blank from which the tray 18 is preferably formed. This blank is stamped out with the top plate portion 20 and the slot 30. The end plates 22 are formed in the same plane as the top plate and are slightly creased or crimped at the boundary portions 40, so that they may be easily bent. One of the plates 22 is shown with the opening 24 preformed therein. A strip 42 extends laterally from the top plate 20.

In forming the tray from the blank, the strip 42 is bent around in an arc to form the semi-cylindrical bottom and side wall and the end thereof is soldered, welded or otherwise secured to the upper edge 44 of the plate 20. The end plates 22 are then bent over and the edges thereof secured to the edges of the strip 42 and plate 20. If desired, the tray may be formed from a completely straight blank and then machined into form.

In use, the assembled device may be attached in the vehicle merely by attaching the magnet to a suitable iron or steel support. When the device is assembled, as shown in Fig. 2, it may be attached to the underside of the dashboard. The space between the flat portion 20 of the tray and the inner surface of the shell permits circulation of the air. The openings 14 and 15 are provided to aid such circulation. The device is spill-proof since the wick is held tightly in the slot 30.

In addition to its use in automobiles, the device may be used equally as effectively in trucks, busses, trains and in households.

It is within the scope of the present invention to construct the device in any desired configuration in addition to the cylindrical form illustrated. It may, for example, be rectangular or square. Furthermore, except for the magnet, it may be constructed of any desired substantially rigid material, such as plastics, wood, metal and the like.

Although this invention has been described in con-

3

siderable detail, such description is intended as being illustrative rather than limiting since the invention may be variously embodied, and the scope of the invention is to be determined as claimed.

Having thus set forth and disclosed the nature of this invention, what is claimed is:

1. A deodorizing device comprising an outer shell, a magnet on said shell, a container in said shell, said container being at least partially spaced from the internal surface of said shell, a deodorizing material in said container, and means in said container for exposing said deodorizing material to the atmosphere, said shell being cylindrical and having open ends, said container being semi-cylindrical, the ends of said container extending beyond either open end of said shell.

2. A deodorizing device comprising an open-ended cylinder, a magnet on the external surface of said cylinder, a substantially closed container within said shell, a portion of said container being positioned in spaced relation to the internal surface of said cylinder, means on said container to separably connect said container to said cylinder, a deodorizing material in said container, a filling opening in said container, and an opening in said container to permit said deodorizing material to be exposed to the atmosphere.

5

10

15

20

25

4

3. The device of claim 2 wherein said magnet is positioned there are a series of holes in that portion of said cylinder which is spaced from the container irrespective of the relative angular position of said container within said cylinder.

4. A deodorizing device comprising a cylindrical outer shell, openings in said shell, a semi-cylindrical container having one flat wall, said container being positioned within said shell, a deodorizing material in said container, said flat wall being spaced from the internal surface of said shell, a slot in said flat wall, and a wick having one end contacting said deodorizing material within said container and having its other end extending out of said slot.

5. The device of claim 4 wherein a magnet is provided on the outer surface of said shell for securing said device in operative position on a ferrous supporting member.

References Cited in the file of this patent

UNITED STATES PATENTS

584,208	Clinton	June 8, 1897
1,027,856	Kocher	May 28, 1910
1,687,830	Clevenger	Oct. 16, 1928