196-88

Sept. 2, 1958 H. E. HOFFMAN 2,850,321

VAPORIZING DEVICES

Filed July 5, 1956 2 Sheets-Sheet 1

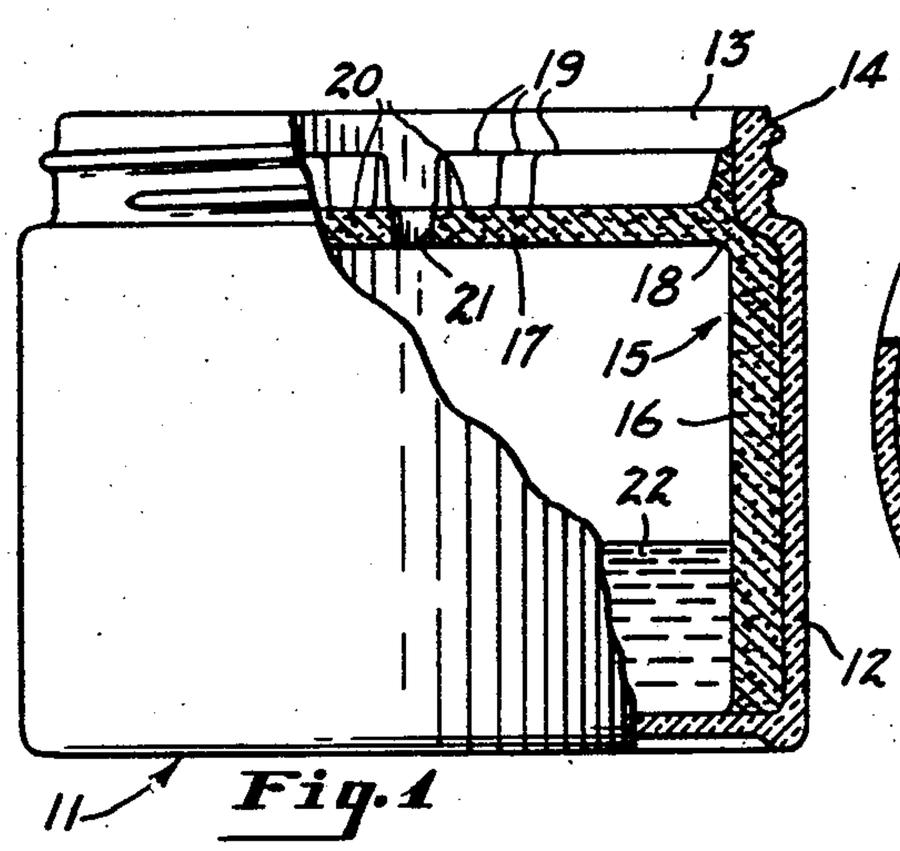

Fig. 1

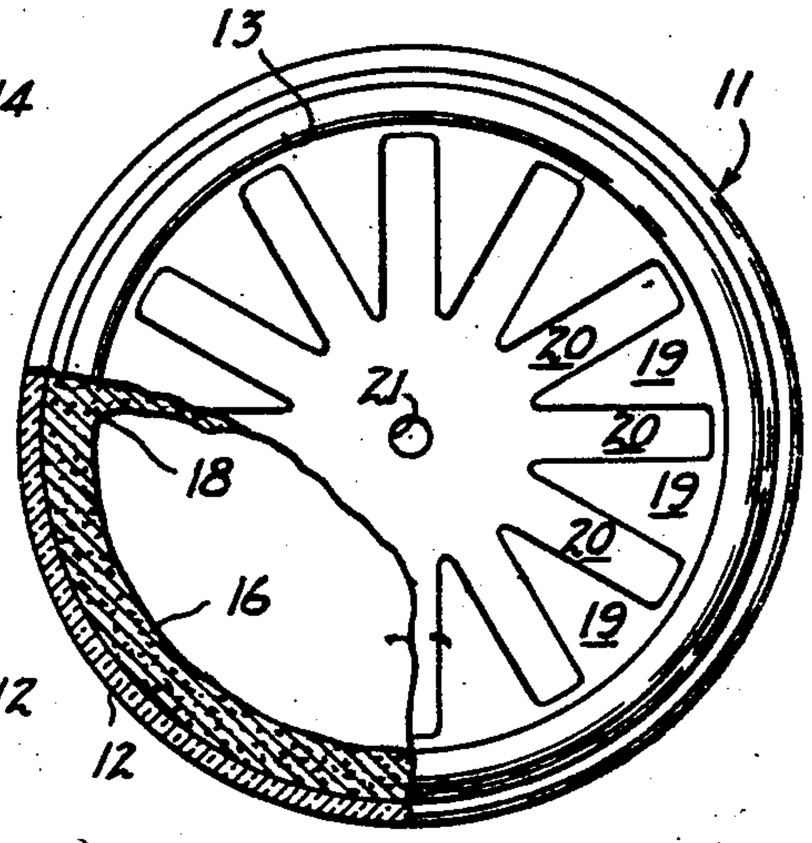

Fig. 2

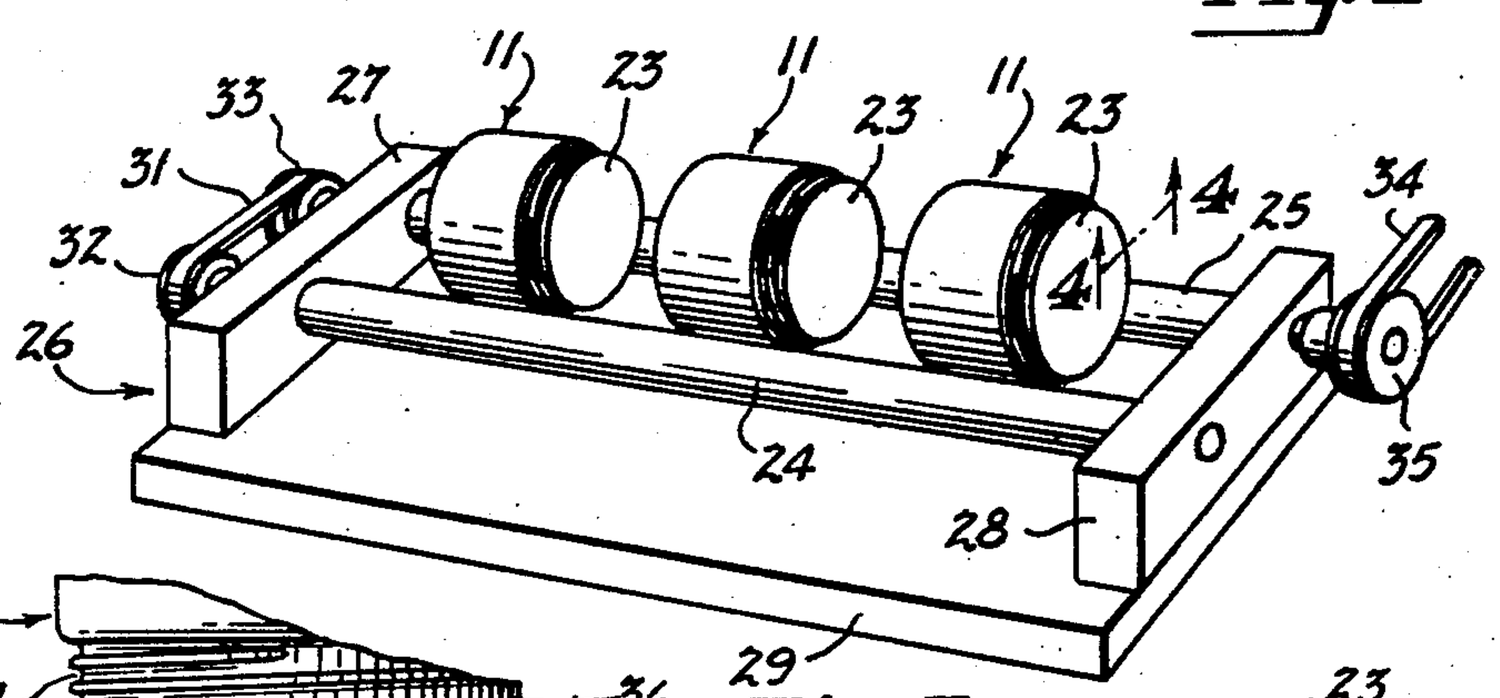

Fig. 3

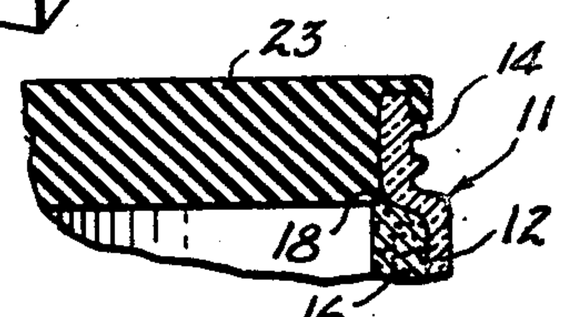

Fig. 4

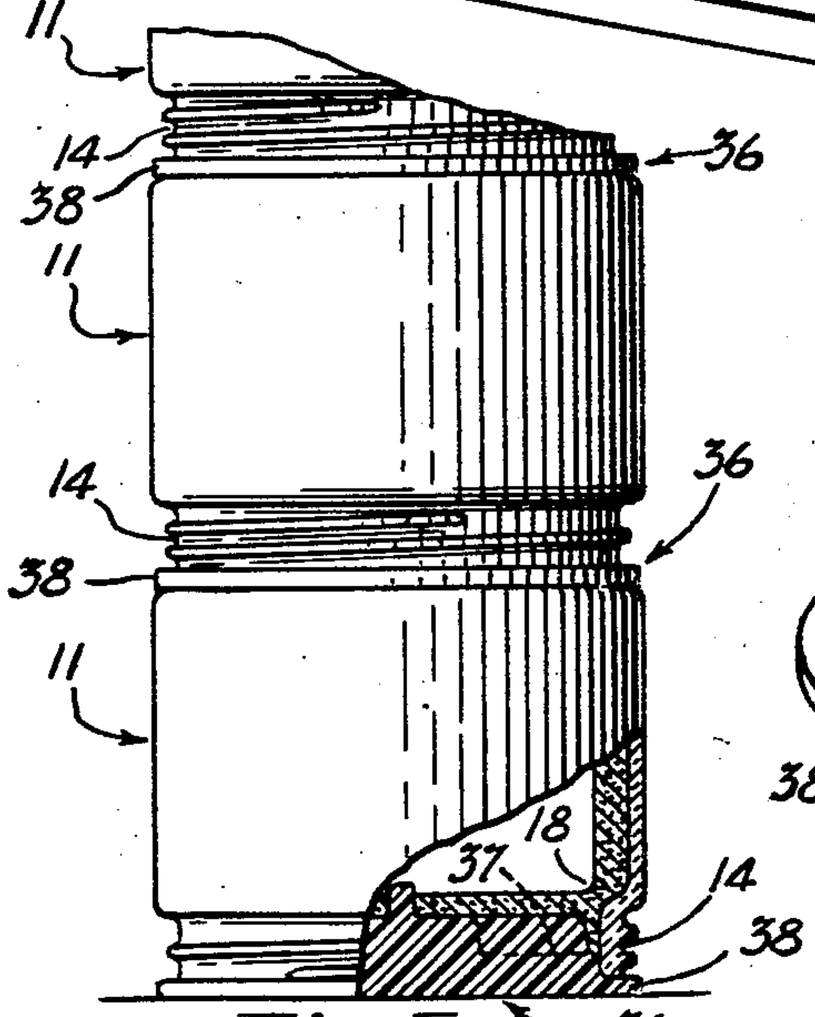

Fig. 5

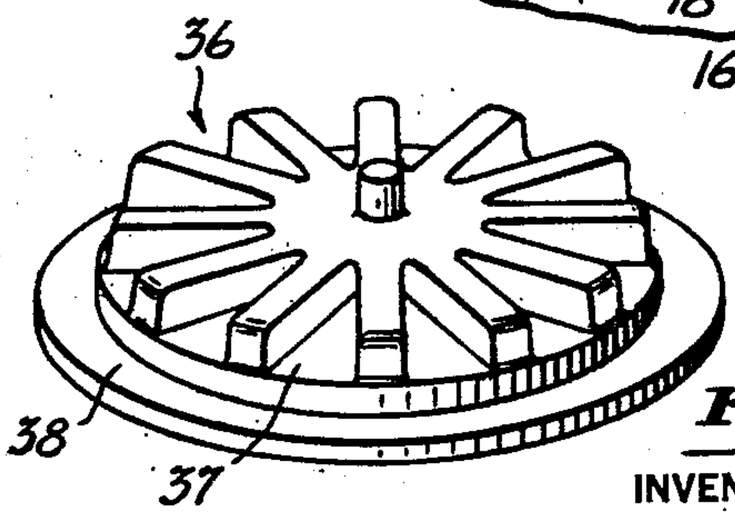

Fig. 6

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VAPORIZING DEVICES

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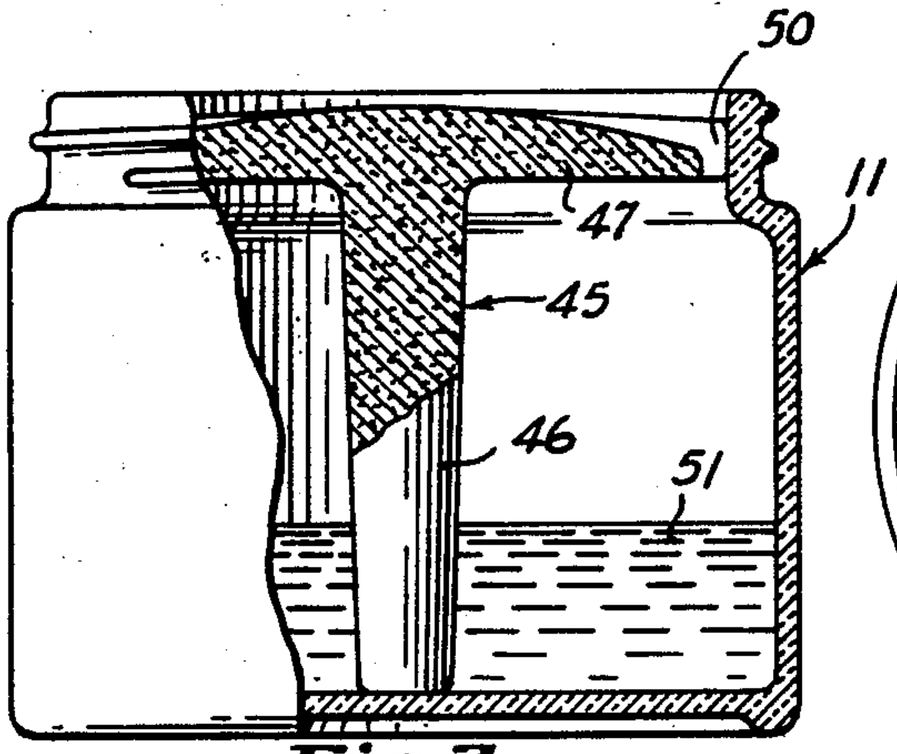

Fig. 7

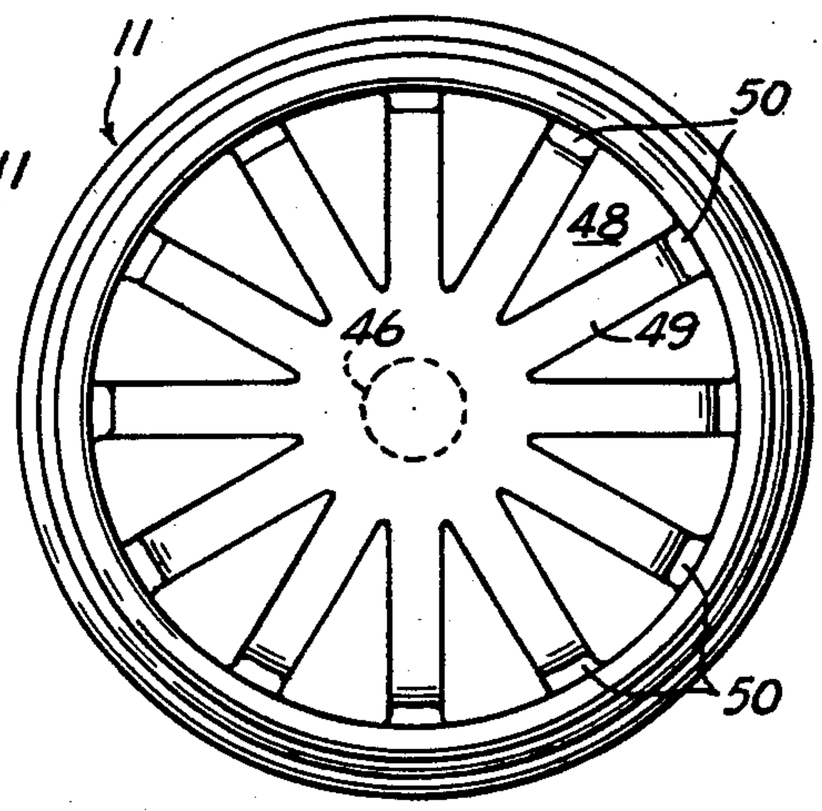

Fig. 8

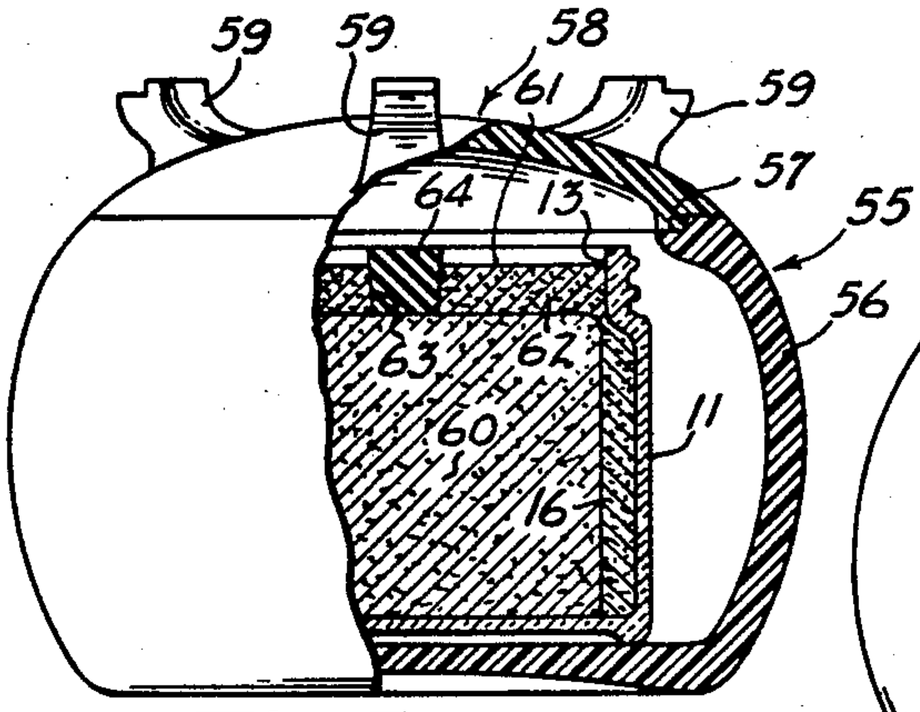

Fig. 9

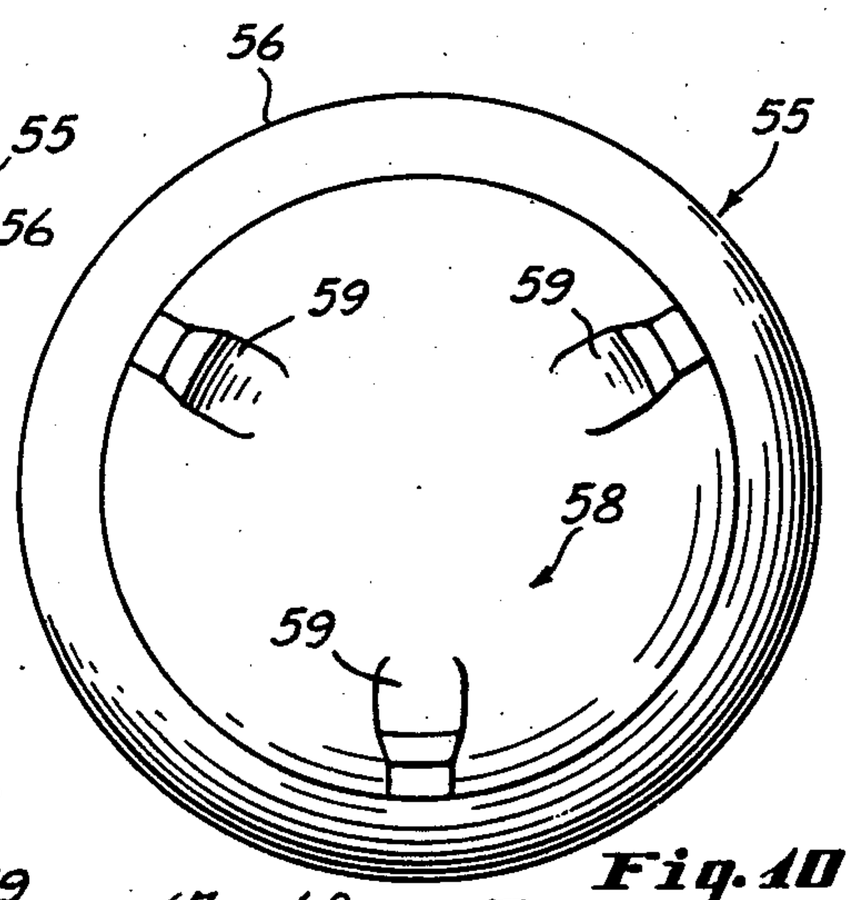

Fig. 10

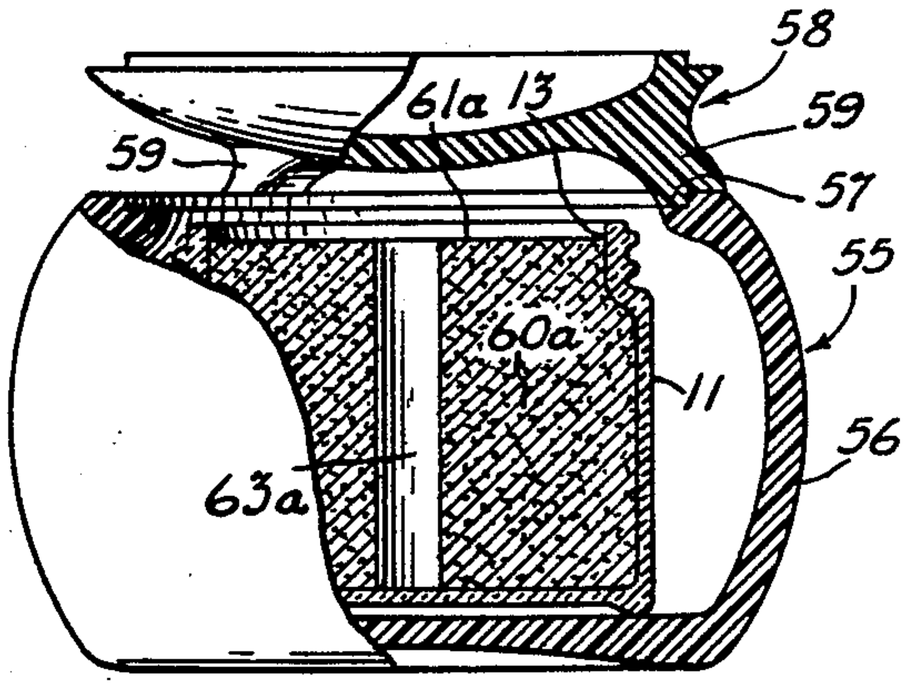

Fig. 11

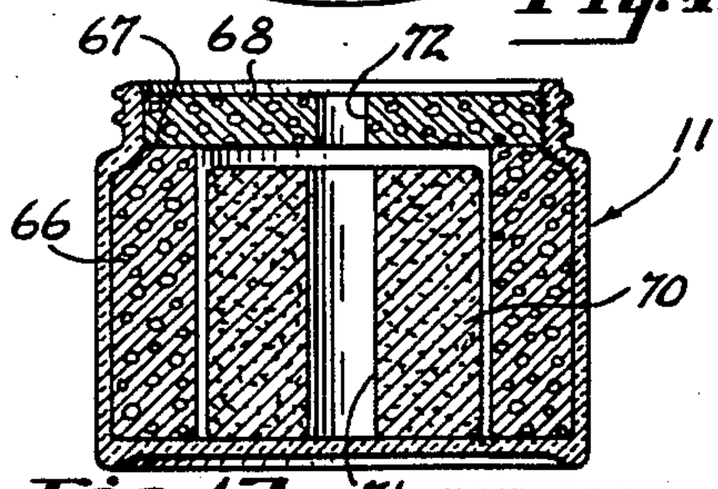

Fig. 12

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United States Patent Office

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VAPORIZING DEVICES

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Application July 5, 1956, Serial No. 595,907

2 Claims. (Cl. 299—24)

This invention relates to vaporizing devices for space deodorants, disinfectants, and the like. More particularly, the invention relates to the types of vaporizing devices which comprises a container having a removable cap and containing a volatile deodorant or disinfectant in a liquid form, or dispersed in a liquid solvent or carrier, and include suitable porous or wick-like elements having one end immersed in the liquid in the container and its opposite end exposed to the air to provide an exposed surface from which the volatile material may be evaporated.

Broadly, the object of this invention is to provide improved vaporizing devices of the general character referred to and improved methods of making the same.

One specific object of the invention is to provide a vaporizing device of the general character referred to which is easily refillable and which is particularly suited for shipment and original sale in a condition containing no mobile liquid, liquid being added by the user by simple addition of water or other suitable solvent or carrier.

Another specific object of the invention is to provide a vaporizing device of the general character referred to which is readily recharged with the deodorant or disinfectant component when the original supply thereof is exhausted.

Still another specific object of the invention is to provide a vaporizing device of the general character referred to which requires no messy, manual wick adjustment, but which can be easily manipulated to vaporize volatile material at a more rapid than normal rate when desired.

Still another specific object of the invention is to provide a vaporizing device that is more convenient to use than prior devices of the general character referred to, is more attractive in appearance, cheaper in initial cost, and more efficient in operation.

Still another specific object of the invention is to provide a novel and economical method of making a vaporizing device having all of the foregoing attributes.

The vaporizing devices of the invention are characterized by the employment of a jar-like container having a relatively large diameter throat or neck and a removable cap therefor, and by a liquid feeding structure within the container formed of a rigid, porous material having a solvent-miscible, volatile deodorant or disinfectant material distributed therethrough. The liquid feeding structure comprises a feeding trunk portion extending upwardly from the bottom of the container and an integrally formed disc portion substantially closing the throat of the container and providing a large, exposed, upper surface for evaporation of said volatile material. Preferably, the disc portion of the feeding structure has an opening therethrough for charging water or other suitable solvent or carrier into the container without removing the liquid feeding structure, and in some forms of the invention, for charging additional volatile deodorant or disinfectant into the container, preferably in a concentrated form in a soluble capsule.

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One form of the invention is characterized by a trunk portion of the liquid feeding structure that has the form of a cylindrical layer of rigid, porous material formed against the cylindrical interior side wall of the container below the throat thereof, and a disc portion substantially closing the throat of the container and integrally joined around its periphery to the upper end of the trunk portion. There is thus formed within the container a rigid, porous, liquid feeding structure of inverted cup-shape, the inverted bottom of the cup-shaped structure providing a large upper surface area from which volatile material may be evaporated. In this form of the invention, the deodorant, perfume, disinfectant or the like, in concentrated form, is impregnated in the liquid feeding structure.

Another form of the invention is characterized by a trunk portion of the liquid feeding structure having the form of a cylindrical stem of smaller diameter than the throat of the container, and a disc portion substantially closing the throat of the container and integrally joined coaxially to the trunk portion. In this case, the lower end of the trunk portion rests on the bottom of the container and supports the disc portion in the throat of the container, and the disc portion preferably has at least one opening therethrough for charging water or other suitable solvent or carrier into the container without removing the liquid feeding structure. In this form of the invention, the deodorant, perfume, disinfectant, or the like is again impregnated in concentrated form in the liquid feeding structure.

Still another form of the invention is characterized by a cylindrical trunk portion and disc portion forming the liquid feeding structure, like or similar to the form of the invention first described, with the space below the disc portion and surrounded by the trunk portion substantially filled with a rigid, highly porous material saturated with a volatile liquid carrier having a deodorant, perfume, disinfectant, or the like dissolved therein.

Still another form of the invention is characterized by a single, monolithic, mass of rigid, porous material constituting both a reservoir and a liquid feeding structure that substantially fills a container therefor.

The method of the invention is characterized by the two-step casting of the liquid feeding structure in place in the container, the trunk portion being formed by the setting of a fluid slurry of a predetermined quantity of cementitious material against the inner side wall of the container while rotating the container about its longitudinal axis, and the disc portion being formed by the setting of a second predetermined quantity of cementitious material against a disc-shaped mold that closes the throat of the container while the container is resting in an inverted position upon the mold.

Among the many advantages of the invention are:

(1) The substitution of an inexpensive, porous material, like gypsum or plaster of Paris, for a relatively expensive fabric wick heretofore commonly used in devices of this general character.

(2) In certain forms of the invention, by reason of the incorporation of the volatile deodorant, disinfectant, or the like, in a concentrated form in the liquid feeding structure itself, for solution or self-emulsification in a liquid carrier (preferably water), which is added to the container just prior to its use, the product may be shipped at low cost in the form of a relatively light weight container with no heavy liquid therein.

(3) In certain forms of the invention, a volatile deodorant, disinfectant, or the like may be incorporated in the liquid feeding structure in sufficient quantity so that, after the device has once been filled with a liquid carrier and used until the carrier is exhausted by evaporation, the mere addition of more of the liquid car-

rier will reactivate the device for at least an equal additional period of use before the deodorant or disinfectant is exhausted.

(4) In certain forms of the invention, when the original supply of deodorant, disinfectant, or the like is exhausted from the liquid feeding structure, it may be replenished by placing an additional supply thereof in the container (suitably as a readily merchandised concentrate in a capsule soluble in the liquid carrier), along with a further quantity of the liquid carrier.

(5) While various liquids may be used as a liquid carrier, plain water is suitable in certain forms of the invention, so that no shipment or sale of heavy liquids is ever required.

(6) The need for adjusting or touching a messy wick structure with the hands at any time is eliminated.

(7) The invention is adapted for use in an attractive outer container, which may be sold with the vaporizing device per se or separately.

(8) The vaporizing device per se may be economically made in quantity production by the method of the invention.

The foregoing and various additional objects, features, and advantages of the invention will be more fully understood from the following detailed description of illustrative embodiments thereof, read in conjunction with the accompanying drawings in which:

Figure 1 is an elevational view of a vaporizing device made in accordance with the invention, the view being drawn partly in vertical section;

Figure 2 is a plan view of the device of Figure 3, partly broken away;

Figure 3 is a perspective view of a plurality of containers, of the kind shown in Figures 1, 2, and 5 being rolled in the course of forming the trunk portion of a liquid feeding structure in the container;

Figure 4 is a fragmentary vertical section of a container removed from the rollers of Figure 3 and placed in upright position, the section being taken as indicated by the line **4—4** in Figure 3;

Figure 5 is an elevational view of the containers of Figure 4 stacked with intervening mold members in the course of forming the disc portion of a liquid feeding structure therein;

Figure 6 is a perspective view of the mold used in the stacked assembly of Figure 5;

Figure 7 is an elevational view of a modified form of vaporizing device made in accordance with the invention, the view being drawn partly in vertical section;

Figure 8 is a plan view of the device of Figure 7;

Figure 9 is an elevational view of another modified form of the device disposed in a decorative outer container which is closed by a removable cover, the view being drawn partly in vertical section;

Figure 10 is a plan view of the assembly of Figure 9;

Figure 11 is a view similar to Figure 9, showing the same decorative outer container with the removable closure inverted to permit vaporization of a deodorant, disinfectant, or the like, and with still another modified form of vaporizing device contained therein; and

Figure 12 is a view similar to Figure 7, showing still another modified form of vaporizing device made in accordance with the invention.

Referring to the drawing, the device of Figures 1 and 2 may comprise a glass jar **11** having a substantially cylindrical side wall **12**, a reduced throat **13**, and a threaded upper end **14** for receiving a conventional screw-on cap (not shown). Inside the jar **11** is an integral liquid feeding structure **15** formed of a rigid, porous, hydrated gypsum or plaster of Paris having a suitable, volatile deodorant or disinfectant incorporated therein in a soluble or self-emulsifiable form. This liquid feeding structure comprises a generally cylindrical trunk portion **16** molded against the jar side wall **12** as a substantially uniform layer, and a disc-like portion **17** molded in the

throat **13** of the jar. The disc-like portion **17** is preferably disposed slightly below the upper edge of the jar throat and is separately molded in a layer of sufficient thickness to join itself integrally with the trunk portion **16** entirely around its upper end in the region designated **18**. Thus, a path along which a liquid may travel through the porous material, from the bottom of the trunk portion **16** to the upper surface of the disc portion **17**, is provided entirely around the inner cylindrical surface of the jar **11**.

The upper surface of the disc portion **17** is preferably molded with alternate raised portions **19** and depressed portions **20** to increase the surface area from which volatile material may be evaporated. At least one hole **21** is provided in the disc portion through which a suitable liquid solvent or carrier **22** may be charged just prior to use of the device. It is desirable, partly for reasons noted below, that the raised and depressed portions **19** and **20** be arranged so that liquid flowing over those surfaces will drain into the hole or holes **21**. A suitable surface configuration for this purpose is shown in the drawings, but it will be appreciated that such configuration may be greatly varied as desired.

The porous liquid feeding structure **15** may be made of any of a variety of settable cementitious liquids or slurries, such as aqueous slurries of gypsum or plaster of Paris. Preferably, the slurry is beaten or whipped to incorporate additional air therein and increase the porosity of the final set structure. This increases the rate at which the liquid **22** will be conducted by capillary action through the liquid feeding structure **15** to the upper surface of the disc-like portion **17**. If desired, a small amount of a foaming agent, such as naphthalene sulfonic acid or other petroleum sulfonate, may be incorporated in the slurry to increase the entrainment of air, though this is generally unnecessary.

In accordance with the invention, a small amount of a volatile deodorant, disinfectant, perfume, insecticide, insect repellant, or the like, or any combination thereof, is also incorporated in the settable slurry in either a soluble or a self-emulsifiable form. These volatile materials should be either soluble or self-emulsifiable in the particular liquid carrier **22** to be used in the device. In the case of volatile or sublimable solids, they may simply be mixed into the slurry. In the case of essential oils, where water is to be used as the liquid carrier, it may be desirable to mix such oils with an emulsifying agent which will render them self-emulsifying in water on contact. Suitable emulsifying agents for this purpose are: petroleum sulfonate, Turkey red oil, naphthenic acid soaps, soaps of mahogany acid, and the like.

In forming the liquid feeding structure **15**, described above, a slurry of the desired cementitious material is prepared, and the desired amount of volatile material, emulsifying agent (if any), and foaming agent(if any) are mixed into the slurry. Preferably, the slurry is beaten or whipped in a high speed mixer of any desired type to incorporate additional air into the slurry. A predetermined quantity of the fluid slurry sufficient to form the trunk portion **16** of the liquid feeding structure is introduced into the container **11**, and a stopper-type cap **23** (Figure 4) is applied to the container. The container is then placed on its side on a pair of rollers **24** and **25** of a suitable rolling apparatus **26**, of which an example is illustrated in Figure 4. The rollers **24** and **25** are mounted at their opposite ends for rotation in a pair of blocks **27** and **28** carried by a base **29**, and the rollers are constrained to rotate together in the same direction and at the same speed by means of a belt **31** connecting a pair of pulleys **32** and **33**, which are respectively mounted on extensions of the rollers **24** and **25**. The rollers may be synchronously driven by an additional belt **34** which connects an additional pulley **35** on an extension of the opposite end of one of the rollers, e. g., **25**, to any suitable motor or the like (not shown).

Any desired number of jars **11** containing the same predetermined quantities of the slurry may be placed on the rollers **24** and **25** and rotated thereby to distribute the slurry in a uniform layer **16** over the inner surface of the side wall **12** of each jar as the slurry sets to a rigid condition. If several jars are filled and placed on the rollers simultaneously, they may be removed simultaneously; if placed on the rollers one after another, they may be removed in the same order after having been rotated for substantially the same lengths of time.

As each container **11** is removed from the rolling device **26**, it is placed upright, as shown in Figure 4, the cap **23** is removed, and a second predetermined quantity of the slurry is introduced into the container. The throat **13** of the container is then closed by a mold **36** having a disc portion **37** fitting snugly within the throat and a rim portion **38** overlying and engaging the threaded upper end **14** of the container. The inner surface of the mold **36** is formed with alternate raised and depressed portions to provide a surface configuration complementary to that to be formed on the upper surface of the disc portion **17** of the liquid feeding structure **15**.

A number of containers having the same predetermined portions of slurry introduced therein and having the molds **36** applied thereto are then inverted and may be stacked, one on top of the other, as shown in Figure 5. If necessary, an additional load may be applied to the top of the stack to hold the mold rims **38** of all the containers in tight, sealing engagement with the open ends **14** thereof. The stack of containers is permitted to remain in this position until the second predetermined quantity of the slurry in each has set against the inner surfaces of the molds **36** to form the rigid disc portions **17** of the liquid feeding structures in the containers.

Upon applying any suitable screw-on cover (not shown) to each container, the device is ready for merchandizing. The purchaser need merely remove the screw-on cover and pour a suitable solvent for the particular volatile material in the slurry through the opening **21** into the jar. The solvent will move by capillary action upwardly through the liquid-feeding structure **15** to the upper surface thereof, dissolving or entraining by emulsification a portion of the volatile material originally incorporated in the slurry. The resulting wet upper surface of the disc portion **17** of the liquid feeding structure maintains a constant supply of the volatile material on this surface for evaporation into the surrounding atmosphere.

If more rapid evaporation for a short period is desired, the container may be inverted before removing the screw-on cap to cause an abundant supply of liquid **24**, carrying dissolved volatile material from the liquid feeding structure, to wet the entire upper surface of the disc portion **17**. Upon returning the container to its upright position, excess liquid **24** will drain back into the container through the opening **21**.

Referring now to Figures 7 and 8, a modified form of liquid feeding structure **45** is shown in place in a similar container **11**. In this instance, the liquid feeding structure comprises a trunk portion **46** in the form of a rod-like stem, and a disc portion **47** with which the trunk portion **46** is integrally formed and coaxially aligned. The trunk portion **46** rests on the bottom of the container and supports the disc portion **47** in the throat thereof. The upper surface of the disc portion **47** is provided with alternate raised and depressed areas **48** and **49** arranged in a suitable configuration for draining radially outwardly toward a plurality of openings **50** formed by notches in the periphery of the disc portion **47**. Liquid solvent or carrier poured onto the top surface of the disc portion **47** will drain radially outwardly along the surface and through the holes **50** into the interior of the container. This reservoir **51** supplies liquid to be conducted from the interior of the container upwardly through the trunk portion **46** and disc portion **47** of the liquid feeding structure to the upper surface of the disc portion in essentially the same manner as in the embodiment of the invention shown in Figures 1 and 2. In all other respects, the embodiments of the invention last described are the same in their mode of operation and use as the embodiments shown in Figures 1 and 2.

Referring next to Figures 9–11, there is shown a decorative container **55** comprising a bowl **56**, having a seat **57** formed around its upper open end, and a dome-shaped cover **58**, having a complementary lower peripheral edge adapted to seat upon and be held in place by the seat **57** on the upper edge of the bowl. The cover **58** is provided with at least three legs **59** symmetrically arranged thereon and projecting generally upwardly therefrom, and the upper end of each leg **59** is provided with a contour complementary to the contour of the upper edge of the bowl **56**. When the cover **58** is inverted, the legs **59** are adapted to engage and seat upon the seat **57** on the upper edge of the bowl (Figure 11), thereby holding the cover spaced upwardly from the bowl and permitting free flow of air under the cover and over the open top of the bowl between the legs of the cover.

A device of the character shown in Figures 1 and 2 or of the character shown in Figures 7 and 8, or the modified forms illustrated in Figures 9–12 (hereinafter described), may be stored in the bowl **55** with its original screw-on cover removed. Evaporation of volatile material may be prevented when the device is not in use by closing the bowl **55** with the cover **58**, as shown in Figure 9. When it is desired to use the vaporizing device for its intended purpose, the cover **58** for the bowl **55** is merely inverted and placed in the position shown in Figure 11. Obviously the particular shape and configuration of the bowl **55** and cover **58** may be varied widely as desired for obtaining an appropriate artistic appearance for household use. The bowl **55** and cover **58** serve both as a decorative article and as a disguise for the vaporizing device.

The modified form of vaporizing device shown inside the bowl **55** in Figures 9 and 10 may comprise a container **11** also having a liquid feeding trunk portion **16** disposed therein, like the device of Figures 1 and 2, and this trunk portion **16** may be formed in the manner described above with reference to Figures 3 and 4. After removing the cap **23** (Figure 4), a separately cast cylindrical block **60** of highly aerated, highly porous gypsum or plaster of Paris is dropped into the container.

The block **60**, after being separately cast, may be saturated with a volatile, water-soluble or miscible carrier liquid, such as isopropyl alcohol, having any desired deodorant, perfume, disinfectant, or the like, or any combination thereof dissolved therein in a relatively high concentration. A block of this character which is 2 to 2½ inches in diameter and 2 to 2½ inches high may have as much as 5 to 6 ounces or more of the volatile carrier solution absorbed and held therein in an immobile condition, as far as liquid flow is concerned. When dropped into the container **11** inside the trunk portion **16**, the block **60** serves as a supply reservoir for the material to be volatilized.

The next step in the formation of this form of the device is to fill all the remaining space in the container, between the block **60** and trunk portion **16** and over both of them, to an additional thickness of about 3/16 to 5/8 of an inch in the throat **13** of the container, with additional fluid slurry of the character of which the trunk portion **16** was cast. A stopper-like cap (not shown) similar to the cap **23** in Figure 4 but of somewhat reduced thickness, may then be pressed into the throat of the jar, squeezing out any excess slurry as it is inserted and molding the upper surface **61** of a disc portion **62** of the liquid feeding structure.

Because of the higher volatility of the isopropyl alcohol carrier in the saturated block **60**, the upper surface **61** of the disc portion **62** may be smooth in this case, less surface area for evaporation being required. Also,

if desired, the volatile material incorporated in concentrated form in the liquid feeding structures of the device of Figures 1 and 2 and the device of Figures 7 and 8 may be omitted, since a substantial supply of such volatile material is dissolved in the carrier liquid with which the block **60** is saturated.

When the last addition of slurry has set, the stopper-like cap is removed, and a hole **63** is drilled through the disc portion **62** and plugged with a separately formed, removable, plug **64** of any ceramic material, plaster, or the like. Alternatively the hole **63** may be molded by a boss on the inner surface of the stopper-like cap (not shown) with which the upper surface **61** is molded. Finally, any conventional screw-on cap (not shown) may be applied for sealing the device during storage and shipment.

When a device like the one last described is to be put into use, the plug **64** is manually removed and water is poured slowly into the hole **63** until the liquid feeding trunk portion **16** and disc portion **62** are saturated with as much water as they will absorb. The plug **64** is then replaced, and, if a bowl **56** is used, the container **11** is dropped into place therein and the cover **58** applied as shown in Figures 9 and 10.

Thereafter, the form of device last described is used in the same general manner as the other forms shown and described herein, except that this device is recharged in a different manner when the original supply of deodorant or the like is exhausted therefrom. One recharging with plain water, introduced through the hole **63**, is highly effective if the deodorant or the like is impregnated in the liquid feeding structure when it is formed. Thereafter, the device may be recharged, if desired, by adding more of the isopropyl alcohol solution and a small amount of water through the hole **63**.

As previously noted Figure 11 shows the decorative outer container **56** with its cover **58** inverted to permit evaporation from the inner container **11** of the vaporizing device contained therein. In Figure 11, however, still another modified form of vaporizing device is shown comprising the same kind of inner container **11** filled, in this instance, with a single monolithic mass of a liquid storing and feeding structure **60***a* saturated with a solution of the material to be vaporized. In this instance, the liquid feeding structure **60** may be cast in the container **11** simply by pouring into the container a highly aerated, highly porous slurry of gypsum or plaster of Paris similar to that used to form the separately cast block **60** in Figure 9.

The monolithic structure **60***a* is preferably formed with a central vertical hole **63***a* therein, which hole may be formed in any desired manner and may extend either partially or completely to the bottom of the container **11**. Because of the greater porosity of the upper surface **61***a* of the block **60***a*, it will provide a sufficiently high rate of liquid transfer to the surface to meet almost any required rate of evaporation. Also, it can easily be made of such a highly frothed slurry, by simply whipping the slurry with or without a frothing agent, that an 8 ounce jar, for example, can hold as much as 3 ounces of liquid in an immobile condition in the pores of the solidified mass **60***a*.

By initially absorbing in the solidified block **60***a* only a relatively small quantity of a water-miscible liquid concentrate of volatile material, or by mixing either a dry or liquid water-miscible concentrate with the slurry from which the block **60***a* is cast, little or no liquid need be shipped in the finished product. The user can place the device in condition for use by simply pouring water into the hole **63***a* until the block **60***a* has absorbed its capacity of liquid and created a dispersion ready for vaporization.

In many instances, as in the other forms of devices disclosed herein complete evaporation of the liquid contents of the container **11** will leave sufficient residue of the volatile concentrate so that the device may be reactivated simply by adding more water. Where capsules of volatile concentrate are to be used, such a capsule may be dropped into the hole **63***a* either to initially charge or to recharge the device, and the capsule will dissolve in the course of adding water so as to saturate the block **60***a*. Thus, though the device in the outer container **55** in Figure 11 is very inexpensive to make, requiring only a jar and a small amount of liquid settable slurry, it has all of the advantages recited above herein.

The modified form of vaporizing device shown in Figure 12 utilizes a rigid, cast, porous block of plaster of Paris or the like saturated with the concentrate of material to be volatilized, and a separately formed wick structure of a less rigid character than those heretofore described, though similarly self-sustaining in the position in which it is originally assembled. In this case, the wick structure may be formed of pre-cut rubber, cellulose, or other synthetic sponge material or the like and merely inserted in place in a jar or similar container.

Referring to Figure 12, the same container **11** may have a liquid feeding trunk member **66** of tubular configuration inserted therein so as to conform generally to and be seated against the inner side wall of the container while providing an annular upper edge **67** upon which a separate disc portion **68** of the liquid feeding structure may rest as shown. If desired, the feeding trunk member **66** may be cut as a flat rectangular block of the sponge material, of appropriate length to be bent to its cylindrical form as it is inserted in the container **11**.

A cylindrical block **70** of plaster of Paris or the like, having an axial hole **71** drilled through the center thereof, or cast therein, may be saturated with a volatile liquid concentrate of the material to be vaporized, as in the case of the block **60** in Figures 9 and 11. This block **70** may be dropped in place inside the feeding trunk member **66**. Thereupon, the disc portion **68** may be dropped in place. To limit the rate of transfer of material to be volatilized from the block **70** to the liquid feeding structure, it may be desirable in some instances to coat the top and outer cylindrical surfaces of the block **70** with a non-permeable coating of paraffine, lacquer, or the like (not shown). A hole **72** is also preferably formed through the disc portion **68** to facilitate the rapid addition of water or other miscible liquid diluent for the concentrate in the block **70** without the necessity of removing the disc portion **68**.

The device of Figure 12 may be used and recharged in the same manner as the similar device shown in the outer decorative container **55** in Figures 9 and 11. Its mode of operation is essentially the same, a preformed liquid feeding structure of sponge material merely being substituted for the more rigid, cast, liquid feeding structure in Figures 9 and 11.

From the foregoing description of various embodiments of the invention, it will be appreciated that the numerous objectives and advantages recited above have been accomplished in a simple and practical manner and that a variety of commercial products having many attractive shipping, merchandizing and utilitarian features may be easily and economically produced in accordance with the invention.

Having described my invention, I claim:

1. A vaporizing device comprising an outer container adapted to serve as a decorative household article or the like and having an open throat at its upper end and a seat extending around the interior of the upper edge of said throat, a dome-shaped closure for said upper end having its lower rim shaped to seat upon and interfit with said seat, a plurality of legs extending upwardly from the upper surface of said closure, said legs being uniformly spaced about the closure with their upper ends vertically aligned with said seat and shaped to seat upon and interfit with said seat when the closure is inverted, for supporting the inverted closure above and spaced from the upper end of said throat, and a vaporizing device com-

prising an inner container, a volatile material within the inner container, and means within the inner container for releasing said volatile material to the atmosphere, said inner container being of a size to be inserted through said throat into said outer container and to be entirely contained therein with the outer container closed by said closure.

2. A vaporizing device comprising an outer container adapted to serve as a decorative household article or the like and having an open throat at its upper end and a seat extending about said throat, a domed closure for said upper end and having a lower rim shaped to seat upon and interfit with said seat about its periphery for closing the throat, a plurality of legs extending upwardly from the upper surface of said closure, said legs being spaced apart about the closure with their upper ends vertically aligned with said seat and shaped to seat upon and interfit with said seat when the closure is inverted for supporting the inverted closure above and spaced from said seat while providing openings between said legs into said outer container, and a vapor releasing device comprising an inner container, a volatile material within the inner container, and means within the inner container for gradually releasing said volatile material to the atmosphere, said inner container being of a size to be inserted through said throat into said outer container and to be entirely contained therein with the outer container closed by said closure.

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