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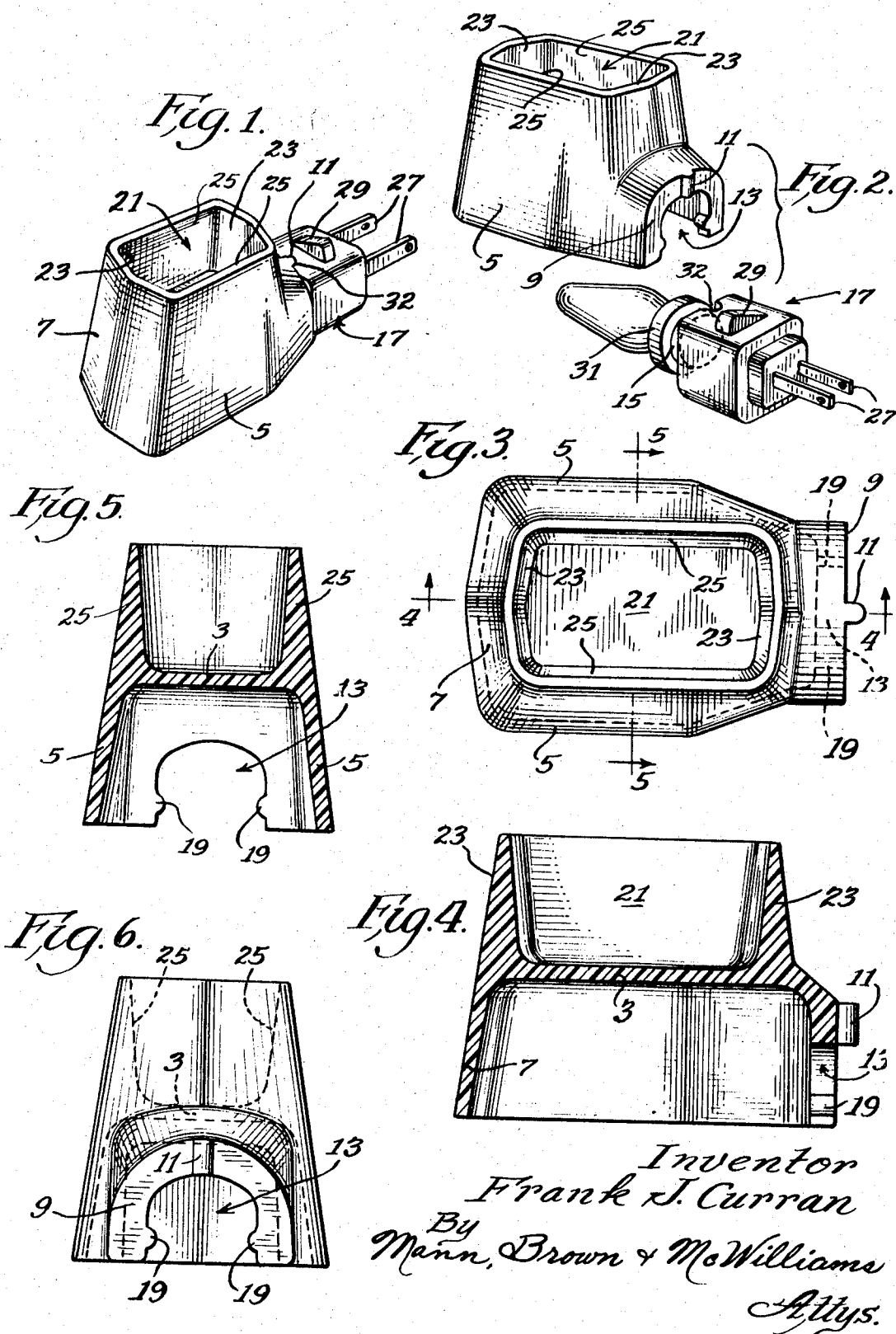
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3,443,083

VAPORIZING LIGHT SHIELD AND COMBINED NIGHT LIGHT VAPORIZER

Filed June 27, 1966

Sheet 1 of 2



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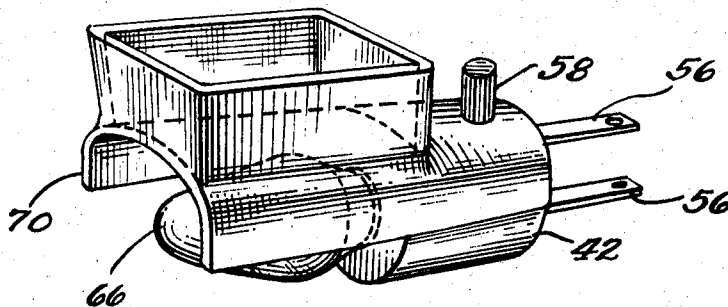
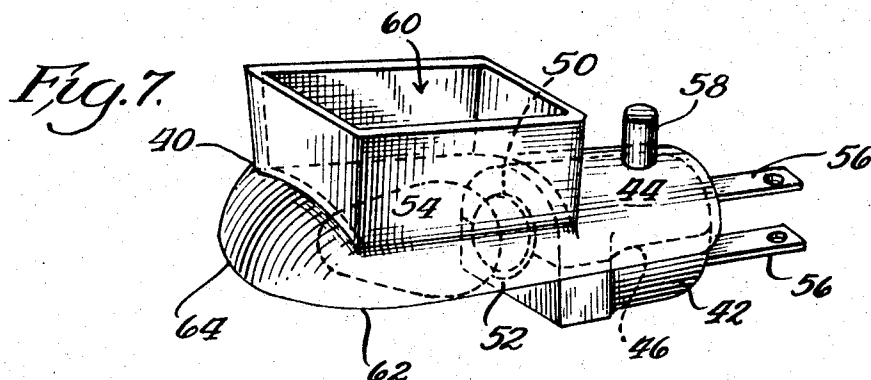
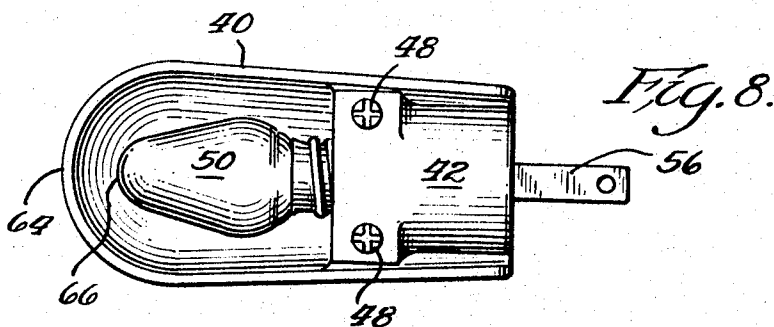
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Sheet 2 of 2

Fig. 9.



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VAPORIZING LIGHT SHIELD AND COMBINED NIGHT LIGHT VAPORIZER

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3 Claims

ABSTRACT OF THE DISCLOSURE

A combined night light and vaporizer in which the light shade is formed with an open top receptacle or vaporizing chamber and the light shade has a collar which snaps on to the neck of the light plug and socket and is held in proper position by a cooperating slot and key on the shade and socket elements.

This invention relates to a vaporizing light shield and to a combined night light and vaporizer.

Night lights comprising a light bulb socket and plug with a shade either permanently or removably mounted thereon made of plastic, are well known. These lights are small in size having an over-all length of the order of 2 to 3 inches and are capable of being plugged into any suitable wall socket to give sufficient light to enable one to see at night and thereby avoid accidents. Such lights use low wattage bulbs of the order of 5 to 10 watts, and require very little current to operate. Such lights may either have a shade which is permanently fastened to the bulb socket and plug or may have a removable shade.

I have discovered that if the shade for conventional night lights are formed with a receptacle or cup thereon, the light can serve the dual purpose of night light and vaporizer, since the light bulb, when lighted, gives sufficient heat to vaporize deodorants, incense, inhalants, perfumes, and other materials placed in the cup. It is common practice to spray deodorants and perfumes into rooms to counteract obnoxious odors or to fill the room space with a pleasant smell. It is also common practice to use vaporizing inhalants to relieve congestion from the common cold while asleep or lying in bed.

It is an object of my invention to supply a means for vaporizing deodorants, perfumes, incense and inhalants by utilizing the heat emanating from a night light.

Another object of my invention is to provide means for vaporizing small quantities at a slow rate by means of the heat emitted by a glowing electric night light bulb of low wattage.

The invention will be better understood by referring to the following description and the accompanying drawings in which:

FIGURE 1 is a perspective of an assembled night light and vaporizer in accordance with my invention;

FIGURE 2 is a perspective view of a disassembled night light socket and plug and the vaporizing shade shown in FIGURE 1;

FIGURE 3 is a top plan view of a vaporizing shield in accordance with my invention;

FIGURE 4 is a cross section of the vaporizing shield of FIGURE 3 taken along line 4—4 of FIGURE 3;

FIGURE 5 is a cross section of the vaporizing shield of FIGURE 3 taken along line 5—5 of FIGURE 3;

FIGURE 6 is a rear elevational view of the shield shown in FIGURE 3;

FIGURE 7 is a perspective view of a modified night lamp and vaporizer in which the shade and vaporizer are affixed to the lamp;

FIGURE 8 is a bottom plan view of the night lamp and vaporizer shown in FIGURE 7; and

FIGURE 9 is a perspective view of another modification of a night lamp and vaporizer in which the shade and vaporizer are affixed to the lamp.

Referring to FIGURES 1 to 6 of the drawings, the numeral 1 indicates generally the combined light shade and vaporizer. The light shade is elongated in order to accommodate a light bulb 2 and is formed with top wall 3, side walls 5, and forward wall 7. The light shade is adapted to form an envelope around the light bulb with one face of the shade open to allow the light to be emitted. The rear end of the shade is formed with an inwardly directed flange 9 (FIGURE 6) and a key 11. The flange 9 is shaped to provide an opening 13 which in general fits the neck 15 (FIGURE 2) of the light bulb socket and plug 17. Near the lower end of the flange 9 are small protuberances 19 extending inwardly from the flange so that the space therebetween is slightly smaller than the diameter of the neck 15. The protuberances 19 permit the back end of the shade to be slipped over the neck 15 by light pressure and prevent the shade from easily being removed from the light socket.

Formed integrally with the light shade on the top wall thereof is receptacle or cup 21 formed with upstanding end walls 23 and side walls 25. The receptacle 21 is formed integrally as part of the shade so that the bottom wall of the receptacle 21 and the top wall 3 of the shade are a common wall. The receptacle 21, forming part of a shade having over-all dimensions of 2¼ inches in length and 1½ inches in width, will have a capacity close to 1 cubic inch.

The light bulb socket and plug 17 is formed with male conducting prongs 27, adapted to be inserted into a wall socket, and is equipped with a switch 29. The end of the socket opposite to that containing the prongs 27 is formed with the neck 15 and collar 31. The hollow neck and collar contain a conductive threaded member into which the light bulb is adapted to be screwed. Immediately behind the neck 15 the upper side of the socket is formed with a slot or recess 32 to receive key 11 when the shade is placed on the socket. The flange 9 of the combined lamp shade and vaporizer is held on neck 15 between the main body of the light bulb socket 17 and the collar 31.

Referring now to FIGURES 7 and 8, there is shown a combined lamp shade and vaporizer 40 which may be molded integrally with the plug 42 but preferably is molded separately from the plug and affixed thereto. Where the plug and shade are made separately, the combined shade and vaporizer has an extension 44 with a flat bottom face 46 adapted to mate with the flat upper face of plug 42 and be fastened thereto by means of screws 48 passing through holes in the plug and threaded into threaded recesses in extension 44. Extension 44 is also formed with semi-circular, threaded recess 50 which mates with semi-circular threaded recess 52 to form a threaded cylindrical recess in which light bulb 54 is screwed. The plug 42 is equipped with suitable electrical contacts connected to male prongs 56. Switch 58 extends through a hole in the upper side of extension 44.

The forward portion of the combined light shade and vaporizer is formed with the receptacle or cup 60 and light shade 62 which substantially envelopes the upper half of the light bulb 54. The front end 64 of the light shield extends a sufficient distance beyond the tip 66 of the light bulb to enable the bulb to be unscrewed from the socket and replaced. A distance of about ¾ to ½ inch between end wall 64 and light bulb tip 66 is sufficient for this purpose. I prefer to size cup 60 so that it is substantially of the same length as the glass envelope of the light bulb, namely, about 1¼ inches, and is slightly wider than the widest portion of the bulb, namely, about

1 inch. The cup will have sufficient depth so that it will have a capacity of about 1 cubic inch.

The combined night lamp and vaporizer shown in FIGURE 9 is similar to that of FIGURES 7 and 8 except that the shade 68 has an open front end 70 which extends about 1/8 inch beyond the top 66 of the light bulb. The light shade in FIGURES 7 to 9 is spaced from the bulb a sufficient distance to permit the bulb to be grasped by the fingers and screwed inwardly and outwardly.

The lamp shade and vaporizer may be made from any suitable thermoset or thermoplastic material which is resistant to chemicals and solvents and which has a high enough softening point to withstand the temperature to which it will be subjected by the light bulb. Suitable thermoplastic materials for this purpose are fluorocarbons such as polychlorotrifluoroethylene sold under the name of Kel-F and polytetrafluoroethylene sold under the name of Teflon. Acrylic resins such as methyl methacrylate resins and methyl methacrylate styrene copolymers are also suitable. Thermoset resins such as melamine-formaldehyde, diallyl phthalate, polyester and epoxy resins may be used. These materials can be molded into a unitary combined shade and vaporizer.

It will be evident that in order to use my invention it is necessary to have a shade with the vaporizer in the upright position. In order to accommodate the device to various wall plugs, plug 17 may be formed having the male prongs either in vertical or horizontal alignment, depending on the position of the female wall socket members.

It will also be obvious that if it is desired to have the light lie against a wall instead of stand out from the wall, the contact prongs can be placed in the side of the plug instead of the end thereof.

In order to use my invention the combined night lamp and vaporizer is filled with the desired solid or liquid desired to be vaporized, either before or after plugging the light into the wall socket. At such time as it is desired to vaporize material contained in the cup the light switch is turned on and as the shade becomes heated from the bulb, vaporization will take place.

The vaporizing light shield shown in FIGURES 3-6 is one and one-half times actual size. However, the shield and corresponding lamp can be larger or smaller than the shield shown and described herein. FIGURES 7-9 are not drawn to scale.

I claim:

1. A vaporizing night lamp comprising:
 - (a) a light bulb socket and plug;

- (b) an annular collar at one end of said socket and plug;
- (c) a neck between said collar and the remaining portion of said socket and plug;
- (d) electrical conducting prongs extending from said socket and plug;
- (e) an integral shade and receptacle formed of solid plastic material, the bottom of said receptacle forming a portion of said shade;
- (f) said shade and receptacle having an open end formed with an inwardly directing flange defining an opening which fits said neck;
- (g) oppositely positioned protrusions extending from said flange inwardly thereof to prove frictional engagement with said neck;
- (h) said shade and receptacle being held in position on said lamp by engagement of said flange and protrusions on said neck; and
- (i) cooperating means on said socket and plug and on said shade and receptacle for positioning the latter and preventing it from turning on the socket and plug.

2. A vaporizing night lamp in accordance with claim 1 in which

- (j) said cooperating means consist of a slot on either said shade or receptacle and a key on the other.

3. A vaporizing night lamp in accordance with claim 2 in which

- (k) the key is formed on the face of said flange and the slot is formed on the main body of the socket and plug immediately adjacent said neck.

References Cited

UNITED STATES PATENTS

2,075,364	3/1937	Smith	240—73
2,166,790	7/1939	Benander	240—73
2,707,733	5/1955	Steinharter	240—73
2,903,570	9/1959	Worden	240—7.1
3,065,340	11/1962	Mead et al.	240—41.5
3,248,530	4/1966	Titmas	240—2

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