

C. KATZENBERGER.
COMPOSITION OF MATTER FOR MAKING FORMALDEHYDE CANDLES.
APPLICATION FILED AUG. 31, 1910.

1,047,416.

Patented Dec. 17, 1912.

Fig. 1.

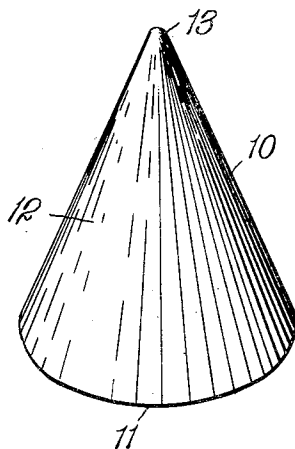
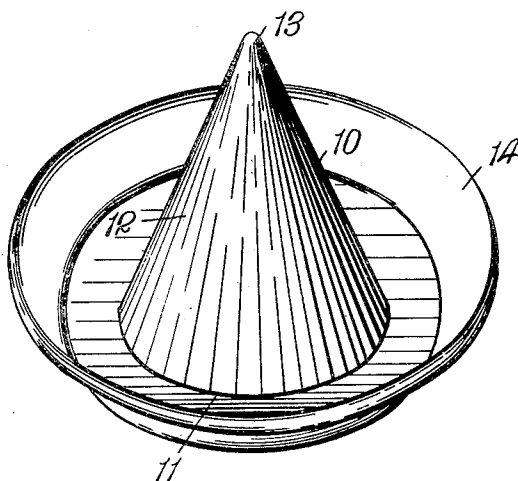


Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

CHARLES KATZENBERGER, OF HOBOKEN, NEW JERSEY.

COMPOSITION OF MATTER FOR MAKING FORMALDEHYDE CANDLES.

1,047,416.

Specification of Letters Patent.

Patented Dec. 17, 1912.

Application filed August 31, 1910. Serial No. 579,854.

To all whom it may concern:

Be it known that I, CHARLES KATZENBERGER, a citizen of the United States, and a resident of Hoboken, county of Hudson, and State of New Jersey, have invented a new and useful Improvement in Compositions of Matter for Making Formaldehyde Candles, of which the following is a full, clear, and exact specification:

This invention relates more particularly to a candle from which is liberated a gaseous disinfectant when ignited for destroying the germs of infectious disease and purifying the surrounding atmosphere thereof, and has for its object to provide a composition of matter wherein the well known germicide property of formaldehyde is employed in conjunction with inflammable non-volatile ingredients the heat from which when ignited will convert the formaldehyde to a gas or vapor which will separate from the non-volatile ingredients and permeate the surrounding air to effectively destroy all prevalent dangerous germs.

My invention has for its further object to provide a process whereby the formaldehyde and associate ingredients are combined in candle form so as to be convenient for transportation and adapted for ready use in the compartments of buildings or other places requiring to be disinfected.

A still further object of the invention is to provide a form of formaldehyde candle which will not smoke in liberating the gas or vapor therefrom and which gas or vapor is not dangerous to persons who may inhale a limited quantity and will not injure fabrics or clothes or like articles in contact therewith.

The invention will be hereinafter more particularly described with reference to the accompanying drawing which forms a part of this specification, and will then be pointed out in the claim at the end of the description.

In the drawing, Figure 1 is an elevation of one form of candle embodying my invention, and Fig. 2 is a perspective view of the candle and a form of pan or dish used in conjunction therewith when the candle is ignited.

As shown in the drawing the formaldehyde candle 10 is cone-shaped having a circular base, as 11, a tapering circular body 12 and a pointed end or apex 13. I prefer to employ this form of candle owing to its

convenience for use, though it is clear that other forms may be adopted.

For the purpose of making a number of the candles 10 my composition consists of the following ingredients combined in the proportions stated, viz: paraformaldehyde, 8 ounces; formaldehyde in concentrated aqueous solution, 5½ ounces; stearic acid, 16 ounces; paraffin, 16 ounces. In combining these ingredients the paraformaldehyde and formaldehyde are mixed in any suitable receptacle. The stearic acid is then melted by heat in a receptacle and when the temperature thereof has lowered, but not sufficiently for the liquid to re-congeal, it is incorporated by agitation with the mixture of paraformaldehyde and formaldehyde. The paraffin is preferably melted by heat in a separate receptacle simultaneously with the stearic acid and when the liquid has likewise cooled without re-solidifying it is mixed in any suitable manner with the mixture of paraformaldehyde, formaldehyde and stearic acid. While the mingled ingredients are still liquid, or when sufficiently cooled to be in a semi-liquid state the composition is formed into candles, similar to the cone-shape as illustrated in the drawing, or other shapes, if preferred, by pouring the liquid or semi-congealed mass into suitable molds of any desired size and which will readily solidify in a cool temperature. The candle may then be used in this form though I prefer to coat each candle subsequently with a melted solution of stearic acid which serves to prevent evaporation of any free formaldehyde which may be liberated in the mass of mixed ingredients until the candle is used.

In practice the candle 10 is placed in a dish or open receptacle 14, as shown in Fig. 2, and the apex 13 of said candle is lighted. The germicide property of formaldehyde is well known, and under combustion the paraformaldehyde is converted into formaldehyde, thus when my candle is ignited the formaldehyde therein will be liberated as a gas from the paraformaldehyde, and as used in conjunction with stearic acid and paraffin the surrounding atmosphere becomes thoroughly permeated with the disinfectant by the gradual process of liberation during the melting period of the congealed stearic acid and paraffin.

It is to be understood that I may use my formaldehyde candle in any preferred form

or size as occasion may require, and that formaldehyde in other forms may be used or other inflammable ingredients employed in conjunction therewith.

5 Having thus described my invention, I claim as new and desire to secure by Letters Patent:

10 The composition of matter herein described for making formaldehyde candles, and which consists of paraformaldehyde 8

ounces, formaldehyde in concentrated aqueous solution $5\frac{1}{2}$ ounces, stearic acid, 16 ounces, and paraffin 16 ounces.

This specification signed and witnessed this thirtieth day of August A. D. 1910.

CHARLES KATZENBERGER.

Witnesses:

ROBT. B. ABBOTT,
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