F. LOBL.

DISINFECTANT AND ODORIZER.

APPLICATION FILED AUG. 1, 1916.

1,340,661. Patented May 18, 1920.

*Fig. 1.*

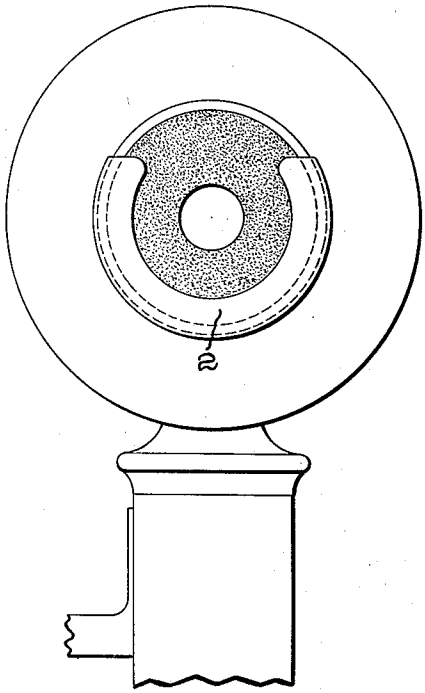



*Fig. 2.*

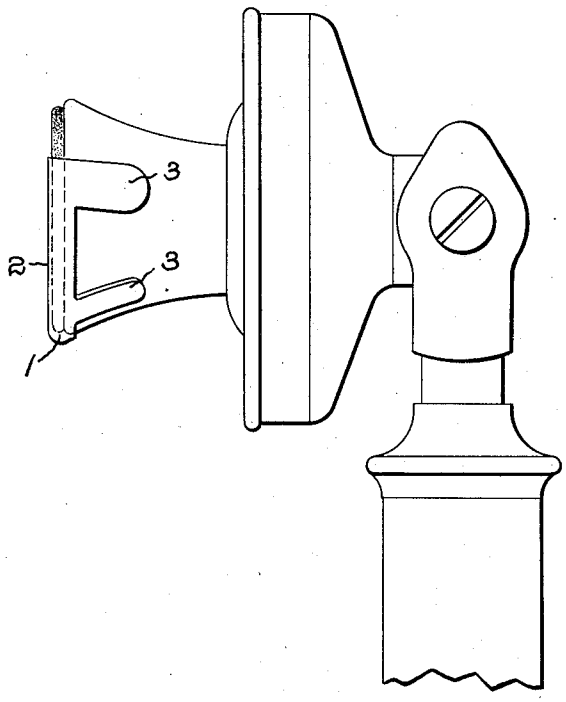



*Fig. 3.*

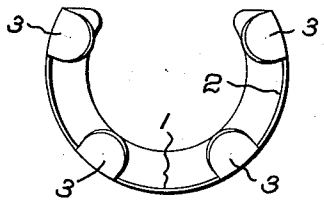
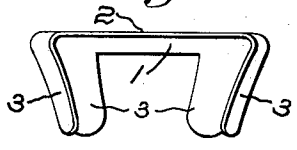



*Fig. 4.*




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# UNITED STATES PATENT OFFICE.

FREDERICK LOBL, OF BOSTON, MASSACHUSETTS.

## DISINFECTANT AND ODORIZER.

1,340,661. Specification of Letters Patent. Patented May 18, 1920.

Application filed August 1, 1916. Serial No. 112,603.

*To all whom it may concern:*

Be it known that I, FREDERICK LOBL, a subject of the Emperor of Austria, and a resident of Boston, county of Suffolk, and Commonwealth of Massachusetts, have invented an Improvement in Disinfectants and Odorizers, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

This invention relates to disinfectants and odorizers and aims to provide a novel and effective article combining the necessary properties for effecting both results:

It is common in the preparation of disinfectants, to use a suitable agent which frequently possesses a very disagreeable odor and objectionable to many persons as, for instance, carbolic acid, eucalyptus, naphthalene, etc. To offset this disagreeable natural odor of the disinfecting agent, it is common also to combine therewith a suitable scenting agent of some kind, such as rose or wintergreen.

While the scent acts more or less effectively for a short time and in the immediate zone of the disinfectant, the scent, in disinfectants as at present prepared, is quickly exhausted and its effective range is so small as to make it at any time of service only in the immediate zone surounding the disinfectant.

One of the objects of this invention is to produce a disinfectant and odorizer that will be more permanent and to that end to effect the continuous production of a suitable gas in sufficient quantities to permeate an area of substantial extent, such as a telephone booth or a room. To accomplish this object I have conceived the novel idea of combining with a suitable disinfectant, effervescing agents which shall act in connection with the moisture ordinarily present in the air and with the moisture deposited near the disinfecting agent from one's breath if the disinfectant is used in connection with a telephone transmitter, for instance, or a speaking tube, to produce the continued supply of disinfecting gas.

While my improved disinfectant may be embodied in any convenient form for use, I have found it particularly effective for use in many instances, as when used in connection with a telephone transmitter, to embody the disinfecting and odorizing agents in tablet form, and the present embodiment of my invention is illustrated as a tablet adapted for use in connection with the ordinary telephone transmitter, and in the drawings:

Figure 1 illustrates my improved disinfecting tablet held in position upon a telephone transmitter by means of an improved holder which I have devised for the purpose; while

Fig. 2 is an edge view of the same;

Fig. 3, a rear view of the holder, and

Fig. 4, a top edge view of the same.

While any suitable disinfecting agent may be used, I prefer to use a 30 per cent. solution of formaldehyde, as possessing satisfactory properties for the purpose with a minimum of disagreeable natural odor.

For the preparation of a tablet as illustrated, embodying my invention, I use as a base any suitable agent, such as powdered talc, which also has the advantage of being somewhat compressible, contributing thereby to the convenient formation of the tablet. The talc also has no tendency to adhere to the disk when under compression and permits the embossing on or sinking in the tablet of any insignia, as a trade-mark.

To the talc I add any suitable alkaline carbonate as bicarbonate of soda, and a suitable acid in powdered form as oxalic, citric, or tartaric acid, preferably the latter, which is sufficiently strong for the purpose, and less expensive than the others.

To the foregoing may be added a suitable scenting or perfuming agent, as an essential oil, and also, if desired, any suitable coloring agent, the latter particularly being a matter of fancy.

While, as stated, a combination of the foregoing ingredients can be pressed into tablet form, nevertheless this process would require a press of considerable power inasmuch as the ingredients mentioned are in the form of such fine powder that they are to only a limited extent compressible.

To render the combined ingredients mentioned more compressible, thereby contributing to lessened expense as involved in the purchase of heavy presses, use of consid-

erable power, and also the time required for compressing the tablets, I have found it convenient to change the combined ingredients to granular form, which may readily be done by mixing therewith a suitable granulating agent, as alcohol, either wood or grain.

When desired, also, a small quantity of a suitable binder and lubricant, as petrolene oil, or vaseline may be added, if it is desired to produce a tablet which shall be less brittle or even somewhat flexible, as a tablet made of the ingredients mentioned without a binder is more or less brittle and therefore more easily damaged in transportation and handling. If the petrolene oil is used it naturally makes the mass of slightly oily and sticky nature, and to offset this it is desirable also to use a small quantity of boric acid which acts to neutralize the oily nature of the mass, in so far as it is apparent to the touch, particularly if touched by the lips when talking, as it is of a cleansing and purifying nature.

While the proportions of the foregoing ingredients or their equivalents may be varied according to the judgment of the maker, I have found the following formula to give satisfactory results, to wit:

½ lb. formaldehyde (30 per cent. solution).
½lb. tartaric acid (powdered).
3 lbs. sodium bicarbonate (powdered).
½ pint alcohol, wood or grain.
Scent and coloring agents, if desired.
2 oz. petrolene oil.
2 oz. boric acid.
1½ lbs. talcum powder.

My improved method of producing a tablet comprising the foregoing ingredients is as follows: I first combine the talc, sodium bicarbonate, formaldehyde, boric acid and vaseline and add thereto the alcohol. The mass is then placed in a mixing machine and thoroughly mixed under the influence of heat until the alcohol is substantially all evaporated and the mass dried and converted into granular form. I next add to it the tartaric acid and place the granular mass in a sifting machine, still more thoroughly to mix and intermingle the several ingredients and to break the granulated particles into smaller sizes.

The mass is now ready to be compressed into tablet or any desired form, which may be done by means of any suitable press provided with necessary dies. The tablet composed as herein outlined is not brittle, and will stand considerable hard usage in transportation and handling; and when made for use in a telephone transmitter or speaking tube, is constructed with an aperture to permit the sound waves to pass therethrough.

While, as already stated, the tablet composed of the foregoing materials is effective for use in many different ways, it is particularly adapted for use in connection with the transmitter of a telephone and for using the same in connection therewith, I have devised a novel holder as illustrated in the drawings. This holder consists, Figs. 1, 3, of a curvilinear ring 1, having a flange 2, on the front edge thereof, the ring provided with rearwardly extended ears 3 on the back for engaging the flaring outer edge of the telephone transmitter. These ears permit the ring 1 to be positioned somewhat away from the transmitter edge, providing between the ring and the transmitter edge a suitable space or pocket wherein may be placed from the top one of the tablets already described.

The described disinfectant or odorizer, by virtue of its effervescent quality under the influence of the moisture in the air, and particularly when one talks near or through the opening in it if used on a telephone, continuously gives off an effective disinfecting and odorizing gas that permeates the transmitter, the telephone booth or room to an extent depending upon the strength of the ingredients and amount of moisture in the air, and effectively disinfects and odorizes the atmosphere therein.

Having described my improved disinfectant and odorizer and a preferred formula and method of making the same which, of course, may be varied in many details both as to composition and method of manufacture without departing from the spirit of the invention and within the scope of the appended claims, I claim:

1. The process of making a disinfecting tablet consisting in combining substantially one and a half pounds of talc, one-half pound of formaldehyde, three pounds of sodium bicarbonate, one-half pound tartaric acid, one-half pint of alcohol, two ounces vaseline and two ounces boric acid, thoroughly mixing the same until the alcohol is substantially evaporated, sifting the granulated particles to effect thorough intermingling thereof, and compressing the same in a suitable press, leaving a sound receiving aperture through the tablet.

2. An effervescent, fugitive, odorizing tablet, comprising in substantially the ratio stated, the following ingredients, namely, one pound and a half of talc, three pounds sodium bicarbonate, one half pound of tartaric acid, a scenting agent, one half pint of alcohol, two ounces of vaseline, two ounces of boric acid, and one half pound formaldehyde, adapted to evaporate and gradually diminish in bulk, and to yield the odor continuously as new portions of the tablet are exposed to the atmosphere by the evaporation of the tablet.

3. An effervescent, fugitive, odorizing tablet, comprising substantially one pound

and a half of talc, three pounds of an alkaline carbonate such as sodium bicarbonate, one half pound of a suitable acid such as citric acid to produce effervescence, a scenting agent, one half pint of alcohol, two ounces of vaseline, two ounces of boric acid, and one half pound formaldehyde adapted to substantially disappear through evaporation in the presence of moisture from the breath.

In testimony whereof I have signed my name to this specification.

FREDERICK LOBL.