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DENTAL WAX

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3 Claims. (Cl. 18—47)

This invention relates to a dental wax composition.

The objects of this invention are:

First, to provide a dental wax which will chill or heat quickly and remain in plastic condition until chilled.

Second, to provide such a wax that is comparatively hard and firm when cold and which will not stick to the hands of the user, and which will leave a smooth surface when trimmed with a knife.

Third, to provide such a wax that will chill so quickly that a large bite may be chilled in the mouth by cold water or air.

Objects pertaining to details of my invention will definitely appear from the description to follow. The invention is clearly defined and pointed out in the claims.

My improved wax is prepared from beeswax or similar material and powdered aluminum, a powder known to the trade as aluminum bronze powder, which I understand to be practically pure aluminum.

In the preparation of my wax I heat 99 parts of the wax until it is thoroughly melted and fluid. The temperature does not need to be higher than is necessary to melt the same. I then add one part of the aluminum bronze powder, mixing and agitating the same until thoroughly mixed. Because the aluminum metal is comparatively light it mixes quite readily with the wax and evenly distributes through the entire mass.

I then pour the wax on a marble slab or the like to cool it, spreading it out into thin layers, preferably one-eighth of an inch thick, or less, although the thickness of the layer is not of great consequence except that the wax is more conveniently handled and manipulated in thin flakes for use. Of course, the proportion of aluminum may be increased or somewhat varied and still secure the results of my invention.

According to my understanding of what is accomplished the aluminum powder distributes through the wax and because it is a conductor facilitates the penetration of heat or the discharge of the same, owing to the fact that the entire mass of the wax due to the presence of the small amount of metal has become practically a conductor of heat. For that reason, when this wax is used as ordinary dental wax it heats quickly, conforms quickly to the bite when taking impressions of the gums and may be quickly chilled, thus greatly facilitating the dentist's operations and at the same time insuring a correct mold.

The wax seems to be reacted upon in some way by the metal so that its tendency to adhere is minimized and the wax does not stick. As a consequence it does not soil the hands and, further, facilitates the taking of an impression. Because the wax is not sticky it leaves a smooth surface when trimmed with a knife, and because it can be chilled and set so quickly the bite may be chilled in the mouth with a little water or cold air from the compressed air system.

I believe my improved wax is available and of advantage wherever it is desired to make a mold or form by means of wax and I have described the precise formula which I find most satisfactory. I am aware that there are various compositions other than beeswax which dentists make use of and I know that the aluminum powder has substantially the same beneficial effect on such waxes. The aluminum powder is, I believe, owing to its low specific gravity, high conductivity and its resistance to oxidation, especially desirable for this purpose.

I desire, therefore, to claim the invention specifically although I am aware that metallic powder admixed with wax will accomplish in some degree the same result but with great difficulty in manipulation. There are other heat conducting powders and materials that might be used. I also wish to claim the invention specifically because of the special advantage of the aluminum powder in the proportions indicated, and broadly as pointed out in the appended claims.

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

1. A wax composition for dentists' use comprising beeswax ninety-nine percent. (99%), and impalpable aluminum powder one percent. (1%) admixed and incorporated into the said wax and formed into thin layers.

2. A wax composition for dentists' use comprising beeswax ninety-nine percent. (99%), and impalpable aluminum powder one percent. (1%) admixed and incorporated into the said wax.

3. A wax composition for dentists' use comprising wax and metallic aluminum powder admixed and incorporated in amount sufficient to effectively conduct heat through the mass.

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