

July 31, 1956

H. S. LEVINE

2,756,504

SHADE GUIDE

Filed Aug. 9, 1954

FIG. 1.

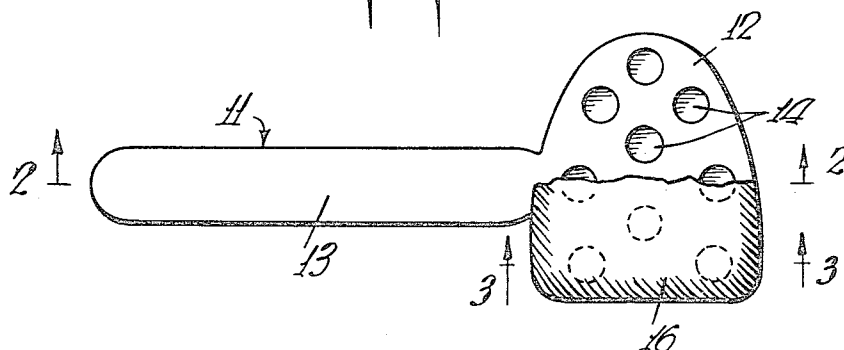


FIG. 2.

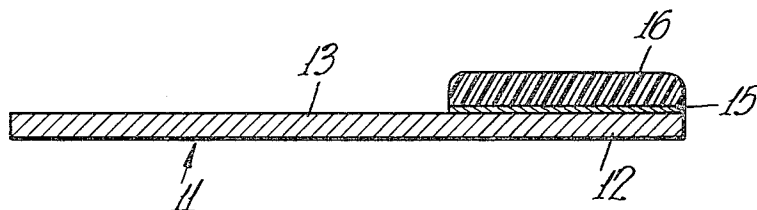
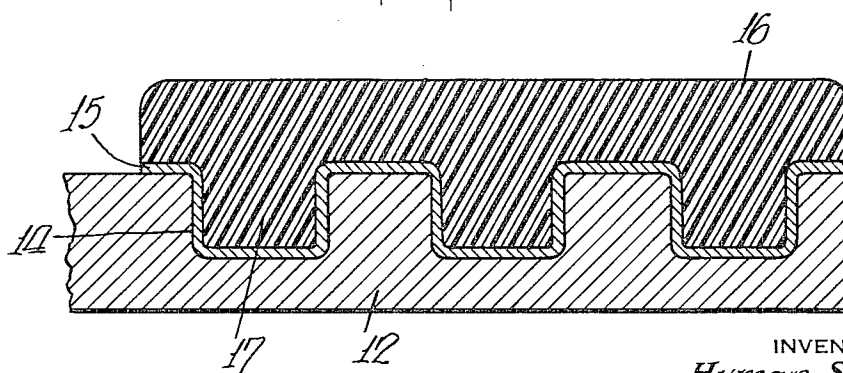


FIG. 3.



INVENTOR
Hyman S. Levine
BY
Dean Fairbank & Hirsch
ATTORNEYS

1

2,756,504

SHADE GUIDE

Hyman S. Levine, New York, N. Y.

Application August 9, 1954, Serial No. 448,589

4 Claims. (Cl. 32—71)

2

This invention relates to the art of shade guides for dental use.

As conducive to an understanding of the invention, it is to be noted that dental bridge work or veneer crowns, for example, generally comprise a rigid frame of a gold alloy to which a veneer of plastic or porcelain is suitably affixed. To preserve the appearance of the natural tooth, which the veneer is designed to simulate, a thin film of a suitable opaque material generally known as an "Opacifier" is interposed between the veneer and the adjacent gold backing during the fabrication of the finished unit. This film is designed to prevent the gold backing from materially affecting the shade of the relatively thin veneer due to reflection of light from such backing.

In selecting the right color or shade for the plastic veneer to be mounted on the bridgework or crown so that it will resemble the natural teeth of the patient, where the dentist utilizes a conventional shade guide of the type which consists of a support of metal or plastic on which a false tooth of plastic or porcelain is mounted, as the false tooth on the support is much thicker than the veneer actually used on the bridgework and as it has no backing similar in color to the gold bridge or crown on which the veneer is mounted and does not have the coating of the "Opacifier," although the shade or color of the false tooth used as a guide may initially resemble that of the natural teeth of the patient, when a veneer corresponding in color to the shade of the selected false tooth is incorporated into the gold bridge or crown in conventional manner with the usual intervening "Opacifier" film, the resultant shade of the veneer thus mounted will be entirely different from the shade of the surrounding teeth so that it will be obvious that the inserted tooth is false and not natural.

It is accordingly among the objects of the invention to provide a shade guide that may readily be fabricated at low cost and which will facilitate the accurate matching of the natural teeth of a patient in the formation of artificial bridgework or veneer crowns.

According to the invention, these objects are accomplished by the arrangement and combination of elements hereinafter described and particularly recited in the claims.

In the accompanying drawings in which are shown one or more of various possible embodiments of the several features of the invention,

Fig. 1 is a top plan view of the shade guide,

Fig. 2 is a longitudinal sectional view thereof taken along line 2—2 of Fig. 1, and

Fig. 3 is a view similar to Fig. 2 on a greatly enlarged scale taken along line 3—3 of Fig. 1.

Referring now to the drawings, the shade guide comprises a supporting member 11 which may be of any suitable material so long as its color is substantially the same as that of conventional dental bridgework or veneer crown, the major portions of which are generally made of gold.

In the illustrative embodiment herein, the supporting member is a brass stamping having an enlarged flat head 12 at one end and a shank 13 extending therefrom and defining a handle. The head 12 is conformed so as to retain thereon a suitable veneer generally of plastic and to this end has a plurality of depressions 14 therein.

The head 12 is coated with a thin layer of a suitable substantially opaque material 15 commonly known in the dental art as an "Opacifier." The "Opacifier" is substantially the same shade as the plastic veneer for which it is to serve as a backing so that it will have little effect on the shade of the veneer when the latter is viewed.

The supporting member 11 coated with the "Opacifier" 14 as previously described, is then placed in a mold charged with plastic powder, or plastic powder mixed with a monomer, for example, at the region thereof in juxtaposition to the head 12 of the supporting member. After the mold is closed, heat and pressure are applied thereto to solidify the plastic powder to form the plastic veneer 16. Thus, when the mold is opened, the plastic veneer will be securely retained on the head 12 by reason of the depressions 14 therein into which the plastic will flow as at 17.

The operations above described are repeated using plastic powder or plastic powder mixed with a monomer, of assorted shades as well as related shades of "Opacifiers" so that a plurality of guides will be provided of an assorted range of shades.

To use the shade guides, the dentist selects the one that most closely matches the color or shade of the teeth adjacent the region the bridgework or veneer crown is to be positioned. He then fabricates the complete bridge-work or veneer crown in conventional manner using for the veneer, plastic powder of the same color as the powder from which the veneer on the selected shade guide was formed.

With the use of the shade guide of the type described, the color of the veneer on the shade guide is selected to match the color of the natural teeth of the patient and since the shade guide is fabricated with the gold color backing and "Opacifier" to simulate as closely as possible the conditions of the finished bridgework, the veneer on the finished bridgework or veneer crown will also match the natural teeth of the patient.

As many changes could be made in the above method and many apparently widely different embodiments of this invention could be made without departing from the scope of the claims, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:

1. As an article of manufacture a shade guide comprising a mounting member, a veneer simulating a natural tooth affixed to the mounting member and a film of substantially opaque material of the same color as the veneer interposed between the veneer and the mounting member.

2. As an article of manufacture a shade guide comprising a mounting member having a handle portion and a head portion, a veneer of plastic material of color simulating a natural tooth affixed to the head portion of said mounting member and a film of substantially opaque material of the same color as the veneer coated on said head portion and interposed between the veneer and said head portion.

3. As an article of manufacture a shade guide comprising a mounting member having a handle portion and a flat head portion, said head portion having substan-

3

tially a gold color, a veneer of plastic material of color
simulating a natural tooth affixed to the head portion of
said mounting member and a film of substantially opaque
material of the same color as the veneer coated on said
head portion and interposed between the veneer and said
head portion. 5

4. The combination set forth in claim 3 in which said
veneer is molded to said head portiton and said head por-
tion has retaining configurations formed integrally there-
with to retain said veneer in position thereon. 10

4

References Cited in the file of this patent

UNITED STATES PATENTS

1,327,306	Berger	Jan. 6, 1920
1,702,226	Bruninghaus	Feb. 12, 1929
2,335,872	Mitchell	Dec. 7, 1943
2,382,304	Foltz et al.	Aug. 14, 1945
2,643,418	Auldridge	June 30, 1953