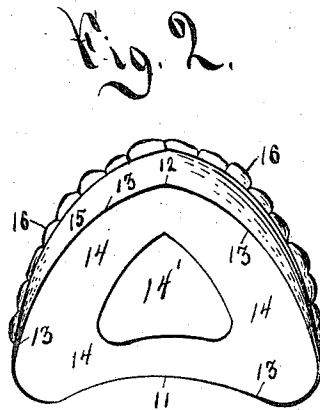
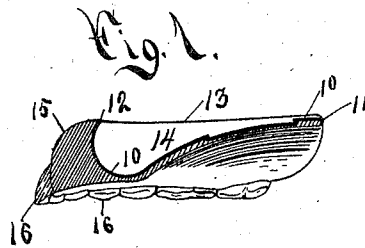


(No Model.)

W. S. DEPEW.
DENTAL PLATE.

No. 582,045.

Patented May 4, 1897.



Witnesses

H. M. Simon

E. E. Carpenter

Inventor

William S. Depew

By His Attorneys

Harris & Baldwin

UNITED STATES PATENT OFFICE.

WILLIAM S. DEPEW, OF JAMESTOWN, NEW YORK, ASSIGNOR TO MILO HARRIS, OF SAME PLACE.

DENTAL PLATE.

SPECIFICATION forming part of Letters Patent No. 582,045, dated May 4, 1897.

Application filed December 30, 1896. Serial No. 617,483. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. DEPEW, a citizen of the United States, residing in Jamestown, in the county of Chautauqua and State of New York, have invented certain new and useful Improvements in the Method of Making Dental Plates, as will be fully set forth in this specification and the accompanying drawings, in which—

Figure 1 is a sectional view of an upper dental plate from front to rear of plate. Fig. 2 is a plan view of an upper dental plate.

The improvement consists, first, in the material and the method of applying it to the article used.

It is well understood that many persons cannot wear the ordinary dental rubber plate, as it causes irritation of the mucous membrane, and to overcome this difficulty solid gold or aluminium plates are used; but these are found difficult to fit perfectly, and only the most skilled dentists have success in the perfect adaptation of these metals. Because of this and the great cost rubber plates having a lining of gold-foil to come next to the flesh have been used; but this only partly overcomes the difficulty, as the cohesion of the parts is troublesome, and it is impossible to fit the lining thus made into the small impressions formed by the mouth on the wax or plaster-of-paris cast. To overcome all these objections and make a cheaper and better plate is one of the objects of my invention. To accomplish this, I take the impression of the mouth in wax or plaster-of-paris in the usual manner. I then take the flour of aluminium or gold and vulcanite rubber and mix with chloroform or other fluids, to cut the rubber, in such quantities as to form a liquid paint, being careful to get such proportions that the solution when applied will vulcanize with the body of the rubber plate. This solution or paint is then applied to the whole surface of the plaster cast from the mouth-impression with a camel's-hair or other suitable brush, and should be given one or more coats to get the desired amount of metal to make a good lining to come in contact with

the flesh. In the drawings this lining is shown by the black line 10, (see Fig. 1,) which extends from the point 11 to the point 12 and includes all that inner portion of the plate within the line 13, as shown in Figs. 1 and 2, and which is numbered 14 and is left plain white in the drawings to represent the metal surface. The suction-cup 14' is formed in the cast and painted also. This is the whole surface of the plaster-of-paris cast as taken from the mouth-impression, and it is the part upon which a perfect fit must be made in order to have the plate set easily. Having applied sufficient of the metal paint to the cast to form a good lining, I then lay strips of dental rubber over this lining, and, building up the plate 15 and putting in the teeth 16 in the usual manner, I vulcanize it. It is found that the rubber in the paint causes the dental rubber not only to readily adhere to the paint, but the paint as readily vulcanizes to the rubber body, so that they cannot be separated. This metal lining easily parts from the plaster-of-paris cast when taken from the vulcanizer, and it will be found not only to be bright and need no polishing, but it is also a perfect facsimile of the cast in every detail, and consequently a perfect fit for the mouth.

Plates made in this way are stronger, more perfect, and cheaper than the common rubber plates, and more cleanly, as foods do not adhere.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A lining for dental plates composed of metal, vulcanite rubber and a fluid or fluids to cut the rubber, the lining being vulcanized with the main body of the vulcanite rubber, substantially as shown and described.

In testimony whereof I affix my signature in the presence of two witnesses.

WM. S. DEPEW.

In presence of—

H. E. BUTLER,
M. V. DEPEW.