

D. D. HYMAN.
DENTAL PLATE.
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941,149.

Patented Nov. 23, 1909.

Fig. 1.

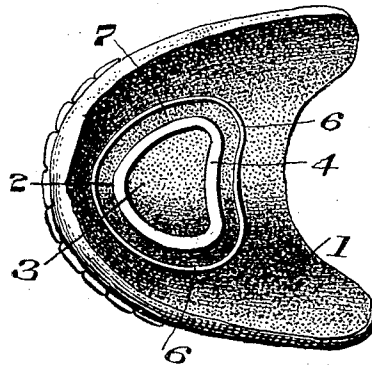
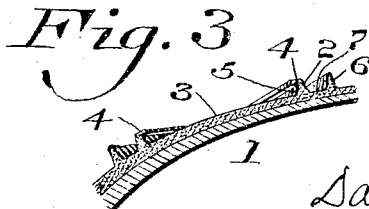
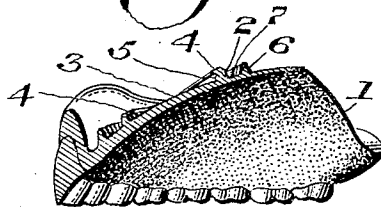


Fig. 2.



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UNITED STATES PATENT OFFICE.

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DENTAL PLATE.

941,149.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, DAVID D. HYMAN, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Dental Plate, of which the following is a specification.

My invention relates to a new and useful dental plate and consists in providing means for forming a suction between the plate and the roof of the mouth for holding the plate in proper position.

It further consists in providing an overhang or flange which prevents escape of the air from the suction means.

It further consists in providing two cups or recesses for forming a suction.

Figure 1 represents a plan view of a dental plate embodying my invention. Fig. 2 represents a sectional view thereof. Fig. 3 represents a sectional view on an enlarged scale.

Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings, I have found in practice that on the dental plates now in use on the market that the suction device or means is imperfect by reason of the fact that if there is a slight movement or unequal pressure upon the plate, the air from the suction cavity or recess will escape, allowing the plate to fall.

My invention is designed to overcome this defect and in the drawing, I have shown one form for carrying out my invention but it will be evident that the arrangement may be varied and other instrumentalities may be employed which will come within the scope of my invention and I do not therefore desire to be limited in every instance to the exact construction as herein shown and described but desire to make such changes therein as may be necessary.

1 designates a dental plate formed of any desired shape and material and upon the upper surface of which extends upwardly the wall 2, which is of any desired shape and forms a recess or cavity 3 which serves as the suction means. Extending inwardly, from this wall, is an overhang or flange 4

which forms around the wall a pocket 5. About the wall 2 at a suitable distance therefrom, I provide a second wall 6, which extends upwardly from the upper face of the plate, as will be evident, forming a space 7 between it and the said wall 2.

When the plate 1 is placed in the mouth, it will be seen that by means of the recess 3 a suction is formed between the plate and the roof of the mouth, so that the said plate will be held in proper position, and if there is any slight movement of the plate, escape of the air from the recess 3 is prevented by reason of the said overhang 4, since the air in the recess will strike the said flange or overhang 4 by reason of the formation of the pocket 5. It will be further understood that the flange gives an increased bearing surface upon the roof of the mouth which assists in preventing escape of the said air from the recesses and thus breaking the suction.

In addition, by reason of the space 7 formed between the walls 2 and 6, a second suction is set up which further assists in holding the plate in position. In this way a positive suction is formed between the mouth and the plate with the evident results.

As shown in Fig. 3, I desire to preferably form the outer face of the plate of soft rubber, vulcanized or otherwise secured to the hard rubber plate 1, the walls 2 and 6 as well as the flange 4 in this instance being also formed of soft rubber. It will be evident that any shape or form of walls 2 and 6 may be constructed, depending upon the shape of the roof of the mouth to which the plate 1 is to be applied.

I am aware that it is old to form a plate with a single suction recess but as far as I am aware, I am the first to form a plate with the suction recess having an overhanging flange in connection with the second suction recess.

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

As an improved article of manufacture, a dental plate formed of hard rubber and having within the confines thereof an upwardly

extending wall forming a suction cavity,
said wall having an inwardly extending
overhang forming around the wall a pocket,
said plate being formed with a second wall
5 extending upwardly from the upper face of
the plate outside of the first-named wall and
forming therewith a space between said

walls, said cavity and space being unob-
structed, whereby the plate is provided with
increased suction surface.

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Witnesses:

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