

G. J. NATIONS.
DENTAL APPLIANCE.
APPLICATION FILED JAN. 3, 1911.

1,009,551.

Patented Nov. 21, 1911.

FIG. 1.



FIG. 4.

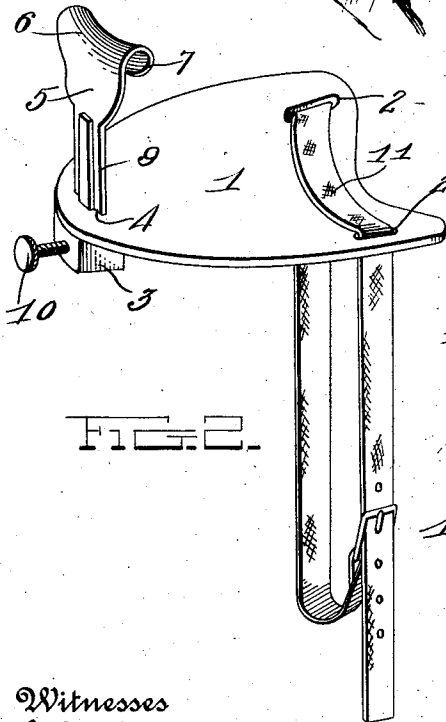
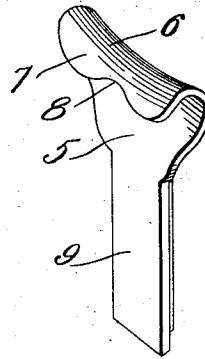


FIG. 2.

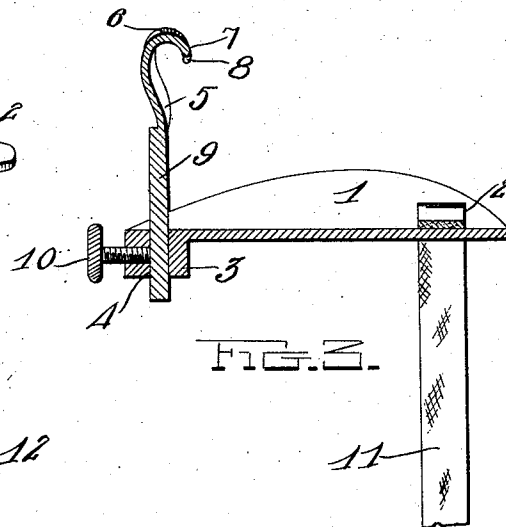


FIG. 3.

Witnesses
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UNITED STATES PATENT OFFICE.

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DENTAL APPLIANCE.

1,009,551.

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Application filed January 3, 1911. Serial No. 600,582.

To all whom it may concern:

Be it known that I, GUY J. NATIONS, a citizen of the United States, residing at Quincy, in the county of Adams and State of Illinois, have invented certain new and useful Improvements in Dental Appliances; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in dental appliances.

One object of the invention is to provide a dental appliance by means of which the lower lip of a patient may be held down in an out of the way position for dental or other operations.

Another object is to provide a device of this character which will firmly hold the lip with but slight discomfort to the patient.

With these and other objects in view the invention consists of certain novel features of construction, combination and arrangement of parts as will be more fully described and particularly pointed out in the appended claims.

In the accompanying drawings: Figure 1 is a perspective view showing the application of the device; Fig. 2 is a similar view of the device; Fig. 3 is a central vertical longitudinal section; Fig. 4 is a perspective view of the lip engaging member of the device.

In the embodiment of the invention I provide a chin engaging member 1 which is in the form of a plate curved or shaped to fit the curvature of the chin. In the rear or inner edge of the plate near its opposite corners are formed slots 2. In the center of the plate on its lower side and at its front edge is formed a reinforcing block or projection 3 through which and through the adjacent portion of the plate is formed a vertically disposed T-shaped passage 4.

Adjustably engaged with the passage 4 is the lip engaging member of the device, said member comprising a plate 5 having its upper end curved transversely as at 6 and bent or curved rearwardly to form a lip engaging hook 7. The edge of the hook 7 has formed therein a centrally disposed notch or recess 8 which prevents the edge of the hook from coming into engagement with the ligament between the lower inner

portion of the lip and the adjacent portion of the gum thus preventing the hook from injuring this part of the lip.

On the lower end of the plate is formed a downwardly projecting attaching shank or stem 9 which is slidably engaged with the passage 4 in the chin engaging member 1. The stem or shank is T shape in cross section to fit the passage 4 and is secured in its adjusted position therein by a set screw 10 arranged in a threaded aperture formed in the outer side of the reinforcing block 3 as shown.

The device is held in position by a strap 11 which is preferably formed of tape or braid and provided with a buckle 12. In applying the device the plate 1 is engaged with the under side of the chin and the strap 11 buckled around the neck. The hook shaped upper end 7 of the plate 5 is then engaged with the lip and the latter drawn down to the desired extent which movement slides the shank 9 down through the slot 4. When thus adjusted the set screw 10 is tightened up thereby securely holding the lip in retracted position.

The appliance is preferably formed of a suitable metal and the parts of the same may be readily taken apart for cleansing and sterilizing. By the use of the appliance the operator has free access to the lower anterior teeth and the accumulation of saliva is effectually prevented. The danger of injury to the gums by the instrument being forced into engagement therewith by the movement of the lip as frequently occurs when the lip is held back by hand or by weights and similar devices now in use, is also prevented.

From the foregoing description taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention as defined in the appended claims.

Having thus described my invention, what I claim is:

1. In a dental appliance of the character described, a chin engaging member, means to secure the same in position, a lip engaging member adapted to hook over the lower

lip and outside the jaw having a sliding engagement with said chin member, and means whereby said lip engaging member is fastened in its adjusted position.

5 2. In a dental appliance of the character described, a chin engaging member, means to secure said member in position, a lip engaging member having a sliding engagement with said chin member, said lip en-
10 gaging member comprising a hook shaped lip engaging plate adapted to hook over the lower lip whereby the same may be drawn and held down to an out of the way
15 in adjusted position.

3. In a dental appliance, a chin engaging member, comprising a plate shaped to fit the chin, said plate having on its lower side near its front edge a reinforcing block and
20 a vertical guide passage, an attaching strap

secured to the plate and adapted to be fastened around the neck of the patient whereby the plate is secured in position, a lip engaging member comprising a plate, a lip engaging hook on one end thereof said 25 hook having a notch, a shank formed on said plate and having a sliding engagement with a guide passage in said chin plate and reinforcing block and a set screw arranged in said block and adapted to engage said 30 shank whereby the lip engaging member is held in its adjusted position.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

GUY J. NATIONS.

Witnesses:

MARY VANDEN BOOM,
H. J. BUTZTURBER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."