J. B. JORDAN.

DENTAL LIP AND CHEEK SUPPORTER.

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ATTY.
DENTAL LIP AND CHEEK SUPPORTER.

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To all whom it may concern:

Be it known that I, JAMES B. JORDAN, a citizen of the United States, residing at Nashville, in the county of Davidson and State of Tennessee, have invented new and useful Improvements in Dental Lip and Cheek Supporters, of which the following is a specification.

My invention relates to an improved dental lip and cheek supporter, and has for its object to provide a device of this character which may be easily and quickly applied to the mouth in such manner as to hold the lip and cheeks of either jaw away from the teeth, so as to fully expose the same and prevent the flow of saliva thereto by the seeping of the same between the lip or cheek and the gums. It is also contemplated as objects of the invention to provide a device of this character which may be readily and antiseptically cleansed, which may be employed in place of the ordinary rubber dam or as a holder for the rubber dam, and which may be constructed in an economical manner as a single or integral structure.

In order that my invention may be fully understood, I have illustrated the same in the accompanying drawings, in which:

Figure 1 is a perspective view of the device.

One end of the retaining-band being detached therefrom to better illustrate the mode of connection between the two. Fig. 2 is a top plan view of the same. Fig. 3 is a transverse sectional view. Fig. 4 shows the mode of application of the device to the mouth; and Fig. 5 is a view similar to Fig. 3, showing a removable prong.

My improved lip and cheek supporter consists of a body portion or lip-section 1, which, as more clearly shown in the sectional view, is substantially concave-convex in outline, the concave portion 2 being adapted to receive the upper or lower lip of the patient. The lip-section 1 is curved to conform to the general contour of the lip, as shown by the plan view. Extending from each end of the lip-section 1 are integral projections 3, which have at their extreme ends and bent outward at substantially right angles thereto hooks 4, which are adapted to engage in openings 5, formed in a metal end 6 of the retaining-band 7. Curved inward from the ends of the lip-section 1 are prongs 8, which are likewise given an upward curvature, as indicated at 9. Between the projections 3 and the prongs 8 a space 10 is provided to receive the lip, as more clearly shown in Fig. 4.

In applying the device to the mouth the prongs 8 are inserted between the cheek and the gums, the lip lying in the concave portion 2 of the lip-section 1. The retaining-band 7 is then passed over the head of the patient and attached to the hooks 4 on the ends of the projections 3, the length of the retaining-band being adjusted in such manner that when its opposite ends are secured to the hooks 4, my improved device will be pulled upward, which, as shown in Fig. 4, will operate to compress or raise the lip if the device be applied to the upper jaw, this being effected by the lip-section 1, while the prongs 8 will operate to distend or press outward the cheeks away from the gums. When thus applied, the teeth are fully exposed to view and may be readily operated upon. If desired, a napkin or piece of other absorbent material, such as cotton, may be first applied to my device, so that such absorbent material will be held between the lip and cheeks and the gums and prevent access of saliva to the teeth. The prongs 8 may also be so arranged as when the device is applied to the mouth they will compress the salivary glands and temporarily stop the flow of saliva in whole or in great part.

The inner edges of the prongs 8 form a continuation of the lower curved edge of the lip-section 1, so that when the device is applied to the mouth it will conform to the curvature of the gum, and thus produce the minimum amount of inconvenience to the patient, as no sharp projecting portions will bear upon the gums. The ends of the prongs 8 are of course rounded, so as not to hurt the cheeks when pressing upon the same.

The device as a whole may be constructed of any material found suitable for the purpose, such as metal, hard rubber, celluloid, or the like; but I prefer to employ metal. Also while I have shown the device as an integral structure it will be apparent that it may be constructed in two or more parts, if preferred, as indicated in Fig. 5. In this con-
struction I provide at each end of the lip-section 1 a short projection or stub 11 and form each of the prongs 12 with a socket 13, adapted to fit over the stub 11, the prongs being held in place by frictional engagement of the walls of the sockets with the stubs. It will be apparent without illustration that the stubs 11 and sockets 13 may be screw-threaded, so that the prongs may be screwed on the 10 stubs.

By providing removable prongs either prong may be removed when only one side of the mouth is to be examined or operated on, or both prongs may be removed if only the upper or lower lip is to be held away from the teeth and gum.

It will be apparent that the device forming the subject-matter of this application will be useful not only in dental operations, but in all cases where the gums, teeth, or other parts of the interior of the mouth are to be exposed to view.

The terms "inward," "outward," and the like as employed herein and in the claims are used relative to the position of the device in the mouth.

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

1. A dental lip and cheek supporter, comprising a lip-section having cheek-supporting members at either end thereof, and means provided at each end of the supporter for receiving the ends of a retaining device.

2. A dental lip and cheek supporter, comprising a lip-section concave on its upper side, cheek-supporting members extending inward from each end of the lip-section, and means provided at each end of the supporter for receiving a retaining device.

3. A dental lip and cheek supporter, comprising a lip-section, prongs extending inward from the ends of said lip-section and having an upward curvature, and means at the end of the supporter for receiving a retaining device.

4. A dental lip and cheek supporter, comprising a curved lip-section, prongs extending inward from the ends of said lip-section and having their inner edges formed as a continuation of the curved edge of said lip-section, and means at the ends of the supporter for receiving a retaining medium.

5. A dental lip and cheek supporter comprising a curved lip-section having a concaved upper side and provided with integral projections at each end, prongs extending inward from each end of said lip-section and having their inner edges forming continuations of the curved edge of said lip-section, there being spaces provided between said prongs and said projections to receive the lip, and means provided on each of said projections for receiving a retaining medium.

6. As a new article of manufacture, a den- tal lip and cheek supporter comprising a curved lip-section having projections at each end provided with means whereby a retaining medium may be secured thereto, and prongs extending inward from opposite ends of said lip-sections in a manner to provide spaces between the prongs and said projections to receive the lip when the device is applied to the mouth, substantially as described.

7. A dental lip and cheek supporter, comprising a lip-section having removable cheek-supporting members at either end thereof, and means provided at each end of the supporter for receiving the ends of a retaining device.

In testimony whereof I have hereunto set my hand in presence of two subscribing wit- nesses.

JAMES B. JORDAN.

Witnesses:
W. B. BALLARD,
P. A. WILLIAMS.