DOUBLE PRESSURE INTERDENTAL WEDGE GUM MASSAGER

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Application April 23, 1934, Serial No. 722,004

9 Claims. (Cl. 128—62)

This invention appertains to a double pressure interdental wedge massager, and more particularly to the production of a simple and efficient massaging device for producing heavy intermittent pressure starting at the crest of the gums at the union of the inner and outer surfaces and extending root-wise for the purpose of assisting in the building-up of the peridental tissues and creating a healthy condition of the same.

One of the important objects of the invention is the production of a simple and efficient gum massaging device which is constructed for the purpose of forcing a wedge or wedges in between the teeth to produce pressure upon opposite sides of the gums at a point intermediate the teeth and thereby producing a pinching-like action.

A further object of this invention is the production of a simple and efficient massaging device which may be easily and conveniently sterilized and at the same time may be always in a proper condition for facilitating the massaging of the gums, and more particularly produce a double pressure upon opposite sides of the gum and provide an inter-dental massaging action upon the gums between the teeth to produce a definite pressure upon the inter-dental tissues which are so difficult to massage.

Other objects and advantages of the present invention will appear throughout the following specification and claims.

In the drawing:

Figure 1 is a longitudinal sectional view through a pair of gum massaging devices showing the same in action and placed upon the thumb and forefinger of the operator's hand, and illustrating the manner in which the gums may be massaged between the teeth to reach the deep inter-dental tissues;

Figure 2 is a section taken on line 2—2 of Figure 1;

Figure 3 is a perspective view of one of the massaging devices;

Figure 4 is a plan view of one of the massaging devices;

Figure 5 is a section taken on line 5—5 of Figure 4;

Figure 6 is a longitudinal sectional view taken on line 6—6 of Figure 4;

Figure 7 is a perspective view of a modified form of the invention;

Figure 8 is a sectional view through a pair of the massaging devices shown in Figure 7;

Figure 9 is a section taken on line 8—8 of Figure 8; and

Figure 10 is a perspective view of a modified form of the invention showing a finger cot provided with a smooth cushioning pad of soft pliable rubber which, when applied to the gums, will cause a pinching action to be produced by the fingers and cause a crowding, wedging action upon the gums.

By referring to the drawing, it will be seen that the inter-dental gum massaging device produces a double pressure action, preferably comprising two similarly constructed massaging members which are preferably carried by the thumb and forefinger of the operator. Each massaging device comprises a finger cot or tubular member which is preferably of sufficient length to fit over the outer end of the finger up to about the second joint thereof. Along the inner face of the finger cot or tubular member is preferably formed a cushioning pad which is either constructed integrally, securely cemented, or otherwise secured to the inner face of the cot, or in other words, upon the face which would normally correspond with the cushion part of the finger. This cushion member is preferably formed of compressible rubber and is preferably oval in shape, as shown clearly in Figures 3 and 4 of the drawing. The cushion pad is preferably approximately 1/8 of an inch thick in its center, and is gradually tapered off toward its ends and sides to approximately 1/16 of an inch, the edges being abruptly curved and preferably merging into the outer face of the cot, as shown in Figures 1 and 5. This pad is preferably approximately one inch long from the closed end of the cot, and is preferably 1/8 of an inch thick at its center and approximately 1/16 of an inch thick from its closed end and at a distance of approximately 1/8 of an inch from which point it bevels off rapidly. At a point about one-third of its length back from the closed end of the thickened pad member, and preferably projecting outwardly of and crossing the cushion member at an angle is arranged a two-point wedge, the points thereof being separated by means of a V-shaped notch. This structure is clearly shown in Figures 3 and 5 of the drawing. The outer faces are inclined to provide the transversely arranged tapering points and these outer faces merge into the sides of the cushioning member or pad. As shown clearly in the drawing, it will be noted that these wedge-shaped portions are preferably formed integrally with the thickened pad and extend at approximately right angles with respect to the
longitudinal axis of the cot 10 and pad portion 11. As previously explained, I preferably employ two of these cots which are similarly constructed, one to fit upon the gum between the teeth and the other to fit upon the thumb in order that the user may place the finger and thumb upon opposite sides of the gum so as to bring the wedge-shaped portion 13 into firm contact with the gum at a point intermediate the teeth to produce a pinching action. The pressure exerted may be exerted directly upon the inter-dental tissues, and by producing this pinching or squeezing action by drawing the thumb and forefinger together into position, as shown in Figure 1, and massaging the gums at this point between the teeth by a pressure massage, a healthy circulation of the blood will be created due to this massaging action, and the pinching pressure massaging action, acting directly upon the gums between the teeth, will permit the apices of the wedge shaped points 12 to reach down into the crevices between the teeth where adequate pressure may be exerted on the deep inter-dental tissues located at this point.

It has long been recognized and at this time is considered a very important element in periodontal treatment, that the inter-dental tissues and particularly the deep inter-dental tissues, be reached in order to properly strengthen and massage these deep inter-dental tissues which are found between the teeth. Consequently, the particular device which is illustrated in the drawing and above described, is particularly adapted for massaging the gums and permitting the user to reach these deep inter-dental tissues and thereby through a pinching pressure massage set up the desired circulation essential to the healing and health of these deep inter-dental tissues which ordinarily cannot be properly or conveniently reached.

Furthermore, the particular device which I have perfected and disclosed herein, may be used by an ordinary layman, and expert skilled or professional training is not necessary in order to manipulate the device in an efficient manner, and obtain the desired results.

In Figures 7, 8 and 9, I have shown a slightly modified form of the present invention wherein a finger cot 15 is illustrated having a thickened massaging pad 16 formed upon one side and located near the outer extremity of the cot in a position normally corresponding to the cushion part of the finger, this cushioning pad 16 being provided with a single taping wedge 17 located preferably at the longitudinal center of the pad 16, the apex 18 extending transversely of the pad. In the preferred embodiment, I have shown a twin or two-point wedge set crosswise of the cot with a point to each side of the center, whereas in Figures 7, 8 and 9, I have shown a single wedge-shaped member upon each cot, this latter illustration merely constituting a modified form, which in some instances might be found to be preferable.

In Figure 10, I have shown a further modified form of my invention wherein the finger cot 19 is provided with a cushion pad 20 of soft or pliable rubber having a flat outer face and capable of being pressed against the gums at a point between approximating teeth so as to permit a part of the cushion pad to be forced down between the teeth for the purpose of producing a crowding, pinching or wedging action.

It should be understood that any suitable or desired type of compressible rubber or other resilient material may be used in carrying out the present invention, or the rubber may be reinforced by fabric, or in any way treated to accomplish the desired results, but it should be understood that in order to obtain the effect as the pad itself, should be formed of material sufficiently compressible to prevent any injury to the gums while they are being massaged.

It should also be understood that certain detail changes may be employed in the mechanical structure that does not detract from the spirit of the invention, so long as such changes fall within the scope of the appended claims.

Having described the invention, what I claim as new is—

1. An inter-dental tissue pressure massaging device comprising a finger-engaging means, and a soft pliable means projecting therefrom for conforming to the contour of the space between the approximating teeth when pressure is exerted thereon to permit the massaging device to reach the deep inter-dental tissues of the gums.

2. A device of the class described comprising a finger-engaging means having a compressible rubber pad formed upon one side thereof, and a single transverse tapering wedge-like portion projecting from the pad portion, to project and engage the inter-dental tissues between the ends of the pad to permit the wedging of the wedge-like portion in between the teeth and conform to the contour of the space between the teeth for creating a pressure upon the gums intermediate the roots of the teeth and permitting of a free massaging inter-dental pressure massaging action of the gums and deep inter-dental tissue.

3. A device of the class described comprising a finger cot, a compressible rubber pad formed upon one side of the cot, and a pair of laterally projecting wedge-shaped points formed integral with said pad and extending in transverse alignment with each other and transversely across the face of the pad to provide a single transversely extending compressible projection area from the face of said pad.

4. A device of the class described comprising a finger cot, a soft pliable compressible pad formed upon one side of the cot, a single relatively wide wedge-shaped point projecting from one face of the pad and formed integrally with the pad, and the apex of the wedge-shaped point extending transversely on one side and located near the outer extremity of the cot, and providing a single compressible projection area extending above the face of the pad.

5. A double pressure inter-dental gum massaging device comprising a pair of similarly constructed finger cots one being adapted to fit upon the thumb and the other upon the forefinger of the hand, each cot having pliable and compressible projecting wedge-shaped massaging points formed upon their opposed faces, and the cots being adapted to engage the gums in straddling relation one engaging the inner face and the other the outer face of the gum whereby a pinching pressure may be produced for forcing the wedge-shaped massaging points into pinching engagement with the gums at a point between the teeth to provide a pinching inter-dental pressure massaging action for reaching the deep inter-dental tissues of the gums.

6. A double pressure inter-dental gum massaging device comprising a pair of cots similarly constructed and each having a pad upon its inner face, wedge-shaped points projecting from each pad at a point intermediate the ends of the pad, the pad and points being formed of compressible rubber, the cots being adapted to engage the gums in straddling relation, one cot engaging the
inner face and the other the outer face of the gum whereby a pinching inter-dental pressure may be produced upon the gums at a point between two approximating teeth to reach the deep inter-dental tissues of the gums and permit an efficient massaging of the gums and inter-dental tissues thereof, the pad and points being adapted to conform to the contour of the space between the teeth when pressure is exerted upon the cots.

7. An inter-dental tissue massaging device comprising finger-engaging means, and a soft pliable pad formed upon said finger-engaging means capable of being forced and wedged in between the approximating teeth to permit of a pinching and massaging action to reach the deep inter-dental tissues of the gums, the soft pliable pad being adapted to conform to the contour of the space between the teeth when pressure is exerted upon the finger-engaging means.

8. As a new article of manufacture, an interdental tissue pressure massaging device comprising a finger-engaging means, and resilient compressible means carried by the finger-engaging mean whereby said resilient means may be forced between adjacent teeth by pressure of the finger upon which the finger-engaging means is mounted and thereby create a pressure longitudinally of the teeth from the crest of the gums rootwise and consequently produce an effect upon the gums similar to that produced when chewing coarse foods.

9. As a new article of manufacture, a double pressure inter-dental tissue massaging device comprising a pair of finger-engaging cots, and compressible resilient means carried by the opposed faces of the cots whereby said resilient means may be forced in between adjacent teeth by pinching action of the fingers upon which the finger engaging cots are carried and create a pressure longitudinally of the axis of the teeth from the crest of the gums rootwise and consequently produce an effect upon the gums similar to that produced when chewing coarse food.

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