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F. D. JACKSON
SOUND IMPROVING DEVICE

2,504,264

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Fig. 1.

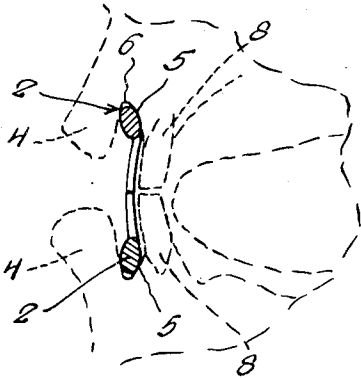
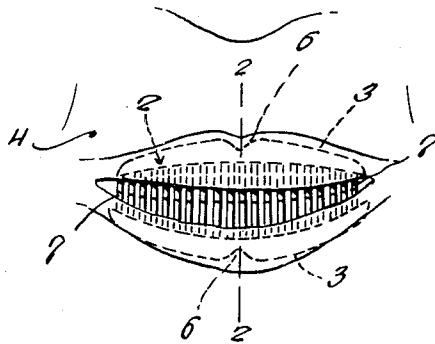


Fig. 2.

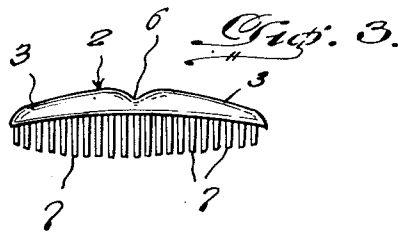
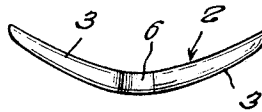


Fig. 3.

Fig. 4.



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SOUND IMPROVING DEVICE

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1 Claim. (Cl. 46—174)

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This instant invention relates to a sound improving device adapted for insertion in the mouth and to be operated by blowing through the device.

The primary object of the invention is to provide a device of the class described and comprising two members each adapted for insertion between the upper or lower lip and the adjacent teeth and including a series of reeds or vibratory sound-producing prongs. The same are set in motion by the passage of wind through the interstices of the teeth and from the main cavity of the mouth.

Another object of the invention is to provide a device embodying the features of simplicity, durability and economy.

Other objects and advantages of this invention will appear from the specific disclosure of the structure in the following specification and in the accompanying drawing forming part of the application and in which:

Figure 1 is a front view of the mouth of a person enclosing the preferred embodiment of my invention;

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

Figure 3 is a front view of one of the members of the device;

Figure 4 is an edge view of such member.

In the drawing in which like numerals designate like or similar parts, numeral 2 denotes the body section of one of the pair of members which constitute the embodiment of my invention. Each body section has symmetrical portions 3 and is adapted for insertion between a lip 4 and the adjacent gum 5. The upper surface of the body of the upper member and the lower surface of the body of the lower member is provided with an intermediate notch 6 for the gingival ligament connecting the lip with the exterior part of the gum. This notch extends also to the front side of the body section. Outwardly of the notch 5 the upper and lower surfaces of the body converge outwardly (Figure 3). The inner and outer surfaces of both bodies also converge outwardly (Figure 4). The corner edges (Figure 2) and end points are rounded off so as not to irritate the inner lip surfaces and gums.

From the lower edge of the upper body and from the upper edge of the lower body extend in a corresponding direction prongs or reeds 7 having a certain flexibility. The length of the reeds is such that the terminals of the upper and lower series of prongs may be in slightly spaced or abutting relation to produce different results to be dealt with in the following description of operation.

As material for the members may be used wood, non-corrosive metals, Celluloid, plastic or any other material including dental porcelain and hard rubber. The prongs may be of a material different from that used for the body and may, if the latter be cast, be embedded therein.

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The user of the device disclosed should adjust the members to his comfort and then breathe through the teeth 8 several times to dry all excess saliva, thus causing the body sections to firmly adhere to the gums.

The person using the device may then try one of his favorite tunes or songs and will readily notice the difference in the quality of his voice. The device does not impair the enunciation or strain the vocal cords and eliminates all throatiness and improves the volume and resonance.

The prongs 7 function as acoustic reeds disposed over the interstices between the teeth and set in vibration by the air passing therethrough.

When the upper and lower series of reeds are in abutting relation, each reed is relatively stiff and may determine the tone by its own vibration as in the organ, the air column in the cavity of the mouth serving chiefly as a resonator.

If the upper and lower prongs are not in abutting relation and the reeds are more flexible, they conform more or less to the vibration of the air column as in the clarinet.

It is evident that various changes may be made in the minor details of this embodiment of the invention without departing from the spirit thereof as set forth in the appended claims.

What I claim and desire to protect by Letters Patent of the United States is:

A voice modifier for use in the mouth, said sound modifier comprising a pair of upper and lower vibratory members comprising a first transversely elongated and transversely curved bar for positioning in the mouth between the upper lip and the upper gums therebehind and a second transversely elongated and transversely curved bar for positioning in the mouth between the lower lip and the lower gum therebehind, said first bar having a plurality of longitudinally spaced depending vibratory prongs depending therefrom to a point adjacent to the lower ends of the upper front teeth, and said second bar having a plurality of longitudinally spaced vibratory prongs rising therefrom to a point adjacent to the upper ends of the lower front teeth whereby sound waves passing forwardly through and between the upper and lower front teeth will be intercepted by and vibrate said prongs, the transverse curvature of said bars substantially conforming to the curvature of the upper and lower front teeth and said prongs decreasing in length from the middle of said bars toward the opposite ends of said bars.

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REFERENCES CITED

The following references are of record in the file of this patent:

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Number	Name	Date
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