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W. CONWAY

EXERCISING DEVICE

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Fig. 1.

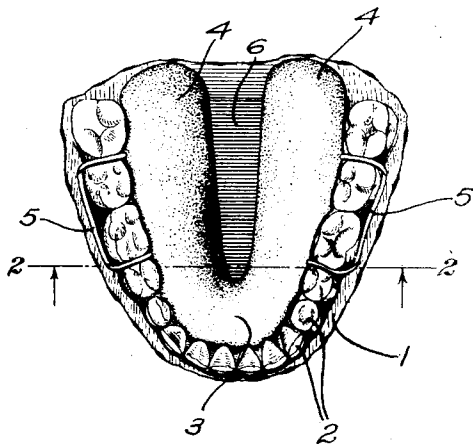


Fig. 3.

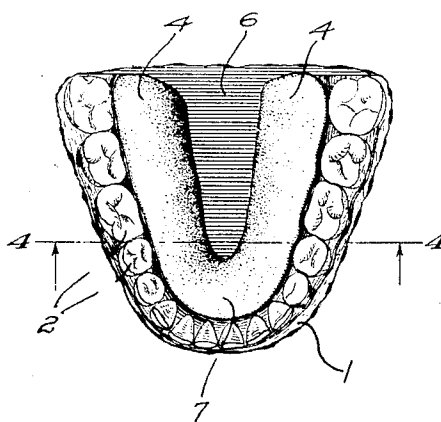


Fig. 2.

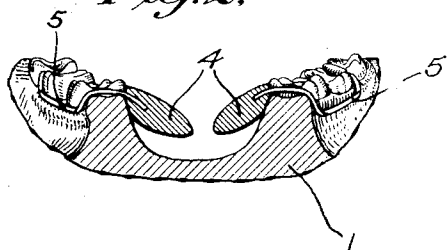
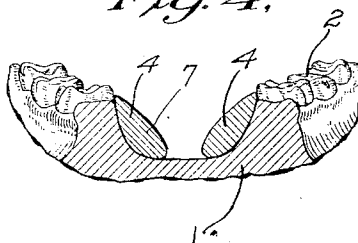


Fig. 4.



WITNESSES

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EXERCISING DEVICE.

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To all whom it may concern:

Be it known that I, WEYMAN CONWAY, a citizen of the United States, and a resident of Jacksonville, in the county of Duval and State of Florida, have invented a new and Improved Exercising Device, of which the following is a full, clear, and exact description.

This invention relates to exercising devices and its function is to exercise the hyoglossus muscle of the tongue to improve the vocal organ and, in a modified form, to train the tongue and develop correct vocal habits and assist in the development and exercise of the hyoglossus muscle.

In all great singers the muscle known as the hyoglossus, which forms the under surface and part of the body of the tongue, is highly developed. In all poor voices, including inferior singers, husky-voiced orators and stammerers this muscle is very weak. The hyoglossus muscle, having at neither attachment a solid and steady foundation remaining immovable, is fastened at one end to the tongue and at the other end to the hyoid bone, which is very mobile. This muscle requires something of a steady nature in order that it may contract itself against it and develop its fibers to a degree of perfection, and it is the purpose of my invention to provide a device or devices which are made to fit within the lower jaw, resting under the tongue and serving the purpose as above pointed out.

With these and other objects in view, the invention consists in certain novel features of construction and combinations and arrangements of parts which will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings—

Figure 1 is a plan view illustrating my improved exercising device in position within a lower jaw, the jaw being illustrated more or less diagrammatically;

Figure 2 is a view in transverse section on the line 2—2 of Figure 1;

Figures 3 and 4 are views similar to Figures 1 and 2 and illustrating a modification.

Referring more particularly to Figures 1 and 2, 1 represents the lower jaw, 2 the teeth, and 3 my improved exercising device. This exercising device may be made of hard rubber or any other suitable material which can be used in the mouth without injurious ef-

fects and which will give the necessary rigidity to perform its functions.

It is to be understood that the device must be molded or otherwise formed so as to exactly fit the jaw in which it is to be used.

The device is of bifurcated form somewhat V-shaped in plan, the joined portion of the furcations 4 lying at the front of the jaw and the furcations 4, 4 extending rearwardly or inwardly as far as may be desired.

This device 3 may be supported by wire bails or frames 5, 5 fixed to the same in any approved manner and engaging over the teeth 2, preferably having its respective end portions positioned between certain teeth, as shown.

It is obvious that wide latitude is possible in the manner of holding the device in the jaw as this will depend altogether upon the patient and the condition of the teeth or jaw, but it is desirable to provide some means which will support the device spaced from the inner bottom portion of the jaw, as indicated most clearly in Figure 2.

The device 3 throughout its furcations and at its joined portion presents to the bottom of the tongue a smooth rounded surface, and it will be noted that by the reason of the shape of the device a longitudinal space 6 is provided between the furcations so as to prevent pressure against the center longitudinal line of the bottom of the tongue, and to exert pressure only on the under portion of the tongue at the sides where the exercising of the hyoglossus muscle is desirable.

In Figures 3 and 4 I illustrate a modified form of device 7, which is of the same general shape in plan as the form shown in Figures 1 and 2, but in cross section is of a shape to fit against the inner face or wall of the jaw, as shown most clearly in Figure 4. In other words, this device 7 fits within the jaw and rests comfortably against the inner surface thereof, and does not offer obstruction or resistance to the movement of the tongue to the same extent as does the form shown in Figure 1. It is my intention to provide both forms of this device for use upon the same patient in exercising the hyoglossus and correcting the vocal habits, as will now be explained.

As above explained, both forms of the device are adapted for developing the hyo-

glossus muscle and correcting the vocal habits but must be used scientifically in order to give the best results without undue annoyance and inconvenience to the patient.

5 For instance, I recommend the use of the device illustrated in Figures 3 and 4 for much longer periods than that shown in Figures 1 and 2.

10 This device 7, shown in Figures 3 and 4, is to be worn in the mouth for a certain length of time each day, preferably while the user is reading aloud or conversing, so that the tongue receives the pressure and develops the muscle. Its use is to strengthen the
15 tongue by opposing it and also to help the development of the hyo-glossus muscle. The tongue strikes this device in enunciating each syllable and in this way brings out the strength of the tongue and develops it.

20 By the use of the device a marked improvement will be noted after a period of careful reading aloud, endeavoring to pronounce each word as carefully as possible, and after a short time the pupil will be able
25 to read aloud without any noticeable obstruction, showing the progress in the bringing out of the strength of the tongue. It also serves to train the pupil to use of the tip of the tongue from which all sound
30 should seem to emanate.

The device 3, illustrated in Figures 1 and 2, is worn for short intervals, when exercises are to be taken with it in place. These exercises consist of contracting the back part of
35 the tongue, then relaxing the tongue, for many times. The effect upon the muscle is soon apparent and, in fact, almost immediate.

The use of the appliance or device will
40 function to clear up husky, weak voices, is a remedy for catarrh of the throat in cases where the rubbing of the muscles together are causing inflammation by pulling the wrong way, and, furthermore, will function
45 as a remedy for the inflamed condition of the vocal cords known as laryngitis, as the device will function to position the vocal cords in their proper relation to each other.

The device is bifurcated to permit the free
50 use of the frenum liguae and the larger muscles of the tongue, which will hold the tongue forward and enable it to strike. This furcation also allows these muscles to move unmolested.

55 It is, of course, to be understood that the longer the devices are used and the oftener, the more beneficial will be the results, and

while I have referred to certain beneficial results I have by no means enumerated all of the beneficial results; as, for example, the
60 device will be useful as a remedy for stammering.

Furthermore, it may be possible to make the device in standard sizes so that it will not be necessary to mold the device for each
65 mouth.

I might, of course, enumerate at considerable length many other improvements which result to the pupil or patient from the use
70 of the devices illustrated, but I have stated sufficient uses to indicate that the device or devices function to improve or correct the use of the tongue, the strengthening of the hyo-glossus muscle, the improvement in
75 the vocal organ and the resultant improvement in health, and these important functions of the device are due to its shape and location within the jaw, and hence I desire to cover broadly this idea which will now be
80 claimed.

I claim:

1. A device of the character described, comprising a bifurcated member adapted to fit within the lower jaw of the user and adapted to be positioned inside of the row
85 of teeth of the jaw and lie substantially horizontal under the tongue with the furcations extending rearwardly and having an inclined upper face.

2. A device of the character described, comprising a member adapted to fit within
90 the lower jaw and inside of the teeth of the jaw of the user, and presenting an upper surface to the lower surface of the tongue, said upper surface being inclined down-
95 wardly from its outer edge.

3. A device of the character described, comprising a bifurcated member adapted to fit within the lower jaw and inside the row
100 of teeth in the jaw of the user, having the connected portion thereof at the front of the jaw and the furcations extending rearwardly or upwardly along the sides of the jaw, said member throughout its length presenting a smooth tapering or inclined sur-
105 face to the tongue resting thereagainst.

4. A device of the character described, comprising a bifurcated member adapted to fit within the lower jaw of the user, and wire
110 frames fixed to the sides of the member and adapted to engage over the teeth of the lower jaw.

WEYMAN CONWAY.