No. 854,898. PATENTED MAY 28, 1907.

H. LORENZ.

MOUTH BRACE.

APPLICATION FILED FEB. 28, 1907.

FIG. 1.

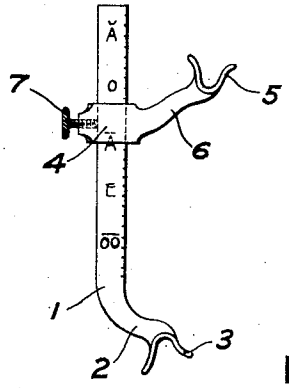


FIG. 2.

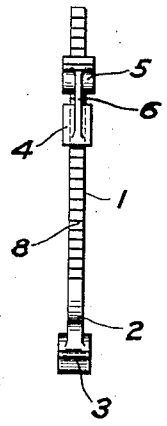


FIG. 3.

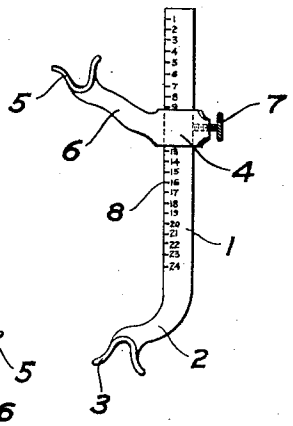


FIG. 4.

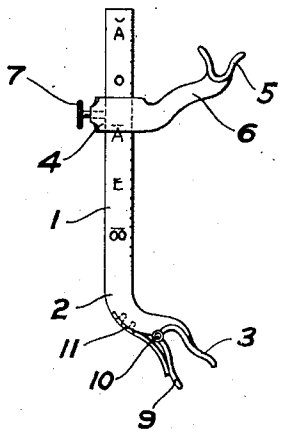
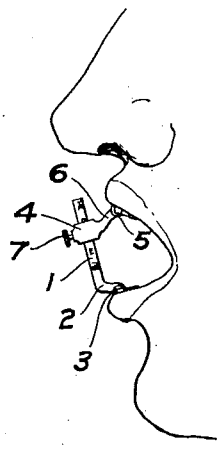


FIG. 5.



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MOUTH-BRACE.

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To all whom it may concern:

Be it known that I, HANS LORENZ, a subject of the Emperor of Germany, and a resident of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Mouth-Braces, of which the following is a specification.

This invention relates to mouth braces, and particularly to devices which are used to regulate the degree to which a person's mouth should be opened for the proper production of certain tones, or for access to the mouth.

In the drawings:—Figure 1 is a side view of the device; Fig. 2 is a rear view; Fig. 3 is a view of the opposite side to that shown in Fig. 1; Fig. 4 is a side view of a modified form of the device; and Fig. 5 illustrates the application and use of the device, as shown in Figs. 1 to 3.

A bar or post 1, usually rectangular in cross-section, is offset at one end 2 and a fork 3 is formed thereon. Said fork is of such size as to fit with reasonable closeness over either the upper or lower front teeth of the average person. A block 4 is slidably mounted on the bar 1, and a fork 5, similar to the fork 3, is carried on an arm 6 which is fixed to, or formed integral with said block. The forks 3 and 5 have their openings directed in opposite directions. A set-screw 7 holds the block 4 and the fork 5 at any desired point on the bar 1. On one side of the bar 1 are marked characters indicating the vowel sounds used in singing, and on the opposite side are graduations 8, consecutively numbered (Figs. 1 and 3). The graduations may also be marked on the rear edge (Fig. 2). The marking may be placed on any suitable part of the bar.

The method of using the device is clearly illustrated in Fig. 5. When the block 4 has been placed at any desired position on the bar 1, and fastened there by means of the set-screw 7, the person desiring to use the device places it in his mouth and closes his upper and lower teeth into the forks 3 and 5. Then his mouth will be open exactly far enough to produce a certain vowel, such for instance, as ō.

An instructor in voice culture, knowing the horizontal width of a pupil's mouth, may make out a schedule or table for the pupil to follow in using the device. Thus, a pupil having a mouth two and one-half inches wide might be required to set the block 4 at "14" on the bar 1, in order to give the correct opening of the mouth for the vowel ō, while for a pupil with a mouth two and three-quarters inches in width it might be necessary to set the block 4 at another graduation to give the correct position for the production of the same vowel.

In Fig. 4 a modification is shown, in which one arm 9 of the fork 3 is hinged at 10, and is pressed inwardly by a flat spring 11, so that the teeth and gums may be gripped more firmly than with the solid fork. The fork 3 when thus constructed is made longer, as shown. Both forks may be constructed in this manner, if desired.

The device may be used by dentists or surgeons for maintaining separation of the jaws.

What I claim is:—

1. In a mouth brace, the combination of two parts movable one on the other, one of which parts is graduated, means for fastening the parts together at different points of position, and two forks, one carried by each part, and having their openings directed in opposite directions.

2. In a mouth brace, a bar, a block sliding on said bar, means for fastening the block and bar together at different positions, and two forks, one carried by the block and the other carried by the bar, and having their openings directed in opposite directions.

3. In a mouth brace, the combination of two parts movable one on the other, one of which parts is graduated, means for fastening the parts together at different points of position, and two forks, one carried by each part, and having their openings directed in opposite directions, one or both of said forks having one arm movable and spring-actuated.

4. In a mouth brace, a bar, a block sliding on said bar, means for fastening the block and bar together at different positions, and two forks, one carried by the block and the other carried by the bar, and having their openings directed in opposite directions, one or both of said forks having one arm movable and spring-actuated.

HANS LORENZ.

Witnesses:
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L. THON.