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MOUTHPIECE FOR WIND MUSICAL INSTRUMENTS

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Fig. 1

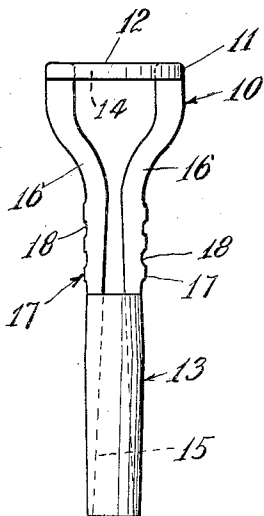


Fig. 2

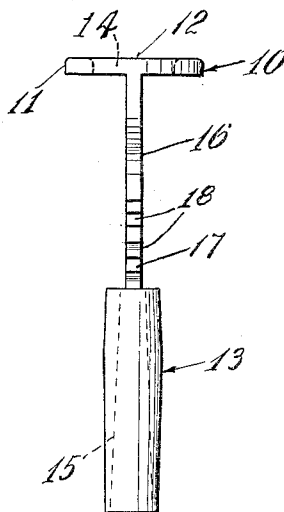
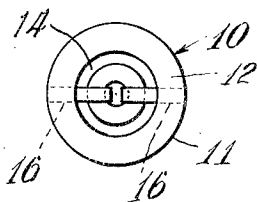


Fig. 3



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MOUTHPIECE FOR WIND MUSICAL INSTRUMENTS

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6 Claims. (Cl. 84—398)

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This invention relates to mouth pieces for wind musical instruments and more in particular to such mouth pieces which are used by players for practicing without producing a sound or noise that might annoy others.

Up to date the mouth pieces for brass instruments consisted of an annular rim portion which the player contacted with his lips and an adjoining convex-concavely curved cup portion merging into a tubular stem to be inserted into the instrument. The cup portion conducts the vibrating air stream, flowing through the central hole of the rim, into the stem which leads it into the musical instrument. While such conventional mouth piece serves the purpose during the musical performance, it has two disadvantages for the purposes of study and practice. The first disadvantage of the conventional mouth piece is that its cup covers the player's mouth adjacent to the lower lip and thereby prevents the visual observation by the instructor or player (from a mirror) the mouth formation or "embouchure" the proper formation of which is very important for the development of the involved muscles and for achieving the desired tone effect as well. The second disadvantage is that with the conventional mouth piece the instrument will produce sounds at full intensity during practice which is undesirable in a dwelling house, hotel or other place lacking special sound insulation making the unavoidable practicing by every musician a nuisance to nearby people, exposing the player to lawsuits and barring him from being accepted as a tenant at suitable locations.

My invention obviates these and other drawbacks by providing a mouth piece having no cup but being equipped with relatively thin spacer means holding the rim portion and the stem together in spaced apart relationship.

One of the main objects of the invention is to provide a mouth piece for brass instruments, such as trumpets, cornets, mellophones, alto horns, French horns, trombones etc. which may be used for practicing and visually studying the formation of embouchure and action of the lips and those of the muscles of the mouth without producing a sound or noise audible from a relatively short distance such as from an adjoining room.

Another object of my invention is to provide a cupless practice mouth piece for brass instruments in which the lip contacting rim is spaced apart from the stem by relatively thin spacer means defining between rim and stem a free

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space through which air and light may pass radially with negligible impediment.

Another object is to provide a cupless practice mouth piece in which the lip contacting rim and the stem are held together in spaced apart relationship by relatively thin braces.

A further object is to provide a device of the character described in which the braces, holding together the rim and the stem in spaced apart relationship, are equipped with ridges and dales serving as fingerholds.

Still another object of the invention is to provide a mouth piece which may be used to develop the lip muscles and embouchure without producing a sound or noise audible from a relatively short distance.

Another object of the invention is that the same can be used without the instrument, by holding the mouth piece with the fingers of either hand, or it may be used in connection with the instrument by inserting the same into the instrument, thereby producing a natural feeling of holding and playing the instrument while practicing.

Yet another object of the invention is to visually provide a mouth piece for practicing a wind instrument which will greatly assist the instructor or student to study the formation and action of the movement of the lips or embouchure, while playing.

Another object of the invention is to provide a mouth piece for practicing which will enable the teacher or student, the latter by looking in a mirror, to readily observe the formation of embouchure while practicing.

Still another object of the present invention is to provide a mouth piece for practicing which may be used in connection with any wind instrument using a detachable mouth piece without altering the musical instrument.

Further objects of the invention are to provide a device of the class set forth which is simple in its construction and arrangement, efficient in its use, readily attached and inexpensive to manufacture.

To the accomplishment of these and such other objects as may hereafter appear the invention consists of the novel construction and arrangement herein specifically described and illustrated in the accompanying drawing, wherein is shown an embodiment of the invention, but it is to be understood that changes, variations and modifications may be resorted to which come within the scope of the claims hereunto appended.

In the drawings wherein like numerals of

reference designate identical parts throughout the several views,

Figure 1 is a front view of a practicing mouth piece for brass wind instruments in accordance with my invention.

Figure 2 is a side view of Figure 1.

Figure 3 is a top view of Figure 1.

Obviously, the mouth piece I herewith describe is not intended to, and cannot, replace the well known conventional mouth pieces now in use, but the same is intended to be used for practicing and especially at times and places where it would be undesirable to practice an instrument with a regular mouth piece.

Referring now to the drawing, the reference numeral 10 indicates, in general, the improved practicing mouth piece comprising a centrally apertured, relatively thin portion 11, against which the player presses his lips and which may be of any regular contour and size as far as its external face 12 is concerned to which the player is accustomed, in other words, the exterior surface of the rim portion of the practicing mouth piece and central aperture 14 might be of the same shape and size as the player's conventional mouth piece, so that both mouth pieces will fit the lips or embouchure and feel comfortable to the player.

The stem portion 13 is adapted to be inserted in the instrument to be played and may be solid or tubular, as shown, having a bore 15. This stem portion 13 is connected to the rim portion 11 by means of a pair of oppositely spaced, elongated and substantially narrow braces 16, preferably integral therewith, but, of course, the rim portion 11 and the shank portion 13 may be separate pieces fastened, welded, soldered or brazed together permanently.

It is important that the braces 16 are relatively thin so as not to obstruct the view of the observer while practicing. It will be noted that due to the novel construction of the mouth piece, which includes the relatively thin rim 11 and the relatively thin braces 16, it is possible for the teacher or student (with the aid of a mirror) to readily observe the lip formation and action or movement of embouchure.

The outer surfaces of the braces 16 are provided with suitable corrugations formed by ridges 17 and dales 18 which are intended to serve as a finger hold when operating the mouth piece.

My improved mouth piece is adapted to permit the student to practice a brass instrument any time and any place he desires without disturbing neighbors or others. In addition the invented device makes it possible that the formation of the mouth and lips or the embouchure may be visually observed thereby greatly facilitating the building up of the mouth and lip muscles and the proper formation of the embouchure.

Though I have shown the spacer means holding the rim portion and the stem in spaced apart relationship as consisting of braces 16, it is obvious that a suitably formed single plate may be used instead.

While I have described the principle of the invention, together with a mouth piece which I now consider to be the best embodiment thereof, it is to be understood that the mouth piece shown is merely illustrative and that the rim, for instance, may be curved to equal the curvature of the regular mouth piece the musician or pupil uses on his regular instrument,

It should be noted, that the embodiment shown and described herewith represents a practice mouth piece for a trumpet, but it is obvious that practice mouth pieces for other wind instruments will follow the general shape of their regular mouth pieces.

What I claim is:

1. A practice mouth piece for wind musical instruments comprising an apertured rim portion adapted to contact the player's lips and a stem portion for insertion in the musical instrument, spacer means rigidly fixed to said portions for holding them together in spaced apart relationship establishing a free space between said portions for substantially unobstructed radial passage of airflow and light.

2. A practice mouth piece for wind instruments comprising an apertured rim portion provided with a lip contacting face and a stem portion adapted for insertion into a brass wind instrument, relatively thin braces rigidly fixed to said portions for holding them together in axially spaced apart relationship establishing a free space between said portions for substantially unobstructed radial passage of airflow and light.

3. A practice mouth piece for wind musical instruments comprising a centrally apertured rim provided with a lip contacting face and a stem portion adapted for insertion in the brass wind instrument, relatively thin braces rigidly fixed to said portions for holding them together in axially spaced apart relationship establishing a free space between said portions for substantially unobstructed radial passage of airflow and light, the external surfaces of said braces carrying ridges and dales serving as fingerholds.

4. A practice mouth piece for wind musical instruments comprising a centrally apertured rim portion, a stem portion adapted for insertion into a brass wind instrument, a pair of relatively thin braces arranged diametrically opposite to each other and rigidly fixed to said portions for holding them together in axially spaced apart relationship establishing a free space between said portions for substantially unobstructed radial passage of airflow and light, the external surfaces of said braces carrying ridges and dales serving as fingerholds.

5. A cupless mouthpiece for wind musical instruments to be substituted for the usual mouthpiece during practice comprising an annular rim having substantially the size and shape of the rim of the usual mouthpiece for which it is to be substituted, a tubular shank portion for insertion into the mouth pipe of the instrument and connecting means between said rim and said shank providing when in use a substantially unobstructed view of the embouchure of the musician.

6. A cupless mouthpiece of the type claimed in claim 5 in which the connecting means is a pair of opposed members in the shape of segments of the cup of the usual mouthpiece.

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