

J. J. RIEDER.
WHISTLE.
APPLICATION FILED OCT. 21, 1912.

1,054,793.

Patented Mar. 4, 1913.

Fig. 1.

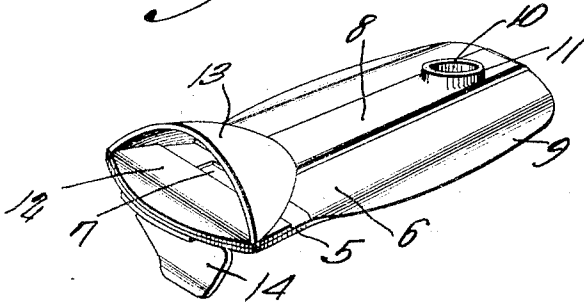


Fig. 2.

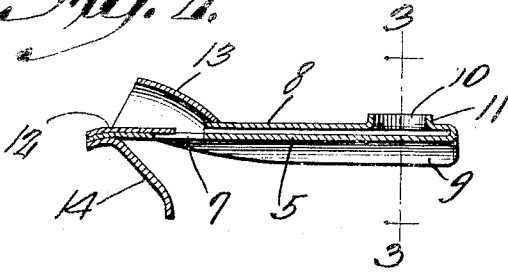


Fig. 3.

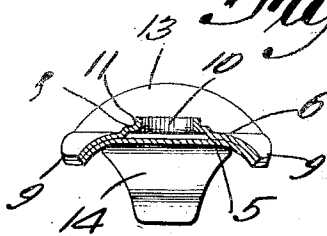
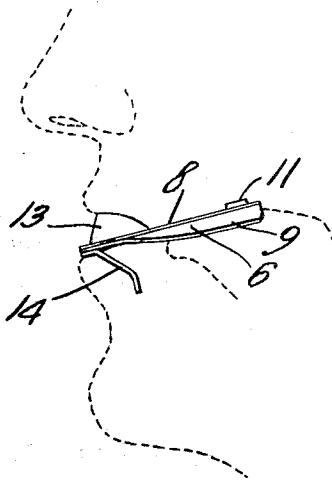


Fig. 4.



Witnesses

J. J. Rieder
L. J. Wilson

J. J. Rieder

Inventor

by

C. A. Snow & Co.

Attorneys

UNITED STATES PATENT OFFICE.

JOHN J. RIEDER, OF JACKSON, MICHIGAN.

WHISTLE.

1,054,793.

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To all whom it may concern:

Be it known that I, JOHN J. RIEDER, a citizen of the United States, residing at Jackson, in the county of Jackson and State of Michigan, have invented a new and useful Whistle, of which the following is a specification.

The present invention appertains to whistles or other musical contrivances or toys under the class of wind instruments.

The present invention aims primarily to provide a musical instrument or whistle of novel and improved construction and operation.

It is also the object of the present invention to provide a whistle adapted to be held and operated within the mouth, and which shall be so designed that the tongue may control the note modulations or pitch.

A further object of this invention is to provide a whistle which is adapted to be held in the mouth in a simple, convenient and effective manner so that the tongue may be brought readily into play for modulating the notes.

A still further object of the present invention is to provide a whistle of the character indicated which shall have means for increasing the volume of sound.

To the above and other ends, the present invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

The preferred embodiment of the invention has been illustrated in the accompanying drawings, wherein:—

Figure 1 is a perspective view of the whistle. Fig. 2 is a longitudinal central section thereof. Fig. 3 is a sectional view taken on the line 3—3 of Fig. 2. Fig. 4 is a side elevation of the whistle, illustrating how the same is held within the mouth.

Referring specifically to the drawings, the present whistle embodies in its essentials a mouth piece comprising the superimposed plates 5 and 6, said mouth piece being preferably formed from a suitable blank of sheet metal or other suitable material doubled to provide the superimposed plates.

The plates 5 and 6 are preferably rectangular, and the lower plate 5 is provided with an opening 7 adjacent its forward or outer end, the forward end of the upper plate 6 terminating adjacent the opening 7 and the upper plate having a longitudinal upstruck channel 8 leading forwardly from its inner end to the opening 7. The edges of the two plates are secured together by means of solder or otherwise, such as by brazing or welding, or the like, and the edges are downturned as indicated by the numeral 9, so that the underside or bottom of the mouth piece is concaved transversely. The channel 8 of the upper plate is provided with an aperture 10 adjacent its rear or inner end, and the edge of the aperture is upturned as indicated by the numeral 11. The aperture 10 provides an entrance for the air passage provided by the channel 8.

A supplemental plate 12 is secured on the forward portion of the lower plate 5 and extends rearwardly so as to project partially over the opening 7 toward the air passage, the forward ends of the plates 5 and 12 being preferably curved.

A hood 13 is secured on the plates 6 and 12 over the opening 7, the said hood being semi-funnel shaped and opening forwardly or outwardly.

A guard 14 is secured to the forward end of the plate 5 and slopes rearwardly therefrom for the purpose which will hereinafter appear.

From the foregoing, it will be noted that the whistle is constructed, or may be constructed, entirely of sheet metal, the various parts being secured together by soldering, welding or the like. The construction of the whistle is thus rendered simple and inexpensive, as well as durable.

In use, the mouth piece is adapted to be held in the mouth so that the forward end thereof rests upon the lower lip, the guard 14 fitting between the lower lip and jaw for maintaining the mouthpiece in position within the mouth, and the hood 13 fitting below the upper lip. The tongue is applied flatly to the bottom of the mouthpiece, the bottom of the mouthpiece being concaved to accommodate the tongue conveniently. Thus, a resonance chamber is provided within the mouth below the mouthpiece, which is controlled by the movement of the

tongue, the opening 7 providing a passage from the resonance chamber to the atmosphere through the hood 13, which increases the volume of sound, or provides greater sonority. The hood 13 also prevents the upper lip from interfering with the opening 7 in order that the proper action of the air will ensue. When the whistle is held in the mouth, as indicated, it is an easy method to produce a whistling sound by blowing outward, the air or breath passing through the apertures 10 and forwardly through the air passage to the opening 7, and through the interference of the plate 12 the air is divided and the proper action of the air takes place at the opening 7 as in the ordinary whistle. The air is discharged through the hood 13 to the atmosphere, said hood increasing the volume of the sound or providing greater sonority, as well as protecting the opening 7 from interference by the upper lip. It will be noted that the guard 14 forms a portion of the resonance chamber, or the forward end thereof, and that by sliding the tongue forwardly and rearwardly along the bottom of the mouthpiece, the resonance chamber may be increased or diminished in size so as to produce the proper note modulation. Thus, by bringing the tongue into play, the person blowing the whistle may produce a large number of notes, extending in practice, over two octaves. A person may therefore modulate the sounds emitted so that the whistle may provide a musical instrument of high quality, the notes being of a mellow quality in view of the fact that the resonance chamber is formed almost entirely by the walls of the mouth. After a little experience, a person may readily employ the whistle for playing, as with other musical instruments, particularly wind instruments.

The saliva or other excretions are prevented from entering the whistle by the upturned edge 11, so that the passage or action of the air is not disturbed.

From the foregoing, taken in connection with the drawings, the advantages and capabilities of the present whistle will be apparent to those versed in the art, it being manifest that the objects aimed at have been carried out satisfactorily and that the present whistle provides a desirable one for the purposes for which it is designed.

The whistle may not only be constructed of sheet metal, but may be fashioned from clay or any other suitable substance or material, as will be apparent to the artisan.

Having thus described the invention, what is claimed as new is:

1. A musical instrument embodying a mouthpiece designed to rest on the lower lip at its forward end and against the bottom of which the tongue may be applied in order to provide a resonance chamber within the

mouth below the mouth piece, the mouth piece having an opening to provide an air passage from the resonance chamber to the atmosphere, and having an air passage leading forwardly to the opening.

2. A musical instrument embodying a mouthpiece designed to rest on the lower lip at its forward end and against the bottom of which the tongue may be applied in order to provide a resonance chamber within the mouth below the mouth piece, the mouth piece having an opening to provide an air passage from the resonance chamber to the atmosphere and having an air passage leading forwardly to the opening, and a forwardly opening hood over the opening.

3. A musical instrument embodying a mouthpiece designed to rest on the lower lip at its forward end and against the bottom of which the tongue may be applied in order to provide a resonance chamber within the mouth below the mouth piece, the mouth piece having an opening to provide an air passage from the resonance chamber to the atmosphere and having an air passage leading forwardly to the opening, and a member attached to the forward end of the mouth piece to fit between the lower lip and jaw.

4. A musical instrument embodying a mouthpiece designed to rest on the lower lip at its forward end and against the bottom of which the tongue may be applied in order to provide a resonance chamber within the mouth below the mouthpiece, the mouth piece having an opening to provide an air passage from the resonance chamber to the atmosphere, and having an air passage leading forwardly to the opening, a forwardly opening hood over the opening on which the upper lip is adapted to rest, and a member attached to the forward end of the mouth piece to fit between the lower lip and jaw.

5. A musical instrument embodying a mouthpiece designed to rest on the lower lip at its forward end and against the bottom of which the tongue may be applied in order to provide a resonance chamber within the mouth below the mouth piece, the mouth piece having an opening to provide an air passage from the resonance chamber to the atmosphere, and having an air passage leading forwardly to the opening, the edges of the mouth piece being downturned.

6. A musical instrument embodying a mouth piece comprising superimposed plates forming an air passage therebetween, the lower plate having an opening therein and the upper plate terminating at its forward end adjacent the opening.

7. A musical instrument embodying a mouth piece comprising superimposed plates forming an air passage therebetween, the lower plate having an opening therein and the upper plate terminating at its forward end adjacent the opening, and a forwardly

opening hood attached to the said plates over the opening.

8. A musical instrument embodying a mouth piece comprising superimposed plates forming an air passage therebetween, the lower plate having an opening therein and the upper plate terminating at its forward end adjacent the opening, and a member attached to the lower plate in front of the opening to fit between the lower lip and jaw.

9. A musical instrument embodying a mouth piece comprising superimposed plates forming an air passage therebetween, the lower plate having an opening therein and the upper plate terminating at its forward end adjacent the opening and having an opening therein forming an entrance for the air passage.

10. A musical instrument embodying a mouth piece comprising superimposed plates forming an air passage therebetween, the lower plate having an opening therein and the upper plate terminating at its forward end adjacent the opening and having an opening therein forming an entrance for the air passage, with the edge of the opening upturned.

11. A musical instrument embodying a mouth piece comprising superimposed plates forming an air passage therebetween, the lower plate having an opening therein and the upper plate terminating at its upper end adjacent the opening, the edges of the plates being secured together and being downturned.

12. A musical instrument embodying a pair of superimposed plates, the lower plate having an opening therein, and the upper plate terminating in its forward end adjacent the opening and having a longitudinal upstruck channel forming an air passage leading to the opening.

13. A musical instrument embodying a pair of superimposed plates, the lower plate having an opening therein, and the upper plate terminating in its forward end adjacent the opening and having a longitudinal upstruck channel forming an air passage

leading to the opening, the channel having an opening therein.

14. A musical instrument embodying a pair of superimposed plates, the lower plate having an opening therein, and the upper plate terminating in its forward end adjacent the opening and having a longitudinal upstruck channel forming an air passage leading to the opening, and a supplemental plate secured on the forward portion of the lower plate and extending part way over the opening.

15. A musical instrument embodying a pair of superimposed plates, the lower plate having an opening therein, and the upper plate terminating in its forward end adjacent the opening and having a longitudinal upstruck channel forming an air passage leading to the opening, a supplemental plate secured to the forward portion of the lower plate and extending part way over the opening, and a forwardly opening hood secured to the upper and supplemental plates.

16. A musical instrument embodying a mouth piece comprising a blank doubled to provide superimposed plates having an air passage therebetween, the lower plate having an opening therein and the upper plate terminating at its forward end adjacent the opening.

17. A musical instrument embodying a mouth piece comprising a blank doubled to provide superimposed plates having an air passage therebetween, the lower plate having an opening therein and the upper plate terminating at its forward end adjacent the opening, and a guard attached to the forward end of the lower plate, a hood secured to the said plates over the opening, the upper plate being provided with an opening forming an entrance for the air passage.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JOHN J. RIEDER.

Witnesses:

JUSTIN R. WHITING,
RICHARD PRICE.