

B. SMITH.
MUSICAL DEVICE.
APPLICATION FILED FEB. 29, 1912.

1,052,525.

Patented Feb. 11, 1913.

Fig. 1.

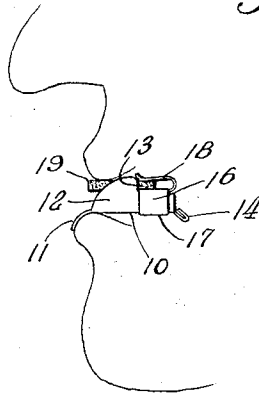


Fig. 2.

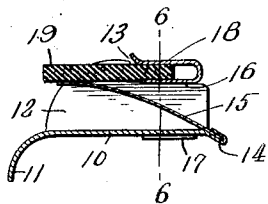


Fig. 3.

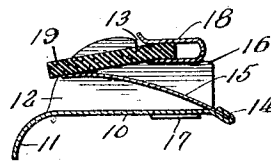


Fig. 5.

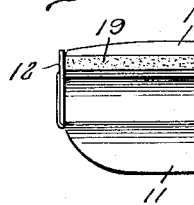


Fig. 6.

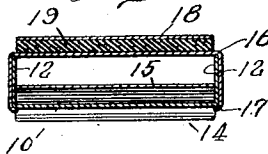
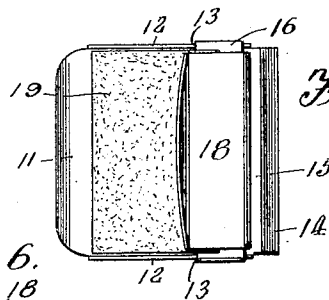


Fig. 4.



WITNESSES

H. D. Robinson

J. T. Marhimer

INVENTOR

By Blake Smith
Superintendent
Attorneys

UNITED STATES PATENT OFFICE.

BLAKE SMITH, OF DUBOIS, PENNSYLVANIA.

MUSICAL DEVICE.

1,052,525.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, BLAKE SMITH, a citizen of the United States, residing at Dubois, in the county of Clearfield and State of Pennsylvania, have invented new and useful Improvements in Musical Devices, of which the following is a specification.

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

The invention has for its primary object to provide a musical device for insertion in the mouth to rest on the lower lip, and having a reed or vibratory sound-producing member adapted to be set in motion by the passage of wind from the mouth, and, further having a note-changing member yieldingly bearing against the upper lip and adapted to be released or depressed for movement away from or toward the reed to restrict the reed in its vibratory movement. Further, the note-changing member is so associated with the body of the device that the wind-passage through the device is enlarged and contracted by releasing or depressing the note-changing member.

Another object of this invention is to provide a musical device for insertion in the mouth to be sounded by the wind passing from the mouth, and which is regulated to produce high and low tones by the natural movement of the mouth in producing such tones.

As devices of this character are of the nature of a toy, it is essential that their structures embody the features of simplicity, durability, and economy. To this end applicant has provided a relatively small and simply constructed device, the main portions of which may be stamped from thin sheet metal and bent to the desired form, while the remaining parts of the device, such as the reed and the tone-changing member, are of simple form and may be easily and economically produced from stock material. Applicant's complete device presents a small, neat toy which occupies but small space in the mouth, and which may be economically produced and be distributed as an advertisement or sold at low cost.

Other objects and advantages of this invention will appear from the specific disclosure of the structure in the following specification, and in the attached drawing forming part thereof, in which:—

Figure 1 is a side elevation of the device,

as applied to the mouth; Fig. 2 is a longitudinal central section through the device, showing the tone-changing member in normal position; Fig. 3 is a similar view showing the tone-changing member depressed to produce a high tone; Fig. 4 is a top plan view of the device; Fig. 5 is a front elevation of the same; Fig. 6 is a transverse section on the line 6—6 of Fig. 2.

As will be seen from the drawing, the musical device comprises four main parts, viz., a base or body portion, a vibratory sound-producing member, a tone-changing element, and a support or holder for the tone-changing element.

The base portion comprises a preferably metal plate 10 curved down and preferably having rounded corners, at its forward end to provide a lip 11. Flanges 12 project from the lateral edges of the plate 10 rearwardly of the lip 11 and are turned up to provide the side walls of the device. These flanges 12 have their forward edges rounded to provide a neat structure and have their rear portions stepped down to provide a pair of registering rearwardly facing shoulders 13.

The plate 10 extends beyond the rear ends of the flanges 12, is turned down at a slight angle, and is overturned upon itself to provide an inclined clip 14 receiving and holding the inner end of a reed 15. The reed 15 extends upwardly and forwardly in the plane of the clip 14, to a line approximately registering with the shoulders 13, whence the reed 15 is bent into a substantially horizontal plane and terminates in line with the forward rounded edges of the flanges 12.

The holder comprises a preferably metal strip 16 extending across the stepped-down portions of the flanges 12 and engaging against the shoulders 13. The ends of the strip 16 pass down against the outer faces of flanges 12 and have their extremities turned slightly inward beneath the base plate 10 to provide retaining flanges 17, as best seen from Figs. 2 and 6, for the holder. The strip 16 has an extension located at its rear edge turned over upon the strip 16 (see Fig. 2) to provide a spring jaw 18, engaging the inner end of a tone-changing member or element to hold the same in fixed position upon the strip 16. The outer edge of the spring jaw 18 is curved upward slightly for engagement with the thumb in placing and removing the tone-changing member.

The tone-changing member comprises a flexible flat strip 19 extending forwardly from the strip 16 and across the entire space between the flanges 12 as disclosed in Figs. 4, 5 and 6. The flat strip 19 terminates slightly beyond the rounded forward ends of the flanges 12, the latter being so rounded to expose the end of the flat strip 19, (Figs. 1, 2 and 3) and permit the same to be depressed against the end of the reed 15. In the present instance the tone-changing strip 19 is formed from a piece of rubber, but any other suitable flexible material may be substituted therefor.

In using this musical device the same is placed in the mouth as in Fig. 1, the base plate 10 lying on the lower lip and the downwardly curved lip 11 of the plate engaging over and against the outer side of the lower lip to prevent the device from being sucked into the mouth. The mouth is now closed upon the device, bringing the upper lip down against the tone-changing strip 19. The operator now blows through the device, the wind passing over the base plate 10 between the walls or flanges 12 and beneath the flexible strip 19. The wind is thus directed against the reed and vibrates the same to produce a musical tone. When a low tone is desired, the tone-changing strip 19 is permitted to assume its normal position, see Figs. 1 and 2, whereby the reed is vibrated relatively slowly by a slight wind pressure and produces such low tone. The natural movement of the mouth to produce a low tone opens or moves apart the lips of the mouth. Thus the natural movement of the mouth adjusts the device to produce the low tone. When it is desired to produce a higher tone, the lips are naturally compressed, such movement bringing the upper lip against the tone-changing member 19 and depressing the same against the reed 15 limiting the range of the vibrating end of the reed 15 and producing a higher tone. As the tone-changing strip 19 extends entirely across the space between the walls 12 the strip 19 regulates the size of the throat of the device so as to concentrate the wind passing through the device against the vibrating end of the reed 15.

The holder which carries the tone-changing member 19 slides backwardly from the body portion and releases the retaining flanges 17 from the plate 10 to permit the detachment of the holder, and the flexible strip 19 carried thereby, from the body portion for the purpose of cleansing the interior of the device, and admitting the easy assembly of the several parts. By raising the lip 18 the tone-changing member or strip 19 may be removed and replaced when worn or broken.

It is evident that various changes may be made in the minor details of this embodi-

ment of the invention without departing from the spirit thereof as set forth in the appended claims.

What is claimed is:—

1. In a musical device, a reed for insertion in the mouth, and supporting means for the reed, said supporting means covering the upper and lower sides of the reed and being adapted for contact with the upper and lower lips whereby the reed is protected from contact with the lips, said supporting means also being adapted to be contracted against the reed by the movements of the lips to produce high and low tones.

2. In a musical device, a base portion, a reed carried by the base portion, and a tone-changing member carried on the base portion over the reed to house the same and bearing adjustably against said reed to regulate the vibrating movement of the same.

3. In a musical device, a base portion for insertion in the mouth, a reed carried on the base portion, and a tone-changing member mounted on the base portion and engaging the upper lip of the mouth and adapted to be depressed thereby against said reed to regulate the vibratory movement thereof.

4. A musical device comprising a body portion for insertion in the mouth and having a downwardly curved lip for engagement with the lip of the mouth, a reed mounted on the body portion and adapted for vibration by the wind passing from the mouth, and a tone-changing member carried on the body portion above the reed and engaging the upper lip of the mouth, said member being adapted to be depressed and released toward and from the reed by the lips in their natural movements to produce various tones.

5. A musical device comprising a body portion for insertion in the mouth and engaging the lower lip, a flexible strip located over the body portion, and engaging the upper lip, and a reed disposed between the body portion and the strip, said strip being adapted to be flexed against the end when the lips are compressed in their natural movement to produce a high tone.

6. In a musical device, a pair of connected elements one movable toward and from the other, a reed supported between the elements, said connected elements being adapted for insertion in the mouth and for movement against the end of the reed to effect various tones, said elements being adapted to be moved by the natural movement of the lips in producing the various tones.

7. A musical device comprising a base plate having a downwardly curved lip at its forward end and lateral upstanding flanges provided with rearwardly facing shoulders in their upper edges, the plate also having an inclined clip at its rear end, a reed engaging in the clip and extending

forwardly and upwardly over the base plate, a holder slidably engaging over the flanges and against said shoulders, and a flexible strip carried on the holder above the reed and adapted to be depressed against the reed to regulate the vibrating of the same.

8. In a musical device, a base portion having a depending lip at its forward end engaging the lip of the operator and having upstanding spaced flanges, a holder supported across the upper edges of the flanges, a flexible strip carried on the holder and extending forwardly from between the flanges, and a reed mounted on the base portion and extending upwardly beneath the flexible strip, said strip being adapted to be depressed against the reed to vary the vibration of the same and produce various tones.

9. In a musical device, a base portion having an inclined clip, a reed engaging at one end in said clip and extending diagonally upward over the base portion, a detachable holder mounted on the base portion over the reed, and a tone-changing strip carried on the holder over the reed and adapted to bear against the reed to regulate the vibrating of the same.

10. In a musical device, a base portion having upstanding spaced flanges, a holder carried across the upper edges of the flanges, a reed mounted on the base portion and extending longitudinally between the flanges,

and a flexible tone-changing strip located on the holder between the flanges and above the reed and adapted to be depressed against the reed to limit the vibrating of the same and contract the passage between the flanges.

11. In a musical device, a base portion having spaced flanges providing a wind channel, a reed mounted on the base portion and extending into the wind channel, and a tone-changing strip supported above the reed and extending across the entire space between the flanges, said strip being adapted to be depressed against the reed to regulate the vibrating of the same and to contract and enlarge the wind channel.

12. A musical device comprising a base portion, a tone-changing member mounted over the base, the base and the member providing a wind passage through the device, and a vibrating element carried by the base in the wind passage, said member being adapted for movement toward and from the base to contract and enlarge the wind passage whereby the vibrating of the reed is varied.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

BLAKE SMITH.

Witnesses:

EDWARD SMITH,
MINNIE EDWARDS.