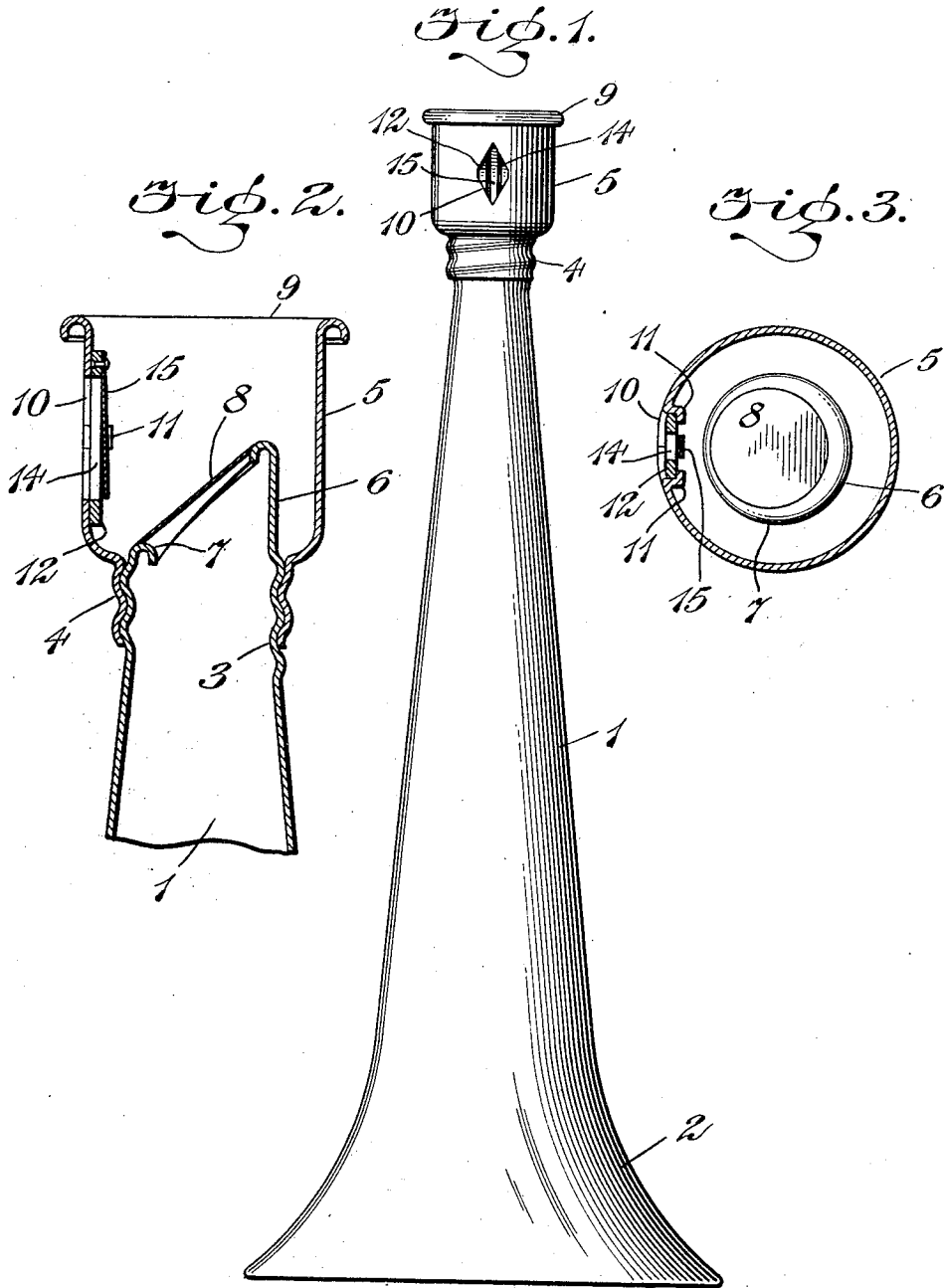


B. M. CARLISLE,
TOY MUSICAL INSTRUMENT,
APPLICATION FILED AUG. 12, 1915.

1,259,600.

Patented Mar. 19, 1918.



WITNESSES

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TOY MUSICAL INSTRUMENT.

1,259,600.

Specification of Letters Patent. Patented Mar. 19, 1918.

Application filed August 12, 1915. Serial No. 45,151.

To all whom it may concern:

Be it known that I, BRINA M. CARLISLE, a citizen of the United States, and a resident of the city and State of New York, have invented certain Improvements in Toy Musical Instruments, of which the following is a specification.

This invention relates to certain improvements in toy musical instruments, and more particularly in toy horns, and has for its object to provide a device of this general character of a simple and comparatively inexpensive nature, presenting certain features of novelty and improvement calculated to admit of differential use in such a manner as to permit the production of different or varying sounds or tones conveniently, and without undue complication of the structure of the device.

The invention consists in certain novel features of the construction, and combinations and arrangements of the several parts of the improved toy musical instrument, whereby certain important advantages are attained, and the device is rendered simple and comparatively inexpensive, and otherwise better adapted and more convenient and desirable for use, all as will be hereinafter fully set forth.

The novel features of the invention will be carefully defined in the claims.

In order that my improvements may be the better understood, I will now proceed to describe the invention with reference to the accompanying drawings, wherein

Figure 1 is an elevation showing a toy horn provided with my improvements;

Fig. 2 is a fragmentary sectional view, drawn to an enlarged scale, and taken axially through the mouth piece of the improved horn for the illustration of certain features of construction to be hereinafter referred to, and

Fig. 3 is an enlarged sectional view taken transversely through the mouth piece, illustrating certain features of construction which will be hereinafter described.

In these views I have shown my improvements applied for use in connection with a toy musical instrument of the character shown and claimed in the patent to L. N. Cracow, No. 663,654, wherein a vibrating or resonant diaphragm is provided for the production of sound, but while my invention presents certain important advantages for use in connection with instruments of

this class or type, I do not desire to be understood as limiting myself to this precise application of my improvements, it being apparent that the invention may also be applied for use with good results in connection with other kinds or types of horns.

As shown in the drawings, the horn is provided with an elongated trumpet-shaped body portion 1, flared at one end as indicated at 2, and having its opposite end provided with an exteriorly screw-threaded portion 3, having detachable screw connection with an interiorly screw-threaded reduced neck or extension 4 integrally produced upon the mouth-piece 5, which as herein shown, is of a cylindrical or rounded form, and is open as shown at 9 opposite to said neck or extension 4 for application to the lips when the device is to be sounded.

The extremity 6 of the body portion is extended axially within the mouth-piece 5 opposite to the opening 9 thereof, and is cut obliquely to the axis of the device as indicated at 7 in the drawings in such a manner as to produce an opening across which is extended a resonant or vibratory diaphragm or tympanum 8, similar in all essential respects to that shown in said prior patent and adapted to be set in vibration by the breath upon application of the opening 9 of the mouth piece to the lips, so as to sound the device.

As in said prior patent, the air directed from the open side of the mouth piece 5, is adapted to be laterally deflected upon impinging upon the resonant diaphragm or tympanum 8, and for its escape from the mouth piece, the latter is provided with an aperture produced in its side wall, as indicated at 10 in the drawings, and so arranged as to permit egress of the air and avoid interference with the vibration of the diaphragm such as might arise were the air deflected from said diaphragm directly back toward the open side of the mouth piece.

According to my present invention, I apply an auxiliary sounding device, laterally arranged with respect to the main or primary sounding device, which in the embodiment of my invention herein set forth is afforded by the diaphragm or tympanum 8, so constructed and arranged that a differential action may be afforded at will in such a manner as to permit the production of different or varying sounds or tones by the interchangeable operation of said sounding de-

vices, and as herein shown, the auxiliary sounding device is in the nature of a reed 15, secured upon a reed plate or support 12, in such a manner as to be set in vibration by the flow of air through an opening 14 in said reed plate over which said reed is extended, the reed plate 12 being secured in position upon the inside of the mouth piece so as to extend across the opening 10 in the lateral wall thereof, and having its opening 14 in registry with said lateral opening 10 of the mouth piece, so as to be traversed by the air escaping from the latter in such a manner as to assure sounding of the reed when desired. As a convenient and inexpensive means for holding the reed plate 12 in place in the mouth piece I have shown the latter provided with oppositely arranged lugs or projections 11, 11, adapted to be engaged over the opposite sides of said plate. These lugs or projections may be conveniently and inexpensively produced from the metal of the mouth piece wall at opposite edges of the opening 10, the same being formed to produce said prongs or projections in the formation of said opening in a manner which will be obvious.

By this structure and arrangement of the parts, in the embodiment of my invention herein shown, the device may, if desired be employed in the same manner as the instrument in said prior patent, the escape of the air at said opening 10 being in such case controlled so as to be insufficient to sound the reed 15 or if desired, by forcing a greater volume of air into the mouth piece while continuing to sound the diaphragm or tympanum, the volume of air escaping through the opening 10 being greater, the reed may be sounded in unison with the vibratory diaphragm or tympanum, so as to give modified sound effects, and when desired, the instrument may also be used in the manner of an ordinary horn, in which case the breath being blown directly into the mouth piece will result in sounding the reed 15 without sounding of the diaphragm or tympanum.

From the above description of my improvements it will be seen that the improved toy musical instrument is of an extremely simple and comparatively inexpensive nature, and is especially well adapted for use by reason of the different sound effects which may be attained, and it will also be obvious from the above description that the device is susceptible of some modification without material departure from the principles and spirit of the invention, and for this reason I do not desire to be understood as limiting myself to the precise formation and arrangement of the several parts of the device as herein set forth in carrying out my invention in practice.

Having thus described my invention, what

I claim and desire to secure by Letters Patent is

1. A toy horn having a mouth piece and a normally operative main sounding device adapted to be sounded by pulsations of air in said mouth piece, and provided with an auxiliary sounding device capable of operation interchangeably with said normally operative main sounding device and actuated by air forced into the mouth piece.

2. A toy horn having a normally operative main sounding device and provided with a lateral wall having an opening for the escape of air, and an auxiliary sounding device actuated from the passage of air through said opening.

3. A toy horn having a normally operative main sounding device and provided with a lateral wall having an opening for the escape of air, and a reed adapted to be sounded by the flow of air through said opening.

4. A toy horn having a main normally operative sounding device and provided with a lateral wall having an opening for the escape of air, a reed plate extended across said opening having an opening in registry therewith, and a reed extended across said opening of the reed plate adapted to be sounded by the flow of air through said opening.

5. A toy horn having a main sounding device and provided with a mouth piece having its lateral wall provided with an opening for the escape of air, and an auxiliary sounding device carried by the mouth piece and controlled by the flow of air through the opening thereof.

6. A toy horn having a main sounding device and provided with a mouth piece having a lateral wall provided with an opening for the passage of air and having prongs adjacent to said opening, and a reed plate engaged by said prongs provided with a reed adapted to be sounded by air flowing through said opening.

7. A toy horn having a vibratory tympanum adapted to be set in vibration in unison with air pulsations transmitted to the horn, and an auxiliary sounding device adapted to be sounded by air blown into the horn.

8. A toy horn having a plurality of sounding devices capable of operation interchangeably to produce different sounds, one of said sounding devices being a vibratory tympanum adapted to be set in vibration in unison with air pulsations transmitted to the horn, and the other of said sounding devices being a reed adapted to be sounded by air blown into the horn.

9. A toy horn provided with a normally operative main sounding device extended across its interior, and having a laterally ar-

ranged opening for the escape of air, and a reed actuated from the flow of air through said laterally arranged opening affording an auxiliary sounding device operable interchangeably with said main sounding device. 5

with air pulsations transmitted to the horn, and having a lateral wall provided with an opening for the escape of air, and an auxiliary sounding device actuated from the flow of air through said opening. 10

In witness whereof I have hereunto signed my name.

10. A toy horn having a vibratory tympanum adapted to be set in vibration in unison

BRINA M. CARLISLE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."