Oct. 18, 1938. F. FORTUNA 2,133,440

WHISTLE

Filed May 13, 1937

Fig. 1.

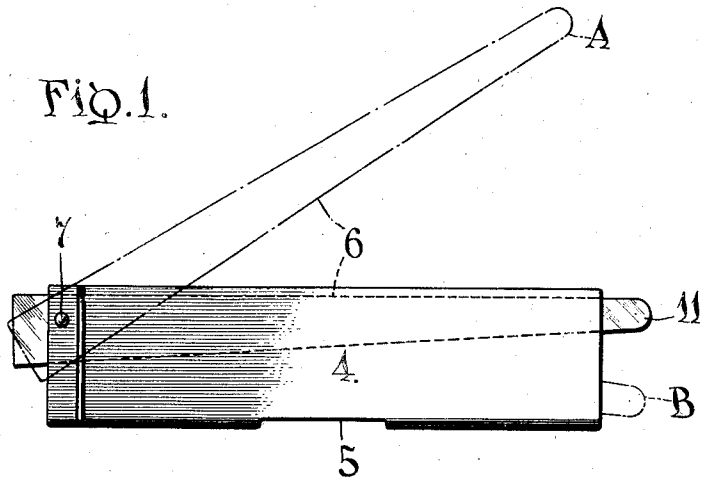


Fig. 2.

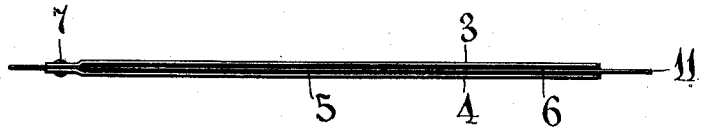


Fig. 3.

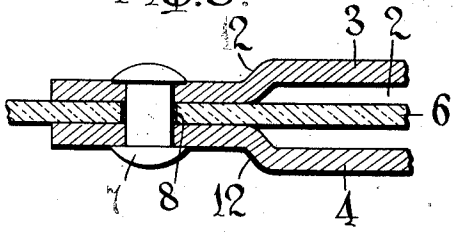


Fig. 5.

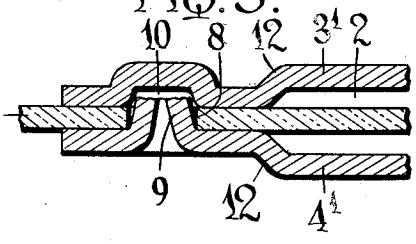
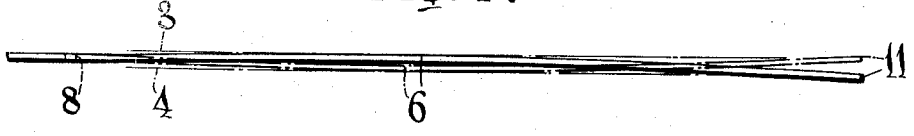


Fig. 4.



INVENTOR
Frank Fortuna,
BY
Beau, Brooks, Buckley & Beau.
ATTORNEYS

Patented Oct. 18, 1938

2,133,440

UNITED STATES PATENT OFFICE

2,133,440

WHISTLE

Frank Fortuna, Niagara Falls, N. Y., assignor of one-third to Guy Di Ruscio and one-third to Domenica Guarino, both of Niagara Falls, N. Y.

Application May 13, 1937, Serial No. 142,445

6 Claims. (Cl. 46—180)

This invention relates to a whistle or mechanical toy by which various musical notes and sounds may be produced.

Whistles of this type have heretofore been proposed but they have utilized a rubber band for the sound producing reed. The rubber would soon deteriorate and shorten the life of the toy. Furthermore, the character of the reed has made it difficult to properly mount and adjust the same for obtaining the desired shrillness and tonal quality of the note or notes.

The present invention has for its object to provide a musical instrument of this nature which is both durable and economical in construction. Further, the invention has for its aim to provide a whistle in which the reed may be readily adjusted to permit of its being cleaned as well as to control the pitch of the note produced.

The invention also has for its object certain improved features of construction which facilitate the manufacture of the whistle, as will more readily appear in the following description, reference being made to the accompanying drawing wherein

Fig. 1 is a front elevation of a whistle constructed in accordance with the present invention;

Fig. 2 is an edge view of the same;

Fig. 3 is a detailed sectional view showing the pivotal mounting of the reed;

Fig. 4 is a diagrammatic view illustrating the manual flexing of the reed; and

Fig. 5 depicts a different manner of securing the reed in position.

Referring more particularly to the drawing, the body of the whistle or toy is preferably formed of sheet material, such as Celluloid or metal, folded or bent upon itself to provide a chamber **2** between the side walls **3** and **4**. At the line of fold the body is provided with an opening **5** to constitute an outlet for the chamber so that when the toy is placed with its mouth opening, as provided by the opposite free edges of the folded sheet, between the player's lips and blown, the breath may find ready escape through such outlet.

Within the chamber **2** is adjustably disposed a reed **6** which is preferably formed of Celluloid, a resinous product, or some other self-sustaining though flexible material unaffected by the moisture of the breath. The reed is depicted as being pivoted between the side walls of the body somewhat after the fashion of the blade of a pen knife and is designed to be swung outwardly clear of the side walls, as illustrated at A in Fig. 1, so that it may be wiped clean of any foreign matter for the better functioning of the reed. The pivotal mounting of the reed may be of permanent form, as by passing the rivet **7** through the opening **8** of the reed and registering openings in the side walls, or the reed may be detachably mounted in a very economical manner by pressing a boss or projection **9** from one side wall **4'** (Fig. 5) through the reed opening **8** and into a recess **10** in the opposing side wall **3'**, the sharp edges or burs on the pivot forming projection **9** being concealed and embedded within the recess, as illustrated in Fig. 5. This provides a simple way of mounting the reed so that the whistle will be composed of a minimum number of parts for greater economy in manufacture.

In either form of mounting, the reed is adjustable about its pivot, not only for exposing the reed for cleaning but also for adjustment to various positions within the chamber 2, as indicated at B in Fig. 1, to enable changes in the pitch of the note produced. To facilitate the reed adjustment within the chamber, the free end of the reed is extended beyond the end of the body to provide a tip **11** which is engageable by a finger of the hand so that the user may readily manipulate and adjust the reed about its pivot to secure the desired tone or variation thereof.

Furthermore, since the reed is of a flexible though self-sustaining character, it may be flexed or buckled laterally back and forth across the chamber in the line of air flow, by pressing sidewise on the projecting tip **11** to cause the adjacent portion of the reed to fulcrum on the end of the body for guiding the buckle. This enables the user to break or interrupt the note intermittently as the reed flexes against the side walls of the chamber. Consequently, the reed is adjustable in the plane of air flow from the mouth opening and is also manually flexible transversely of the air stream.

The whistle is of simple construction and of a minimum number of parts. It is durable in formation and where the pivoting projection is struck out of a side wall, as in Fig. 5, the reed may be readily replaced by springing apart the spaced sides, disengaging the reed from its pivotal mounting, substituting another reed and restoring the sides to their proper position. For this purpose the material from which the body **1** is formed may have a sufficient amount of inherent resiliency. The defining walls **3** and **4** of the chamber **2** may be spaced to the desired extent by offsetting the same adjacent the pivoted end of the reed, as indicated at **12**. The side walls fric-

tionally engage the reed about the pivot to aid in holding the reed in a set position.

It will be understood further that the device shown and described is merely illustrative of the inventive principles involved, which may be applied to other physical embodiments without departing from the scope and spirit of the invention claimed.

What is claimed is:

1. A whistle comprising a body having a chamber formed with a transverse air passage leading from a mouth opening, the chamber being open at the side opposite from the mouth opening, and a reed of a self-sustaining material pivotally mounted in the chamber for movement into and out of the chamber through the open side thereof, said reed having an end portion extended beyond the body to provide an operating tip by which it may be adjusted in the line of air flow.

2. A whistle comprising a body formed of sheet material folded upon itself to define a chamber with a transverse air passage leading from a mouth opening, the mouth opening being formed in the folded portion of the body and the free edges of the sheet being spaced apart, and a vibratory reed pivotally mounted at one end within the chamber for adjustment in the plane of air flow and also for movement from within the chamber between the free edges, the reed extending at its free end through the body to provide a tip by which the reed may be adjusted about its pivotal mounting.

3. A whistle comprising a body having a chamber with a transverse air passage leading from a mouth opening, a reed of self-sustaining material mounted at one end within the chamber and adapted to be flexed back and forth across the chamber and transversely of the air flow from the mouth opening, said reed having its free end extended beyond the body to provide an operating tip by which the reed may be moved laterally against the body as a means of fulcrum to effect a flexing of the reed in the chamber.

4. A whistle comprising a body having a chamber with a transverse air passage, a reed of self-sustaining material pivotally mounted in the chamber in the plane of air flow, said reed having its free end extended beyond the body to provide an operating tip by which it may be adjusted in the line of air flow and flexed transversely thereof.

5. A whistle comprising a body having spaced sides defining a chamber, the body being formed with openings to permit flow of an air stream through the chamber transversely of the body, a reed having an opening at one end, one of the side walls having a pivot struck therefrom through the opening of the reed and into a recess formed in the opposing side wall, the side walls being joined for relative movement enabling them to be separated for the mounting and demounting of the reed, the opposite end of the reed being extended beyond the body to provide an operating tip by which the reed may be adjusted.

6. A whistle comprising a body having an air slot therethrough, a self-sustaining reed frictionally pivoted at one end in the slot for adjustment toward and from the mouth of the slot and having a part projecting beyond the body for engagement by the hand to adjust it to set positions of adjustment.

FRANK FORTUNA.