Oct. 6, 1936. G. S. SCOTT 2,056,623

TWO-TONE WHISTLE

Filed Oct. 11, 1935

Fig. 1.

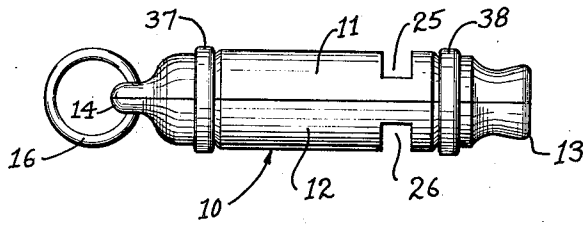


Fig. 2.

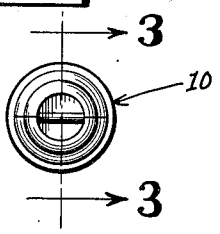


Fig. 3.

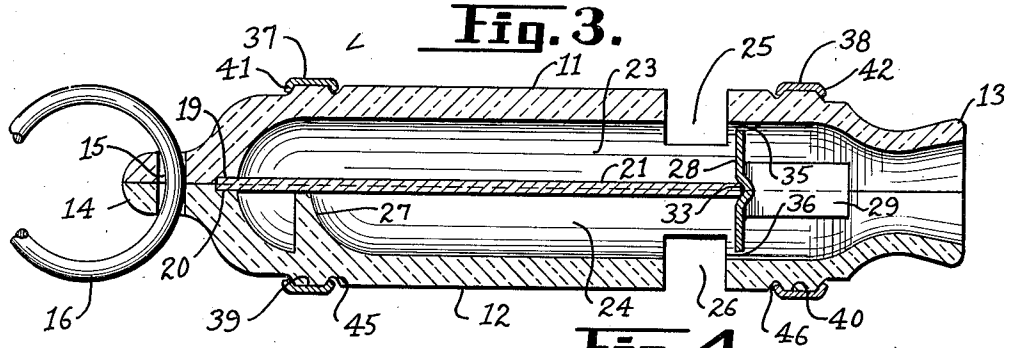
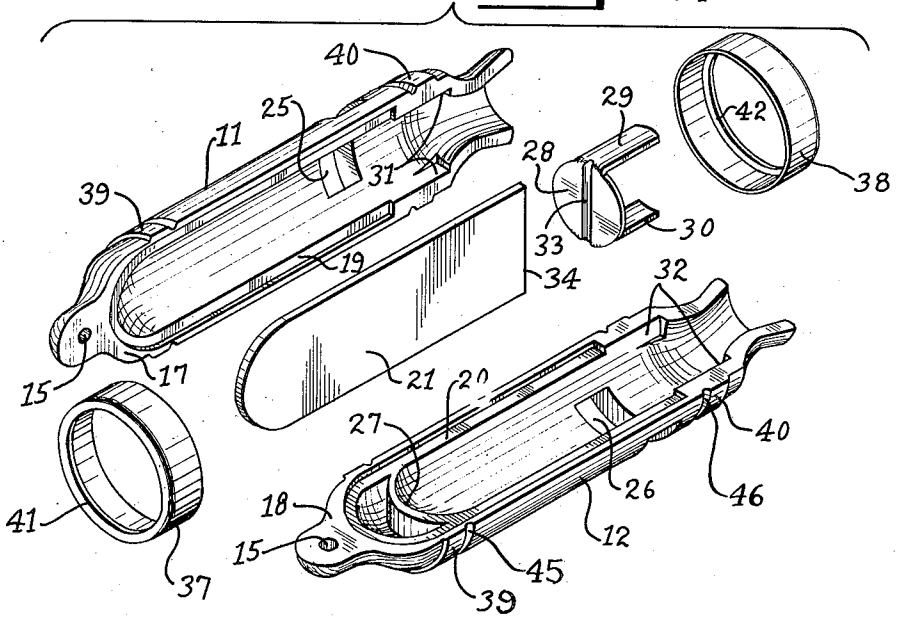


Fig. 4.



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Patented Oct. 6, 1936 2,056,623

UNITED STATES PATENT OFFICE

2,056,623

TWO-TONE WHISTLE

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Application October 11, 1935, Serial No. 44,559

8 Claims. (Cl. 46—179)

This invention relates to sound producing devices, and more particularly to a whistle adapted to produce a pleasing two-tone harmonious musical chord.

One object of this invention is to provide a whistle of the above nature comprising two complementary semi-cylindrical sound chambers separated by a central partition, said chambers being held rigidly together by a pair of external bands.

A further object is to provide a whistle of the above nature in which one of the sound chambers is provided with a false bottom to cause it to have a musical tone of higher pitch than the other sound chamber, and thus producing a musical chord when the whistle is sounded by blowing through a common mouthpiece.

A further object is to provide a two-tone whistle of the above nature which will be simple in construction, inexpensive to manufacture, easy to assemble and manipulate, compact, and very efficient and durable in use.

With these and other objects in view, there has been illustrated on the accompanying drawing one form in which the invention may be conveniently embodied in practice.

In the drawing:

Fig. 1 represents a side view of a whistle embodying the invention.

Fig. 2 is a right end view of the same.

Fig. 3 is a longitudinal sectional view through the same on an enlarged scale, the view being taken on the section line 3—3 of Fig. 2.

Fig. 4 is an exploded perspective view of the several parts of the whistle.

Referring now to the drawing in which like reference numerals denote corresponding parts throughout the several views, the numeral 10 indicates generally an elongated tubular whistle casing or body, preferably of molded composition, and comprising two semi-tubular complementary half sections 11 and 12. One end of the body 10 is provided with an annular reduced mouthpiece 13, while the opposite end thereof has an oval shaped projection 14, having an aperture 15 formed therethrough for receiving a ring 16 to which a supporting chain or cord, not shown, may be attached.

The sections 11 and 12 have flat contacting faces 17 and 18, the side and bottom edges of which are provided with grooves 19 and 20, said grooves being adapted to receive a flat elongated partition 21, preferably made of metal and serving to divide the casing 10 into two parallel sound chambers 23 and 24. The depth of the grooves 19 and 20 is made equal to half the thickness of the partition 21, so that when the latter is in assembled position within said grooves, the half sections 11 and 12 will contact with each other and will be held by said partition from twisting with respect to each other. The side sections 11 and 12 adjacent the mouthpiece sections are provided with transverse slots 25 and 26, which communicate with the chambers 23 and 24 to permit the escape therefrom of air blown into the mouthpiece 13.

The sound chamber 24 is constructed with a false bottom 27 so spaced from the true bottom of said chamber as to reduce the volume thereof, and consequently, produce a sound of different pitch from that produced by the full length sound chamber 23.

In order to provide an air baffle so as to divide the air blown into the mouthpiece 13 into two streams, one for each sound chamber, provision is made of a circular plate 28, preferably of metal, having a pair of parallel upwardly extending outwardly convex legs 29 and 30 formed integrally thereon. The legs 29 and 30 are adapted to seat in a pair of opposed socket portions 31 and 32 formed respectively on the half sections 11 and 12 at the lower end of the neck of the mouthpiece 13. The baffle plate 28 is provided on its rear face with a cross groove 33 which lies in a plane passing through said legs 29 and 30, and is adapted to fit over the upper squared end 34 of the partition 21. The diameter of the baffle plate 28 is made somewhat less than the interior diameter of the hollow casing 10 so as to provide a pair of opposed arcuate air passages 35 and 36, through which the divided stream of air is adapted to pass when the whistle is blown.

The two half sections 11 and 12 of the whistle are adapted to be held in assembled position with the partition plate 21 and baffle plate 28 interfitted therewith by means of a pair of exterior circular metal bands 37 and 38. The bands 37 and 38 are adapted to embrace a pair of ribs 39 and 40 formed on the outer cylindrical surface of the casing 10.

In the exploded view of the whistle shown in Fig. 4, the bands 37 and 38 are shown as they appear before assembly with one edge of each band provided with a preformed inturned flange 41, 42. The other edges of the bands are adapted to be spun inwardly around the ribs 39 and 40 and seat in a pair of circular grooves 45 and 46 located on the inner sides of said ribs 39 and 40.

One advantage of the present invention is that the two complementary half sections of the

whistle may be completely moulded in one operation of the die plunger without the necessity of any subsequent machining or forming operations.

While there has been disclosed in this specification one form in which the invention may be embodied, it is to be understood that this form is shown for the purpose of illustration only, and that the invention is not to be limited to the specific disclosure but may be modified and embodied in various other forms without departing from its spirit. In short, the invention includes all the modifications and embodiments coming within the scope of the following claims.

Having thus fully described the invention, what is claimed as new and for which it is desired to secure Letters Patent, is:

1. In a chord producing whistle, a tubular casing comprising a pair of preformed molded complementary half sections, means to hold said sections in assembled position, said casing having a mouthpiece at one end and being closed at the other end, a longitudinal partition dividing said casing into two sound chambers, one of said sound chambers having an integrally formed transverse partition adjacent the closed end of the casing to produce a musical sound of different pitch from the other sound chamber.

2. In a sound producing device, a tubular casing comprising a pair of complementary half sections of molded plastic composition, means to hold said sections assembled, said casing having one end closed and the opposite end formed with a restricted mouthpiece, a longitudinal partition for dividing the interior of said casing into two separate sound chambers, said half sections having opposed openings leading into said chambers, one of said sections having an integrally formed transverse partition adjacent the closed end of the casing, and a transverse baffle plate positioned in said mouthpiece at the end of said longitudinal partition.

3. In a sound producing device, a tubular hollow casing having a mouthpiece at one end and closed at the other end, said casing being split into two preformed complementary half sections along a central longitudinal plane, means for holding said sections together, a longitudinal partition lying in said plane and located between said half sections to produce two separate sound producing chambers, each of the contacting faces of said half sections having a depressed groove for fitting the sides of said partition, and one of said side sections having a transverse partition formed integral therewith adjacent the closed end.

4. In a two-tone whistle, a split tubular casing having a closed end and an open end, a reduced neck mouthpiece on said open end having opposed grooves formed therein, a longitudinal partition lying diametrically between said split sections and dividing said casing into two separate sound chambers, means in one section to make one chamber shorter than the other, a U-shaped baffle located in said mouthpiece and serving to spread the air blown into said mouthpiece into two streams to produce sounds of two different pitches in said separate sound chambers, the legs of said baffle being convex outwardly and being disposed one in each groove formed in the reduced neck of said mouthpiece, the two parts of said casing being separable along a longitudinal plane.

5. In a multiple-tone chord whistle, a split tubular casing composed of a plurality of separate sound chambers, said casing having a pair of annular ribs adjacent the opposite ends thereof, and a pair of annular metal bands fitting said ribs and having their edges spun down about the sides of said ribs to hold the sections of said casing together.

6. In a whistle, a pair of preformed molded casing parts each having a flat surface and being adapted to be disposed with said flat surfaces in contact to form a tubular casing closed at one end and open at the other, a central longitudinal partition plate, each casing part having a depressed groove formed in its flat surface to receive the edges of said partition plate, a U-shaped baffle plate having longitudinal side legs, said casing parts also having opposed recesses to receive said side legs, and means to secure the casing parts together.

7. In a whistle, a pair of preformed molded casing parts each having a flat surface and being adapted to be disposed with the flat surfaces in contact to form a tubular casing closed at one end and open at the other, a central partition plate, each casing part having a depressed groove formed in its flat surface to receive the edges of said partition plate disposed between the parts, a transverse baffle plate within the mouthpiece end of said casing and having opposed longitudinal side legs, opposed recesses in said flat surfaces to receive respectively said opposed legs, said casing parts having alined annular ribs formed thereon, and an annular ring band member disposed around said casing about said rib to hold the parts together.

8. In a whistle, a pair of preformed molded casing parts each having a flat surface and being adapted to be disposed with the flat surfaces in contact to form a tubular casing having a closed end and an open mouthpiece, a central longitudinal partition plate, each casing part having a groove formed therein to receive the edges of said partition plate, a U-shaped transverse baffle plate in the mouthpiece end of said casing, opposed recesses in said flat surfaces to receive respectively the opposed longitudinally extending legs of said baffle plate, one of said casing parts having a transverse partition formed therein adjacent to but spaced from the closed end, and means to secure the casing parts together.

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