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J. THOMPSON
MULTITONE WHISTLE

2,454,105

Filed June 26, 1946

FIG. 1

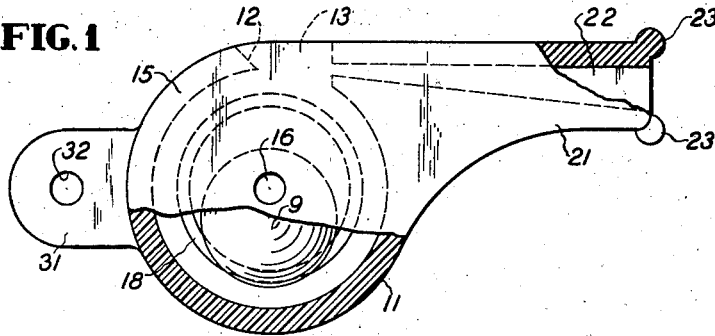


FIG. 2

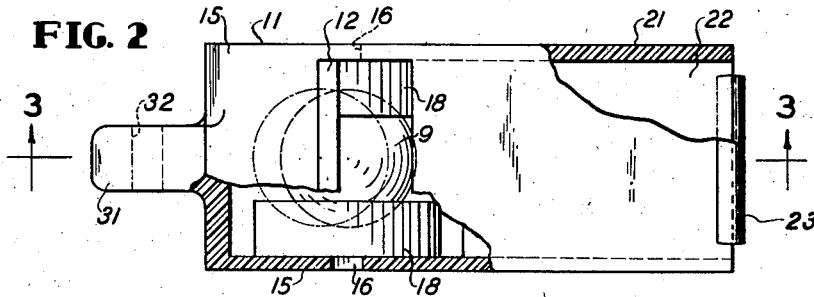


FIG. 3

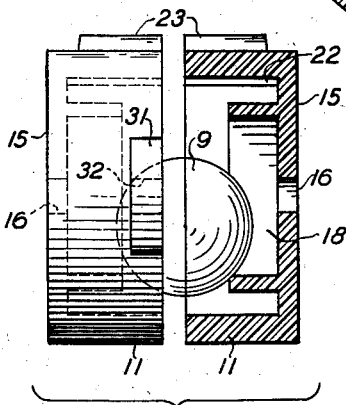
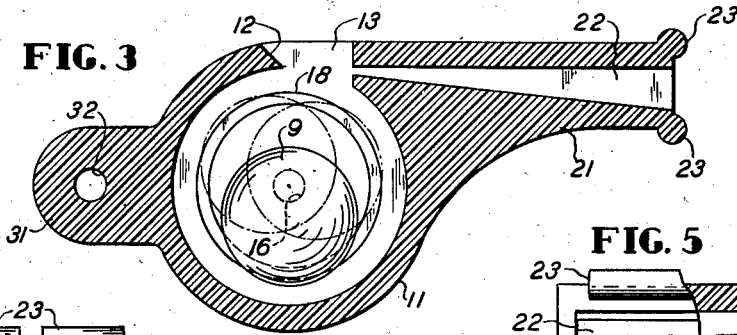
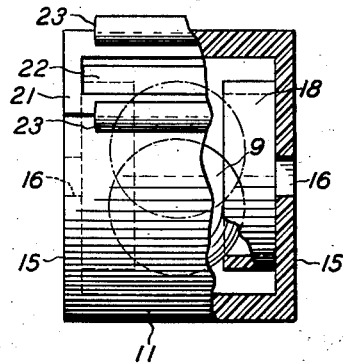


FIG. 4

FIG. 5



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2,454,105

MULTITONE WHISTLE

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1 Claim. (Cl. 46—179)

1

This invention relates to simple whistles and particularly to the type commonly known as police whistles.

The primary object of this invention is to construct such whistle with an improved tremolo tone producing effect.

Another object is to provide such whistle with simple means for conveniently varying the pitch thereof, so as to produce three distinct sounds as desired.

These and other objects of the invention will become apparent from a reading of the following description and claim, together with the accompanying drawing wherein like parts are referred to and indicated by like reference characters and wherein:

Figure 1 is a side elevation of a whistle made in accordance with this invention with parts thereof broken away to show construction thereof;

Figure 2 is a top plan view thereof with parts broken away to show construction;

Figure 3 is a vertical cross-sectional view of the whistle taken along the line and in direction of the arrows 3—3 of the Figure 2;

Figure 4 is a rear end view of the two matched or analogous sections which form when united, the whistle body and mouthpiece, with a section cut away to show construction; and

Figure 5 is a front end view of the whistle with parts thereof broken away to show construction.

In the drawing there is shown a whistle made in accordance with this invention and which has a body, a mouthpiece, and a simple holder integral therewith.

The body has a rounded or substantially cylindrical wall 11, the top of which has an opening 13 provided with a whistle-blade 12. Straight side walls 15 close the cylindrical wall 11 as shown. Each of the side walls 15 has a small hole 16 therethrough as is clearly illustrated in the drawing. By closing one or both holes 16 with the thumb and, or first finger of one hand, when the whistle is blown, two different and distinct tones are produced respectively from the tone normally produced when both said holes are open. A shrill or high pitched tone is produced when both holes are opened. A lower tone is produced when both holes 16 are closed, and an intermediately pitched tone is produced when only one hole is open.

A small ball 9 is inside the body 11 and between the sides 15 as shown. The ball may be made of wood or cork and is agitated violently when the whistle is blown. It is used to produce a tremolo effect in the resulting sound. Balls of this type are common in police whistles.

The other improvement and novel feature of this new whistle resides in the embodiment of two spaced concentric facing rings 18 which are mounted on the inside surfaces of the afore-

2

stated side walls 15. The inner free edges of the concentric rings 18 form a circular track or race on which the aforesaid ball 9 may roll when the whistle is blown. The ball 9 being thus guided and regularly rolled on the tracks or rings 18, evenly spaced from the side walls 15, and uniformly and regularly past the opening 13 produces a noticeably even tremolo tone effect, which effect in ordinary whistles is "fuzzy", blurred and unmusical.

The ball 9 is also thereby kept free of the two openings 16, and a clear and distinct musical tone is thereby produced when each hole 16 is opened as desired.

The mouthpiece 21 of the instant whistle is conventional in every respect. A detailed description of it is not necessary since its design and construction is already well-known. The drawing, however, illustrates the mouthpiece 21 having a channel or air duct 22 therethrough which directs a stream of air against the aforesaid blade 12. The reference character 23 indicates a conventional bit piece on the free end of the mouthpiece 21.

The holder 31 is simply a small tab molded or otherwise attached to the whistle body 11 and is provided with a small hole 34 for a retaining cord or chain.

It should be noted here that this whistle has a distinct advantage over prior type whistles of this type, in that it facilitates the transmission of sound signals. This whistle is designed for use by leaders of military or parading bands. Since its tone is more musical, and since it is capable of producing three distinct notes, the leader of the band may more conveniently and readily signal to the band members certain directions which he wants them to follow. The old-fashioned single toned and coarse tremolo whistle was limited to numerical signals or to signals based on their length or duration. Such signals were often confused or mistaken, and the unmusical sound distracted from the musical composition being played by the band.

In size and appearance the whistle need be no larger or different than the prior art conventional police type whistle.

Having thus described the invention in its preferred form, it should be understood that there may be other forms or modifications of the invention which may also come within the scope of the following claim.

I claim:

1. A multi-tone whistle, comprising in combination, a body member including a cylindrical sound chamber including walls at each end thereof and parallel to each other, the said chamber having a transverse opening therein extending between the said parallel walls, the said body member also including a mouth piece integral therewith and

3

having an air passage opening into the said transverse chamber opening, the said body member also including a blade portion integral therewith at the said transverse chamber opening and being spaced from and opposite to the said air passage opening, each of the said walls having an annular race on the inner side thereof aligned with and facing each other and each wall also having a central hole therein concentric with the circular race proximate thereto, and a ball in the sound chamber rollable on the said aligned races and revolvable around the said hole and producing a smooth tremolo sound effect when air is blown through the said mouth piece against the

5

10

4

said blade, either or both of the said holes being closable as desired to produce different sound pitches when the whistle is blown.

JOSEPHUS THOMPSON.

REFERENCES CITED

The following references are of record in the file of this patent:

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