June 10, 1941. T. LEAVENS 2,245,484

DOG WHISTLE

Filed Nov. 1, 1940

Fig. 1.

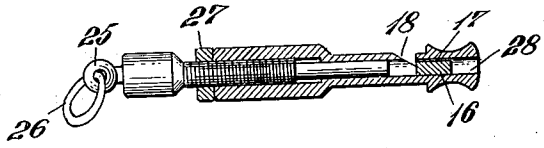


Fig. 2.

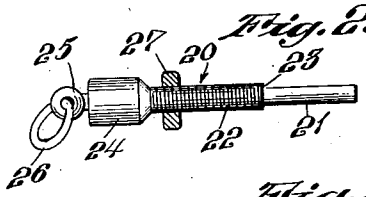


Fig. 3.

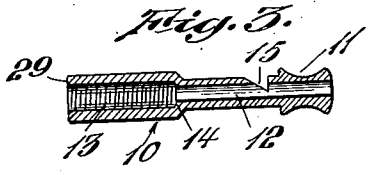


Fig. 4.

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## DOG WHISTLE

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4 Claims. (Cl. 46—179)

This invention relates to a whistle and has for one of its objects to provide a whistle which will be of sufficiently high frequency so that it may be heard by a dog but not heard by the human ear.

Another object of the invention is to provide for an adjustment of the pitch of the whistle with a means for holding the adjustment in set position.

Another object of the invention is to provide a whistle which may be adjusted to a selective pitch which if continually used at this pitch may be recognized by the dog, while the pitch may be differently selected from that used by others.

Another object of the invention is to provide an extremely simple whistle which may be manufactured and assembled quickly and inexpensively.

With these and other objects in view, the invention consists of certain novel features of construction, as will be more fully described, and particularly pointed out in the appended claims.

In the accompanying drawing:

Fig. 1 is a sectional view showing the whistle in assembled position;

Fig. 2 is a side elevation with the adjusting nut in position on the plunger;

Fig. 3 is a sectional view of the body of the whistle;

Fig. 4 is a perspective view of the restricting plug.

Quite frequently when one wishes to call a dog, whistling will be resorted to for the purpose. Such whistling is sometimes objectionable to neighbors. However, it is known that a dog's ears are receptive to high frequency notes which are not audible to human ears; and accordingly I have provided a whistle which will emit a high frequency note so that it may be heard by the dog but not by human ears, although I have provided an adjustment so that some notes may be heard if desired; and the following is a more detailed description of the present embodiment of this invention, illustrating the preferred means by which these advantageous results may be accomplished:

With reference to the drawing, 10 designates the body of the whistle which is generally tubular in form, having its outer surface shaped as at 11 to provide a mouthpiece, while the body is provided with a bore 12 of one size and a bore 13 of a larger size, the larger size bore being threaded as indicated. A shoulder 14 exists between the two size bores 12 and 13. A notch through the wall of the tube provides an opening 15 for the producing of sound. The block 16 shaped as best shown in Fig. 4 is located in the bore 12 adjacent the sound-producing opening 15 to provide a restricted passage 17 for directing air adjacent the beveled edge 18 of the opening 15.

In order to adjust the tone or the pitch emitted by the whistle, I have provided a plunger designated generally 20 for insertion into the bores 12 and 13. This plunger has a cylindrical portion 21 of one diameter and a threaded portion 22 of a larger diameter providing a shoulder 23 between the two, while a head 24 is provided, having an eye 25 in which a suspending ring 26 may be located. A check nut 27 is threaded onto the portion 22 of the plunger.

The plunger 20 may be threaded onto the portion 13 of the bore of the body and when its shoulder 23 engages the shoulder 14, the size of the cavity is such that a very shrill high-pitched note will be emitted when air is directed inwardly at the end 28. The shrill note so emitted will not be audible to the human ear but will be audible to the ears of a dog. The shrillness results from the small diameter in the bore and the distance of the sound-producing opening from the mouthpiece. A slight movement of the plunger outwardly will result in a different frequency which is not audible to human ears, but after the plunger is moved to a substantial distance outwardly, the note emitted will be of lower frequency, and after moved to some extent, will come within the range of human ears.

At all positions of adjustment the check nut 27 may be set up snugly against the end 29 of the body so as to lock the plunger firmly in an adjusted position.

I claim:

1. A whistle comprising a one-piece tubular body having a mouth portion at one end and a longitudinal bore of two sizes with a shoulder formed between the two size bores, the smaller bore providing an air chamber and being at the mouth portion end of the body and provided with a sound-producing opening, the larger bore being threaded, a one-piece plunger having a threaded portion to engage the threads of the body and having a reduced portion to loosely fit and extend into the smaller bore with a shoulder provided between the two portions to engage the shoulder of the body and limit the movement of the plunger into the body.

2. A whistle comprising a one-piece tubular body having a mouth portion at one end and a longitudinal bore of two sizes with a shoulder formed between the two size bores, the smaller

bore providing an air chamber and being at the mouth portion end of the body and provided with a sound-producing opening, the larger bore being threaded, a one-piece plunger having a threaded portion to engage the threads of the body and having a reduced portion to loosely fit and extend into the smaller bore with a shoulder provided between the two portions to engage the shoulder of the body and limit the extension of the plunger into the body, and a check nut on said plunger to engage the end of the body and hold the plunger in adjusted position.

3. A whistle in which the cross-sectional area of the air chamber is so proportioned and the space between the air exit opening in said chamber and the extreme end of the mouth piece is so distanced as to be capable of producing a sound of a frequency inaudible to humans but audible to dogs, means rotatably movable for varying the effective length of said air chamber to change the frequency of the sound emitted from said whistle to one audible to both humans and dogs, and means associated with the first said means for locking said first means against movement for retaining the choice of effective length of air chamber for producing a sound of chosen frequency within the range of the whistle.

4. A whistle in which the cross sectional area of the air chamber is so proportioned and the space between the air exit opening is so distanced as to be capable of producing a sound of a frequency inaudible to humans but audible to dogs, means rotatably movable for varying the effective length of said air chamber to change the frequency of the sound emitted from said whistle to one audible to both humans and dogs, said means comprising a plunger having a reduced part of a size to be loosely received in said chamber and of a length to extend substantially the entire length of said chamber when said plunger is in its innermost position, and a threaded portion on said plunger threadedly engaging the body of said whistle for moving said reduced portion inwardly and outwardly in said chamber and an abutment within said body and adjacent said chamber and engageable by the end of the threaded portion for limiting the inward movement of said reduced portion into said chamber.

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