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P. S. OLT ET AL

2,606,400

GOOSE CALL

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FIG. 1.

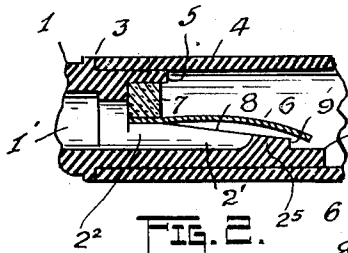
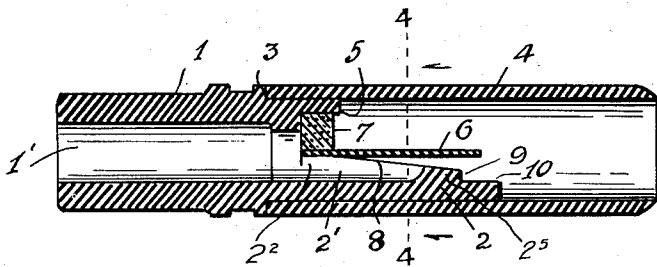


FIG. 2.

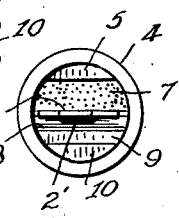


FIG. 3.

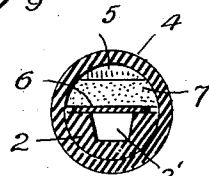


FIG. 4.

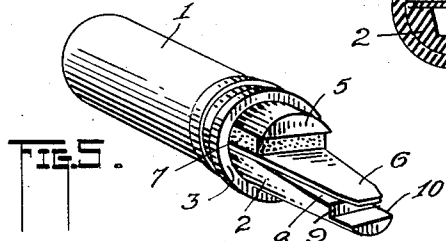


FIG. 5.

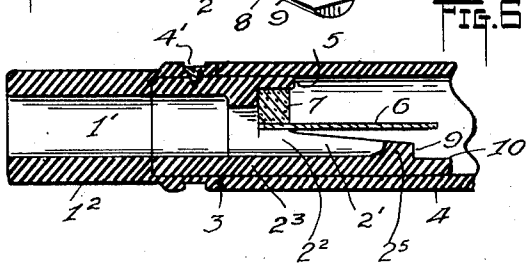


FIG. 6.

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GOOSE CALL

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2 Claims. (Cl. 46—180)

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This invention pertains to goose calls.

The main object is to provide a goose call wherein the hard rubber reed is flat throughout while the so called reed base, i. e., that portion beneath the reed through which the air blast passes is curved away from said reed thus permitting greater freedom for the passage of air in volume by which a "call" for the specific purpose named is caused to produce both a high and a low tone corresponding closely to the call of the goose without manipulations or cupping of the hand.

Another object is to furnish a call whose parts may be disassembled for cleaning, the construction being such that even a novice may reassemble the parts with assurance that the proper, or correct tone will result in use.

The difference between the calls of a duck and a goose is, of course, well known. Up to the present time an instrument for imitating the call of the goose has required the manipulations of the hand of the hunter while holding the instrument, to produce different sound effects in order to as closely as possible imitate the two different tones of the cry as distinguished from that of the one tone produced by the duck. The imitation of a duck call is provided by an instrument the reed of which vibrates for a single tone at all times. In contrast, the purpose herein is to furnish an instrument wherein the reed bears a peculiar relation to the other parts therein to the end that two tones of the goose's call will be more faithfully produced than is possible by other methods.

That the invention may be understood the appended drawing is provided forming part hereof.

Figure 1 is a longitudinal section of the complete device wherein a flat or straight reed is shown.

Figure 2 is likewise a longitudinal section of a part thereof showing the reed in a flexed position in use when a high tone is produced.

Figure 3 is an end elevation of the device as viewed from the mouth-piece end thereof.

Figure 4 is a transverse section of the device as produced on line 4—4 of Figure 1.

Figure 5 shows the reed holding section of the device in perspective, and

Figure 6 is a longitudinal section of part of the device of Figure 1 showing a two part construction as compared with that figure.

Preferably the device is made of hard rubber. In the first four figures of the drawing 1 denotes the main portion of the said device, which is known as the "plug." This portion, which in the main is cylindrical, has an extended portion 2 at

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one end which is semicylindrical as best shown in Figures 3 and 4 and provided with a longitudinally extending groove, this latter portion 2, in this instance, being of less diameter than the portion 1 creating a face 3 on the latter against which may abut one end of a tubular mouth piece 4 that snugly fits upon both the said extended portion 2 and a projection 5 of the portion 1 lying opposite and spaced from said extended portion about as shown.

Said portion 1 has a bore 1' which opens into the extended portion 2 as a groove identified at 2', this terminating distant from the free extremity of said portion 2 and exposed to the bore of the same and the bore of the mouthpiece 4. It is observed that the portion 2 has an upper surface 2² which is flat where it extends from the portion 1, and lies at substantially the center of the latter. Upon this flat surface rests one end of a hard rubber reed 6 extending toward the free extremity of the named portion 2 and in this instance parallels the axis of the bore 1' the base or root of the reed being spaced from the projection 5. The reed is maintained in position by an insert 7 of suitable material such, for example, as cork.

It is now to be observed the upper surface 8 of the extended portion 2 of the plug is a flat surface downwardly directed away from the fixed base or root of the reed toward the mouthpiece and toward the free end of said portion 2 and the normally straight reed is suspended free thereof, and spaced above it. Further, below the thus extended end of the reed the named portion 2 has an upstanding abutment 2³ having an abrupt face 9 which lies at right angles to the plane of the said normally straight reed and also lying in a transverse direction with respect to the length of the same, said face forming a step from the base of which a lower surface 10 may terminate the portion 2, and which is spaced from said reed.

In Figure 1 the device or "call" with respect to the body portion 2 is shown as of a single part.

In Figure 6, however, this structure is shown as of two parts 1² and 2³ respectively, the latter at its inner end lying in a counter bore 2⁴ of the portion 1², any suitable means, such as a screw 4', for example, serving to secure the portions relatively, if desired.

This latter structure thus provides an arrangement by which the instrument may be readily taken apart for cleaning, on occasion, to insure that the reed may be unhindered in its ability to vibrate freely.

The groove in the part 2 for passage of air is

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of a determined form and area to best serve the purpose in a goose call as determined by the setting of the reed and the size thereof. In this connection it is important that the reed at its free end extend well beyond the face 9, as shown, in order that the air blast may have positive control of it.

In some so-called goose calls it is customary to so form the reed that it curves away from a flat reed-base to provide proper clearance but during use said reed will naturally gradually regain its straight or flat form and approach the said reed-base and thereby the instrument fails in its purpose as a goose call since in use the proper tone is destroyed, both the necessary high and low tones being altered, or one of them lost entirely.

In the present structure the surface 8 is downwardly inclined in a flat surface away from the root of the reed, and the reed itself is straight and flat, as manufactured, and therefore when mounted for use never tends to change its form, and tone changes cannot result throughout the life of the instrument, there being no change in form except by air movements produced at the mouthpiece 4. The space between the surface 8 and the adjacent face of the reed, when the latter is in repose, being in the nature of a dihedral angle opening toward said inlet.

The instrument requires no cupping of the hand of the hunter in any way to provide changes in the tone since the proper tone is provided in the instrument itself, the degree of air movement giving the needed "her-ronk" of the wild goose.

The provision of the step or face 9 is an important advancement in a goose call as distinguished from other instruments in that the air in moving through the mouth piece 4 in striking said face is deflected upon and beneath the extended overhanging end of the reed causing the said reed to vibrate at moderate frequency to thereby produce a low tone. As the velocity of the air is increased the reed becomes arched about as shown in Figure 2, where it will vibrate, at a higher frequency, the different air velocities giving the "her-ronk" as the required perfect imitation.

This result is occasioned from the fact that the air blast is somewhat imprisoned in the cavity of the mouthpiece above the reed, the pressure of which finally depresses the reed until it reduces the flow of the blast moving beneath it, the thin terminal note being occasioned as the reed has light contact with the corner of the step at 9, and still vibrating.

The abruptness of diversion of the air blast provided by said step or face 9 is thus the controlling factor in the effect upon the reed in the peculiar tone production. As the blast of air through the mouthpiece is somewhat diminished the reed moves down upon the flat surface 8 throughout, which, of course, includes the upstanding abutment or step 2⁵ having the abrupt face 9, whereupon the said reed sets up a thin wheezy sound, it may be said, as the terminal

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note corresponding to the terminal note peculiar to the goose.

Naturally slight changes in the structure may be made but such as may fall within the invention and the claims thereto.

We claim:

1. In a goose call, a barrel having a bore therethrough and an air inlet and an air outlet, a tubular member positioned with said outlet, a normally flat reed positioned longitudinally within said barrel and having one end fixed in said tubular member, and closure means sealing the bore of said tubular member against air flow on one side of said reed, said tubular member including a portion extending toward the inlet end of said barrel and positioned on the side of said reed opposite said closure means, said portion presenting a flat face exposed in the bore of said barrel and slanting from the fixed end of said reed toward the wall of said bore to form with said reed an acute dihedral angle opening toward said inlet, said flat face having a longitudinal groove communicating with the bore of said tubular member and a transverse abutment closing said groove and presenting a flat face exposed toward said inlet, said reed extending toward said inlet to terminate in a free end portion extending beyond and overhanging said abutment.

2. In a goose call of the type comprising a barrel having a bore therethrough and an air inlet and an air outlet, a normally flat reed positioned within said barrel and fixed only at its end nearest said outlet, and means restricting the flow of air through said bore to a path along one face of said reed, the combination of a member positioned within said bore on said one side of said reed and presenting a flat face disposed longitudinally of the bore of said barrel and arranged to form with said reed an acute dihedral angle opening toward said inlet, said flat face having a longitudinal groove to allow flow of air past said reed, and an abutment arranged transversely of said barrel to close the end of said groove nearest said inlet, said abutment presenting a flat face lying at right angles to the longitudinal axis of said bore and exposed toward said inlet, the free end of said reed extending beyond and overhanging said abutment.

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REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
795,493	Ditto	July 25, 1905
1,484,148	Olt	Feb. 19, 1924
2,296,785	Hoeflich	Sept. 22, 1942
2,396,359	Yager	Mar. 12, 1946