

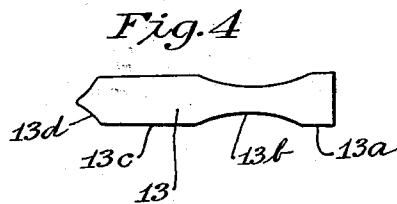
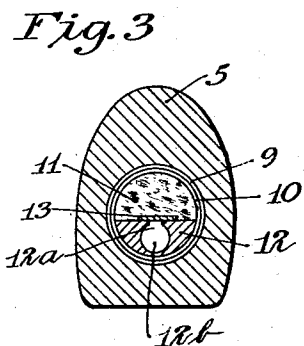
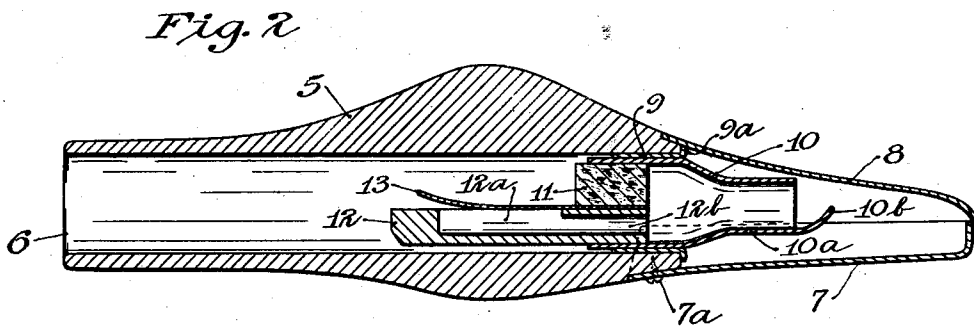
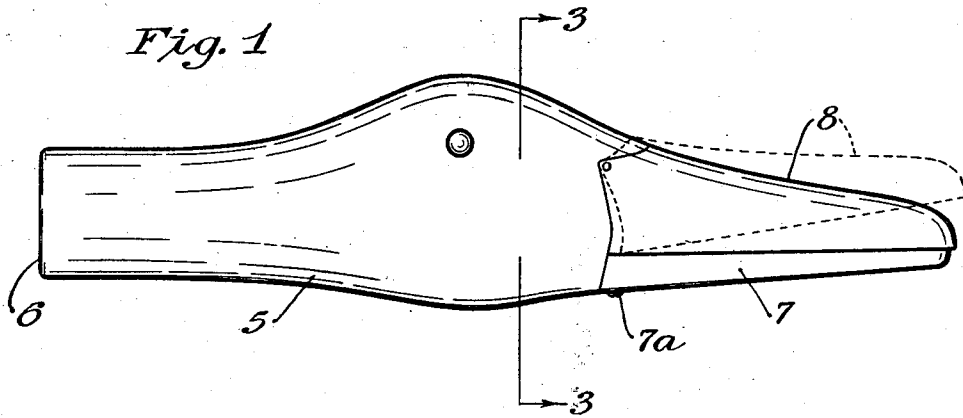
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F. J. MUEHLSTEIN

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DUCK CALL

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Inventor
Francis J. Muehlstein
By his Attorneys
Williamson & Williamson

UNITED STATES PATENT OFFICE

FRANCIS J. MUEHLSTEIN, OF ST. PAUL, MINNESOTA

DUCK CALL

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My invention relates to new and useful improvements in duck call devices.

Most duck calls now on the market require extensive skill and experience on the part of the user to produce successful results. In practically every instance a deceptive similarity to the call of the wild duck is produced only by skillfully manipulating the fingers or hand over the discharge of the conventional duck call, to properly muffle, deflect and accentuate the sound. Extremely few hunters, with devices commercially used at this time, are able to call a flock of wild ducks down to their decoys.

It is an object of my invention to provide a simple and highly efficient duck call wherein extensive experience and extraordinary skill are not required to produce successful results and wherein as nearly as possible the functions of the duck's mouth, tongue and bill are reproduced.

More specifically, it is an object to provide an improved duck call wherein sound producing means are associated with air actuated deflecting means in such manner that when the user blows the device to produce the requisite air pressure, a deceptive call is produced without the exercise of skillful finger manipulation at the discharge.

With these objects in view and such others as will be apparent from the description, the invention resides in the novel construction and arrangement of parts hereinafter described and claimed and illustrated in the accompanying drawings, wherein corresponding parts are indicated by similar characters of reference throughout the several views and wherein,

Fig. 1 is a side view of the duck call showing the normal position of the movable shell member in full lines and the operated position in dotted lines;

Fig. 2 is a longitudinal cross sectional view of the duck call;

Fig. 3 is a transverse sectional view of the

duck call taken along the line 3—3 of Fig. 1; and

Fig. 4 is a view showing the shape of the reed employed in the duck call.

Referring to the drawings, a casing 5 having a cylindrically-shaped interior, has an exterior formed to resemble a duck's head. The casing 5 is formed at one end into a mouth piece 6. At the other end, a shell member 7 shaped similarly to the lower half of a duck's bill, as shown, is rigidly attached to the casing 5 by means of screws 7a. At this same end, a second shell member 8 shaped similarly to the upper half of a duck's bill is swingably attached to the casing 5 by means of screws 8a. The shell members 7 and 8, as shown, are shaped and located in such a manner that the shell member 8 will engage with or overlap the shell member 7 when the shell member 8 is at the inward limit of its movement. A sleeve 9, having a flange 9a, is secured within the interior of the casing 5 at the end opposite the mouth piece 6. Within the sleeve 9, a tubular member 10 having an outer portion 10a of reduced diameter is provided, said portion extending outwardly of the end of the casing 5 and being disposed between the shell members 7 and 8. At the outer end of the portion 10a of the member 10 is an upturned air deflecting lip 10b. In the opposite end of the cylindrical member 10, two cooperating reed retaining members 11 and 12, each having a semi-circular cross section are frictionally engaged with the interior of said member 10. The retaining member 11 should preferably be of compressible material such as cork. The outer end of the member 11 is substantially flush with the end of the tubular member 10 and the member 12 extends a substantial distance outward of the end of the cylindrical member 10. The member 12 has a longitudinal flat surface on the side adjacent member 11. The said member 12 has an axial passageway 12b extending from its forward end to a point

removed a short distance from its rearward end. The longitudinal flat surface of said member is provided with a longitudinal channel 12a communicating with the axial passage 12b.

5 A flat flexible reed 12 comprises a portion 13a at its inner end for engagement with a supporting means, a portion 13b of reduced width located outward of the portion 13a, a
10 portion 13c of full width located outward of the narrow portion 13b and a portion 13d located outward of the portion 13c and converging from full width at its inner end to a point at its outer end. The portion 13a of
15 the reed 12 is firmly held between the members 11 and 12 with the portions 13b, 13c and 13d extending outward along the longitudinal flat surface of the projecting portion of the member 12, so as to cover the channel 12a.
20 The portions 13c and 13d of the reed 12 are curved slightly upward from the longitudinal flat surface of the member 12.

Operation

25 The user of the device forces air through the interior of the casing 5, through the mouth piece 6. This air flows past the reed 12 into the channel 12a, thus causing the reed to vibrate and produce sound. From the
30 channel 12a the air then flows through the passage 12b, through the interior of the tubular member 10 and out of the open end of the portion 10a of the cylindrical member 10, at which point the upturned lip 10b deflects
35 the stream of air upward against the inner side of the shell member 8, said shell member 8 being raised by said stream of air.

The raising of the shell member as the sound producing means is actuated, simulates
40 the opening of a duck's bill and very effectively assists in making the sound emitted closely resemble the call of a duck. It is obvious that my duck call does not require the opening and closing of the fingers or hand
45 over the discharge of the duck call and, hence, obviates the necessity for the user having ability and skill in such manipulation.

The device described has been made and used and its accuracy and effectiveness have
50 been fully demonstrated. While I have shown the upper shell or bill section 8 as hinged to the tubular body 5, it will, of course, be understood that either or both of said sections may be hinged and means may be provided, gravity actuated or resiliently actuated for normally closing the shells together.
55 It will, of course, be understood that various changes may be made in the form, details, arrangement and proportions of the various parts without departing from the scope of the present invention.

What is claimed is:—

1. In a duck call, a casing, an air actuated sound producing means located within said
65 casing, one portion of said casing apertured

to receive air, another portion of said casing apertured to permit exit of air, a movably connected member mounted to normally diminish the air exit when said member is at the inward limit of its movement, and means
70 associated with said sound producing means for directing the air discharge against said movable member, so as to produce movement of said member away from said air discharge.

2. In a duck call, a cylindrical casing, an air actuated sound producing means located within said casing, a mouth piece at one end of said casing, an air exit at the other end of said casing, a shell swingably attached to said exit portion, said shell being shaped and located to close said exit when said shell is at the inner limit of its movement and an air directing means to receive air which has passed through the sound producing means and direct said air against the inner surface of said shell to cause outward movement thereof.
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3. In a duck call, a cylindrical casing, one end of said casing being formed into a mouth piece, a partition located within said casing, said partition being provided with an aperture, an air actuated sound producing reed associated with said aperture, the end of said casing opposite said mouth piece being provided with two shells resembling the upper and lower halves of a duck's bill, one of said shells being rigidly attached to said casing and the other of said shells being swingably attached at its inner portion to the end of said casing, said shells cooperating to close said end of the casing when the swingably attached shell is engaged with the rigidly attached shell, and an air deflecting member shaped to receive air emitted from said aperture and direct said air against the inner surface of said swingably attached shell so as to cause outward movement of said swingably attached shell.
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4. In a duck call, a tubular casing provided with a mouth piece and a discharge, a pair of reed retaining members mounted within said casing, one of said members projecting considerably beyond the other in the direction of said mouth piece and having a longitudinal passage extending from a point adjacent its rear end through its forward end, said last mentioned member also having a lateral passage through one of its sides in communication with said longitudinal passage and a reed clamped between said retaining members and having a free end disposed above said lateral passage.
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5. In a duck call, a tubular casing provided with a mouth piece and a discharge, a relatively short tubular member detachably secured within said tubular casing, a pair of reed retaining members frictionally mounted within said tubular member, one of said reed retaining members being constructed of compressible material and the other of said reed
125 130

retaining members projecting considerably beyond said first mentioned member in the direction of said mouth piece and having a longitudinal passage extending from a point
5 adjacent its rear end through its forward end, said last mentioned member also having a lateral passage through one of its sides in communication with said longitudinal passage and a reed clamped between said retaining
10 ing members and having a free end disposed above said lateral passage.

In testimony whereof I affix my signature.

FRANCIS J. MUEHLSTEIN.

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