

No. 632,184.

Patented Aug. 29, 1899.

F. L. JOHNSON.  
WHISTLE.

(Application filed Apr. 5, 1899.)

(No Model.)

FIG. 1.

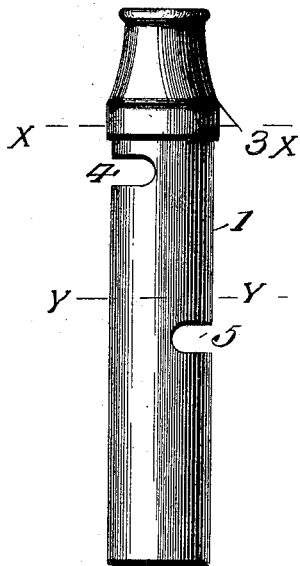


FIG. 2.

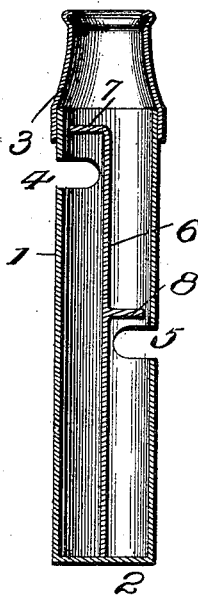


FIG. 3.

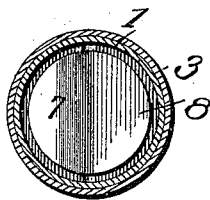
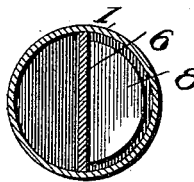


FIG. 4.



Witnesses

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# UNITED STATES PATENT OFFICE.

FREDERICK L. JOHNSON, OF WALLINGFORD, CONNECTICUT, ASSIGNOR OF ONE-HALF TO GEORGE W. BACKES, OF SAME PLACE.

## WHISTLE.

SPECIFICATION forming part of Letters Patent No. 632,184, dated August 29, 1899.

Application filed April 5, 1899. Serial No. 711,839. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK L. JOHNSON, a citizen of the United States, residing at Wallingford, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Whistles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

It is the purpose of this invention to provide a whistle or signal combining a single length of tube with means for producing different notes or sounds which blend and result in a single blast when the whistle is blown, said means consisting, essentially, of a tube or casing having transverse slots at opposite sides and at different points in its length and a longitudinal partition dividing the tube and having deflectors projecting from opposite sides thereof about in line with the top side of the lateral slots and cooperating therewith to produce the sound.

For a full understanding of the merits and advantages of the invention reference is to be had to the following description and the drawings hereto attached, and it is to be understood that the invention is susceptible of various changes in the form, proportion, and minor details of construction without departing from or sacrificing any of the advantages thereof.

In the drawings, Figure 1 is a side elevation of a duplex whistle embodying the essence of the invention. Fig. 2 is a vertical central longitudinal section thereof. Figs. 3 and 4 are transverse sections on the lines X X and Y Y, respectively, of Fig. 1.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The body of the whistle is a single tube or casing 1, closed at its lower end, as shown at 2, and having its upper end open and provided with a mouthpiece 3 of any desired formation, said mouthpiece being preferably separate from and applied to the tube, although it is to be understood that if preferred the mouthpiece and body may be formed in one piece in the ordinary way common in de-

vices of this character. Slots 4 and 5 extend inward from opposite sides of the tube or casing and are located at different points in the length thereof and approach a medial plane coincident with the longitudinal partition 6, which divides the tube into separate compartments having a longitudinal and parallel relation. The longitudinal partition 6 reaches to the closed end 2 of the casing, is attached to the inner side thereof, and is soldered at its longitudinal edges to the inner sides of the tube at diametrically opposite points. Deflectors 7 and 8 project laterally from opposite sides of the partition 6, the deflector 7 coming above or about in line with the top side of the lateral slot 4 and the deflector 8 occupying a similar relation with reference to the lateral slot 5. The outer edges of the deflectors are spaced a short distance from the inner sides of the tube or casing, so as to provide an exit for the escape of the air in the usual manner, whereby the sound is produced upon blowing into the tube through the mouthpiece.

The effective lengths of the longitudinal compartments upon opposite sides of the partition 6 vary, as indicated most clearly in Fig. 2, whereby different sounds are produced at the exits 4 and 5. The distance from the closed end or bottom 2 of the tube or casing to the deflector determines the effective length of the compartments, and since the deflectors 7 and 8 are located at different distances from the closed end 2 it is apparent that the longitudinal compartments are of different lengths and capacity.

Having thus described the invention, what is claimed as new is—

1. A duplex whistle comprising a single tube or casing subdivided longitudinally into compartments and having lateral openings in opposite sides in communication with said compartments and at different points in the length of the whistle, substantially as set forth.

2. A duplex whistle comprising a single tube or casing having a mouthpiece at one end and its opposite end closed and provided at different points in its length with lateral slots opening through opposite sides thereof; a partition subdividing the tube longitudinally, and deflectors extending laterally from op-

posite sides of the partition to cooperate with the lateral slots of the tube, as and for the purpose set forth.

3. The herein-described duplex whistle comprising a tube or casing closed at one end and provided at its opposite end with a mouth-piece, and having slots in its opposite sides at different points in its length, a central partition dividing the tube longitudinally forming compartments of different effective lengths, a deflector projecting laterally from

opposite sides of the said partition and about in line with the top side of the said lateral slots, and having a small space between their outer edges and the inner sides of the tube or casing, substantially as described. 15

In testimony whereof I affix my signature in presence of two witnesses.

FREDERICK L. JOHNSON. [L. S.]

Witnesses:

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