No. 649,576. Patented May 15, 1900.

A. P. HATCH.

WHISTLE.

(Application filed Feb. 10, 1900.)

(No Model.)

Fig. 1.

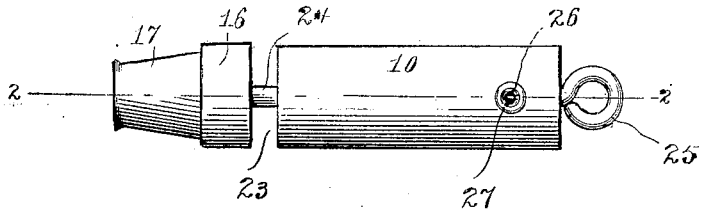


Fig. 2.

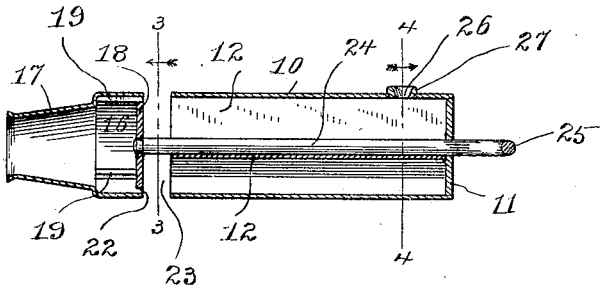


Fig. 3.

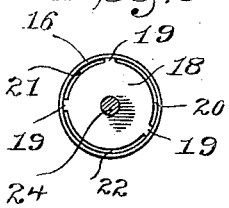
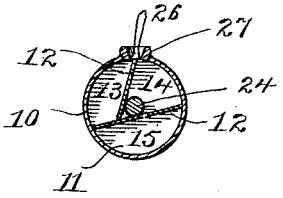


Fig. 4.



WITNESSES

H. H. Lamb

S. H. Atherton.

INVENTOR.

Alexander P. Hatch

By A. M. Wooster Atty.

UNITED STATES PATENT OFFICE.

ALEXANDER P. HATCH, OF BRIDGEPORT, CONNECTICUT.

WHISTLE.

SPECIFICATION forming part of Letters Patent No. 649,576, dated May 15, 1900.

Application filed February 10, 1900. Serial No. 4,741. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER P. HATCH, a citizen of the United States, residing at Bridgeport, county of Fairfield, State of Connecticut, have invented a new and useful Whistle, of which the following is a specification.

My invention has for its object to produce an inexpensive and very strong whistle adapted for general use—for example, as a hunting, bicycle, boatswain's, or policeman's whistle, and especially adapted for the latter use—which shall be easy to blow, will produce a compound or harmonic tone of great carrying power, and which may or may not have a rattle or warble, as preferred, it being an important feature of my novel whistle that the rattle or warble is produced without a ball, thus avoiding the danger of freezing up in cold weather, and that but one hand is required to manipulate it either when it is desired to produce a harmonic tone or a warble.

With these ends in view I have devised the simple and novel whistle which I will now describe, referring to the accompanying drawings, forming part of this specification, and using reference characters to designate the several parts.

Figure 1 is an elevation of my novel whistle; Fig. 2, a longitudinal section thereof; Fig. 3, a transverse section on the line 3 3 in Fig. 2, and Fig. 4 is a transverse section on the line 4 4 in Fig. 2.

10 denotes the barrel of my novel whistle, which is open at one end and closed at the other end. In the present instance I have shown the end of the barrel as closed by a disk 11, which is soldered or otherwise rigidly secured in place, although both barrel and disk may be cupped and drawn in a single piece, if preferred. The interior of the barrel is divided by walls 12 into three longitudinal compartments of different sizes in cross-sectional area and indicated, respectively, by 13, 14, and 15. By making these compartments of different sizes in cross-section and providing valve-openings corresponding therewith, as will be more fully explained, I produce a different tone from each compartment, the smallest compartment, which I have indicated by 13, producing the highest tone, which is of a relatively-tenor quality, the next larger compartment, which I have indicated by 14, producing a tone of relatively-alto quality, and the largest compartment, which I have indicated by 15, producing a tone of relatively-baritone quality. Said construction enables the different tones to be obtained with compartments of uniform length and provides a simpler and more cheaply-made whistle than where different lengths of compartments or separate barrels are relied upon for the different tones. Contiguous to the barrel, but wholly separated therefrom, is a valve-chamber 16 of uniform diameter with the barrel and having at its outer end a tapering mouthpiece 17. At the inner end of the valve-chamber is a valve 18, which is rigidly secured in place by means of lugs or ribs 19, which may or may not be formed integral with the valve. At the edges of the valve—that is, between the valve and the wall of the valve-chamber and separated from each other by lugs or ribs 19—are air-passages 20, 21, and 22, which correspond, respectively, with compartments 13, 14, and 15. The valve-chamber is supported contiguous to the open end of the barrel, leaving a space 23 between the valve-chamber and the barrel, by means of a central rod 24, which is rigidly secured to the valve, as clearly shown in Fig. 2, extends the entire length of the barrel, and is likewise rigidly secured to disk 11. One form of assembling which I have adopted is to pass the rod through a central opening in the disk, the disk resting against and being rigidly secured to a ring 25, which I have shown as formed integral with the rod and by means of which the whistle may be hung from a cord or chain.

In order to provide for a warble or rattle, I provide the barrel with a finger-hole 26, and in order that this finger-hole may be found instantly in the dark I form around it a flange 27. This finger-hole may lead into either one or two of the compartments, as preferred. In the present instance I have shown the wall which separates compartments 13 and 14 as intersecting the finger-hole, so that the single finger-hole provides an air-passage for both compartments. When, therefore, it is desired to produce a warble by playing upon the finger-hole, this effect will be produced upon the tones from two of the compartments, while a continuous tone

will be produced from the other compartment, thereby giving to the resultant tones of the whistle an unequalled carrying power, enabling them to be heard at a much greater distance than has heretofore been possible.

In use the best result—that is, a piercing compound or harmonic tone of great carrying power—is produced by placing a finger over the finger-hole and blowing steadily into the mouthpiece. If it is desired to produce a warble or rattle, the user plays upon the finger-hole as upon the finger-hole of a flute or fife.

Having thus described my invention, I claim—

1. A whistle consisting of a barrel closed at one end and having a valve-chamber secured contiguous to the open end but with a space between said valve-chamber and barrel, said barrel being separated by walls into longitudinal compartments of different sizes in cross-section and said valve-chamber having a mouthpiece and a valve with air-passages corresponding with the compartments in the barrel.

2. A whistle consisting of a barrel closed at one end and having a valve-chamber secured contiguous to the open end but with a space between said valve-chamber and barrel, said barrel being separated by walls into longitudinal compartments of different sizes in cross-section and having a finger-hole surrounded by a flange, for the purpose set forth, and said valve-chamber having a mouthpiece and a valve with air-passages corresponding with the compartments in the barrel.

3. A whistle consisting of a barrel closed at one end and having a valve-chamber secured contiguous to the open end but with a space between said valve-chamber and barrel, said barrel being separated by walls into longitudinal compartments of different sizes in cross-section and having a finger-hole surrounded by a flange, one of said walls intersecting the finger-hole so that the latter provides an air-passage into two compartments, for the purpose set forth, and said valve-chamber having a mouthpiece and a valve with air-passages corresponding with the compartments in the barrel.

4. A whistle consisting of a barrel closed at one end and divided into longitudinal compartments and a valve-chamber having a mouthpiece and a valve with air-passages corresponding to said compartments, said valve-chamber being secured contiguous to the open end of the barrel by means of a rod which is rigidly fixed in the closed end of the barrel, extends the length thereof and is rigidly secured to the valve.

5. A whistle consisting of a barrel closed at one end and divided into longitudinal compartments and a valve-chamber having a mouthpiece and a valve with air-passages between the valve and the wall of the chamber formed by lugs or ribs 19 which hold the valve in place, said valve-chamber being secured contiguous to the open end of the barrel by means of a rod rigidly fixed in the closed end of the barrel and having at its outer end a ring.

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

ALEXANDER P. HATCH.

Witnesses:
A. M. WOOSTER,
S. W. ATHERTON.