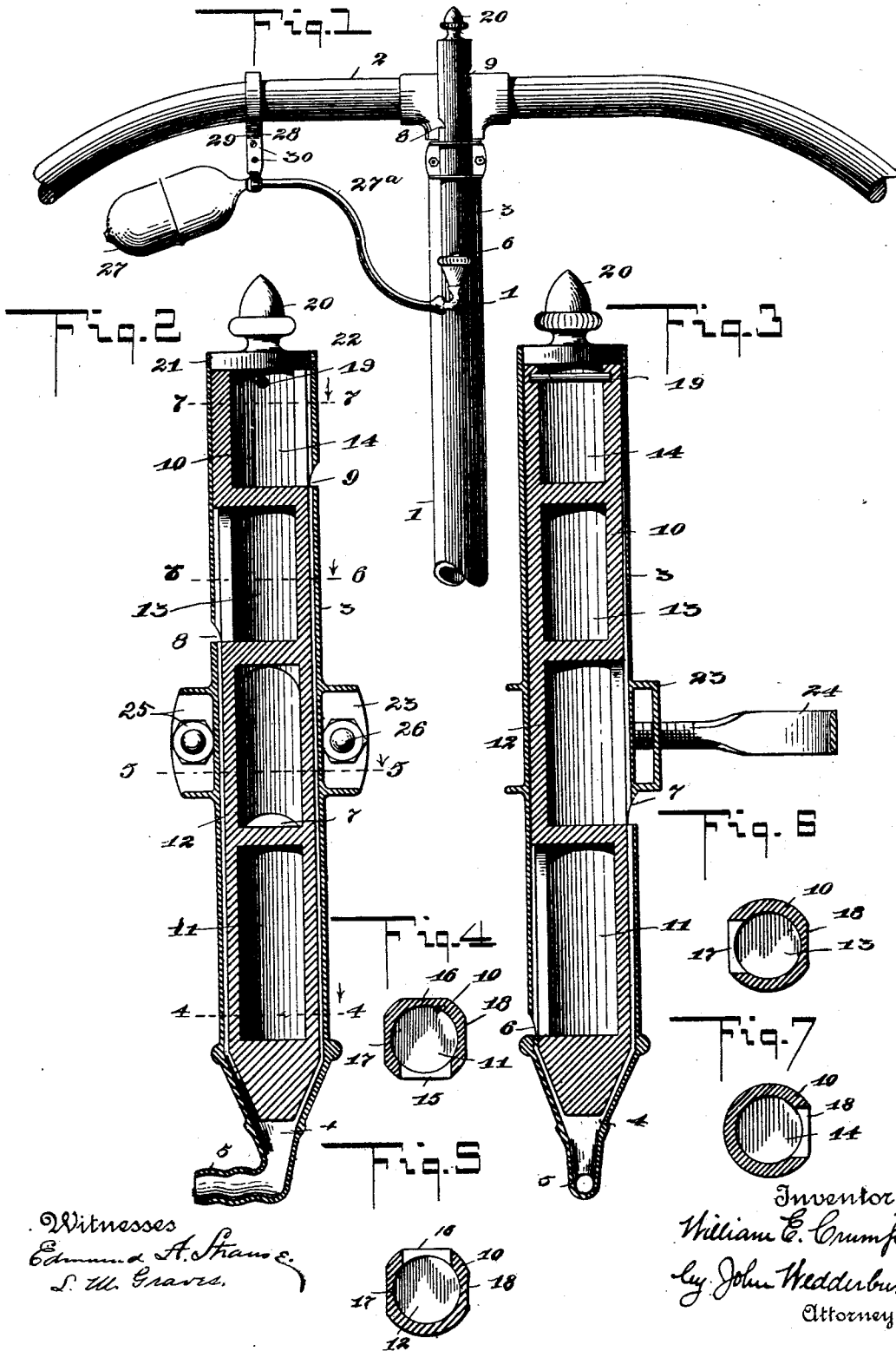


(No Model.)

W. E. CRUMP.
BICYCLE ALARM.

No. 586,420.

Patented July 13, 1897.



Witnesses
Edmund A. Stans E.
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UNITED STATES PATENT OFFICE.

WILLIAM E. CRUMP, OF SEALY, TEXAS, ASSIGNOR OF ONE-HALF TO JOHN
T. J. MARTIN, OF SAME PLACE.

BICYCLE-ALARM.

SPECIFICATION forming part of Letters Patent No. 586,420, dated July 13, 1897.

Application filed July 21, 1896. Serial No. 600,036. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. CRUMP, a citizen of the United States, residing at Sealy, in the county of Austin and State of Texas, have invented certain new and useful Improvements in Bicycle-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.

My invention relates to whistles, and more particularly to whistles especially adapted for use in connection with bicycles.

My object is to provide a simple and cheap as well as ornamental bicycle-whistle, or for other uses, of novel and peculiar construction, adapted for attachment to the bicycle and made to sound at pleasure.

A further object is to provide a whistle of improved and peculiar construction which will be adapted and constructed to sound a single note or a series of notes properly pitched, so that a harmonious and pleasing warning is given and which can be heard for a long distance off.

Having these objects in view, my invention consists of a whistle comprising certain improved features and novel combinations, which will be more fully pointed out in the following description and appended claims and in the accompanying drawings, in which—

Figure 1 is a front view showing my improved whistle applied to a portion of an ordinary bicycle; Figs. 2 and 3, longitudinal sections of the whistle; Fig. 4, a cross-section of the stop, taken on line 4 4; Fig. 5, a cross-section of the stop, taken on line 5 5; Fig. 6, a cross-section of the stop, taken on line 6 6; Fig. 7, a cross-section of the stop, taken on line 7 7.

The numeral 1 designates the steering-tube, and 2 the handle-bar, of the bicycle.

At 3 there is shown an elongated whistle-barrel, which is formed at its lower end into a bowl 4, provided with a hollow coupling 5. The barrel is provided with four valves or vents 6, 7, 8, and 9. Vents 6 and 7 are located on opposite sides of the barrel, while vents 8 and 9 are also located on opposite sides of the barrel and are disposed a quad-

rant's distance from the other two vents. The vent 6 is located at the bottom of the whistle-bowl and vent 7 at some distance up the barrel. The distance between vents 6 and 7 is slightly greater than the distance between vents 7 and 8, while the distance between vents 7 and 8 is somewhat greater than the distance between vents 8 and 9. The vents are located at such distances apart that when the whistle is blown a series of properly-pitched notes will be sounded.

The numeral 10 designates my improved stop. This stop is cylindrical, being adapted to snugly fit in the barrel and the bowl of the whistle. The stop is provided with four chambers 11, 12, 13, and 14. The lower walls of the chambers are in alinement with the lower edges of the respective vents. The stop is cut away at 15, so that an air-passage will be provided leading into chamber 11. The opposite side of the stop is also flat or cut away, as at 16, so that an air-passage is provided which leads into chamber 12. A longitudinally-extending cut is made in the stop, as at 17, and this provides an air-passage leading into chamber 13. Diametrically opposite the stop is cut away, as at 18, to provide an air-passage that leads to the uppermost air-chamber 14. A pin 19 extends across chamber 14, this being provided so that the stop can be withdrawn from the whistle barrel or bowl whenever necessary.

The numeral 20 designates an ornamental cap which is held in position in the barrel by two bayonet-joints 21 and 22.

About midway of its length the whistle is provided with a bracket 23. The numeral 24 designates a clip whose arms pass through this bracket and which is provided with clamp-nuts 25 and 26. This clip passes around the steering-tube 1, and by means of it the whistle is held in vertical position on the bicycle, as shown in the drawings.

The numeral 27 designates an elongated air-bulb which is connected to the coupling of the whistle by a flexible tube 27^a.

The numerals 28 and 29 designate the members of a double clamp which is provided with suitable clamping-screws 30. This clamp fastens to the handle-bar 2 and also clamps

around the metallic connection between the bulb and the flexible tube, so that the two latter are held in position.

When the elongated air-bulb is squeezed, 5 air is introduced into the whistle and passes up through the four air-passages into the respective chambers and out through the vents, so that four properly-pitched notes are simultaneously sounded and a pleasing and 10 yet powerful warning given of the approach of the bicycle.

It is obvious that my improved whistle could be used in other connections than with a bicycle, and also that it could be operated 15 by other means than air—as, for instance, steam—and, further, that it might be varied in many slight and immaterial ways without departing from the spirit and scope of the invention. It is not necessary that a series of 20 vents be used, inasmuch as the whistle will properly operate with one vent. It is to be understood, therefore, that I do not limit myself to the precise construction herein shown and described, but consider that I am entitled 25 to all such variations as come within the purview of the invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

30 1. The herein-described whistle comprising a barrel provided with a vent in its side and a removable stop which fits snugly within the barrel and is hollowed out into a chamber to which leads an air-supply passage and 35 which chamber is in connection with said vent and passage only.

2. The herein-described whistle comprising a barrel having a bowl and provided with a vent in its side, of a removable stop which 40 fits within the barrel and is hollowed out into a chamber that opens out through the said vent but is otherwise closed, and said stop being cut away on its side to provide in connection with the barrel an air-passage which 45 leads into the bowl and the chamber.

3. The herein-described whistle comprising a barrel provided with a bowl having a vent in its side, and a removable stop which is fitted snugly into the barrel and is hollowed out into a chamber whose lower end 50 opens out through the vent and into the bowl and whose upper end is closed.

4. The herein-described whistle comprising a barrel having a bowl and provided with independent and separated vents in its side, 55 and a stop fitted snugly into said barrel, which stop is hollowed out into independent chambers which are in communication with the bowl by independent air-passages and open out through their respective vents but 60 are otherwise closed.

5. The herein-described whistle comprising a barrel having a bowl and provided with vents in its side which are located at proper 65 distances apart along the length of the barrel to insure properly-pitched notes, of a removable stop which fits snugly in the barrel and is hollowed out into a number of independent air-chambers which open out through their respective vents, and said stop being cut away 70 on its sides to form independent air-passages of different lengths leading to the chambers and to the bowl.

6. In a bicycle-whistle, the combination with a barrel provided with a vent, and having 75 a conical bowl, of a stop located in the barrel and bowl, said stop being provided with an air-chamber opening out through the vent, and also being cut away to provide an air-passage leading to said chamber, means 80 for connecting the whistle to the bicycle, an air-bulb and a pipe connection leading to the barrel.

In testimony whereof I have signed this specification in the presence of two subscrib- 85 ing witnesses.

WILLIAM E. CRUMP.

Witnesses:

JOHN W. LOTT,
E. G. MAGRUDER.