

(No Model)

W. H. PERKINS.
WHISTLE FOR SPEAKING TUBES.

No. 585,402.

Patented June 29, 1897.

Fig. 1

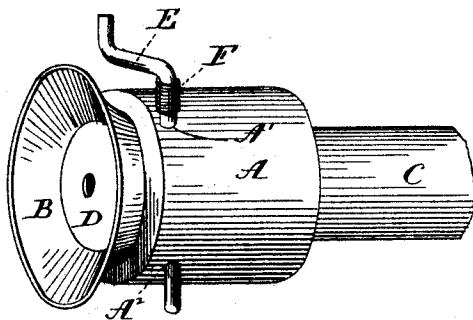


Fig. 2

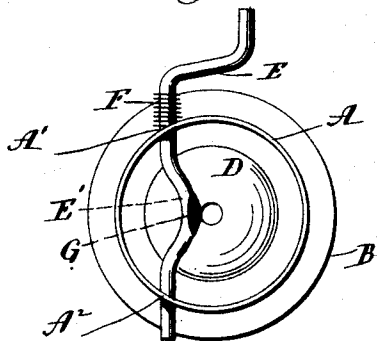
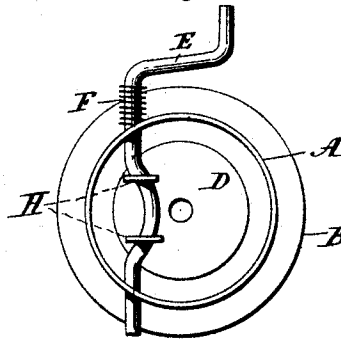


Fig. 3



Witness

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WALTER H. PERKINS, OF WATERBURY, CONNECTICUT, ASSIGNOR TO THE
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WHISTLE FOR SPEAKING-TUBES.

SPECIFICATION forming part of Letters Patent No. 585,402, dated June 29, 1897.

Application filed October 7, 1895. Serial No. 564,974. (No model.)

To all whom it may concern:

Be it known that I, WALTER H. PERKINS, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new Improvement in Whistles for Speaking-Tubes; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a perspective view of a speaking-tube whistle containing my invention; Fig. 2, a view of the same in rear elevation; Fig. 3, a view in rear elevation of one of the modified forms which my invention may assume.

My invention relates to an improvement in speaking-tube whistles of that class in which the button forming the whistle proper is secured to a rotatable shaft having bearing in the whistle-body, the object being to reduce the amount of solder required for connecting the whistle to the shaft to the minimum and to secure a strong, compact, and neat construction.

With these ends in view my invention consists in certain details of construction and combinations of parts, as will be hereinafter described, and pointed out in the claim.

In carrying out my invention I employ a cylindrical whistle-body A, a mouthpiece B, and a coupling-tube C, all of the said parts being shaped and constructed in any approved manner. The button D, forming the whistle proper, has bearing upon the annular seat formed by contracting the outer end of the body A for the attachment to it of the contracted inner end of the flaring mouthpiece B. The supporting-shaft E is mounted in the body A, which is thereto constructed with two perforations A' and A², located in line with each other and on one side of the longitudinal center of the body. A spring F, encircling one of the projecting ends of the shaft, is connected with it at one end and at the other end with the body, so as to exert a constant effort to hold the whistle-button D in its closed position. For the attachment

of the button to the shaft the same is bent longitudinally at a point within the body, as at E', so as to extend inward in a plane parallel with the plane of the whistle-button and engage therewith near the center thereof. The bowed portion of the shaft makes direct contact with the rear face of the button, to which it is preferably secured by the application of a little solder G, as indicated in Fig. 2 of the drawings. If preferred, however, the button may be secured to the shaft by means of staples H, as shown in Fig. 3.

By bending the shaft as described, so as to come directly in contact with the button, I am enabled to reduce the amount of solder required for securing the button to the shaft to the minimum. I thus secure a saving of solder and also a saving in the amount of time and labor required for the attachment of the button to the shaft. I further secure a stronger connection and a neater finish. Heretofore the supporting-shafts have generally been made straight and the space between them and the buttons built up with solder or bridged by a sheet-metal reach secured both to the shaft and button by means of solder. Moreover, my invention enables me to invariably locate the button in right position in the whistle-body for properly seating itself upon the annular seat thereof prior to securing it to the shaft, with the bend of which the button is directly engaged when the button is squarely seated upon its seat. I am thus enabled to locate the button properly and without any effort preparatory to securing it to the shaft, so that every whistle produced under my invention will be a perfect one. On the other hand, where the button is not in direct contact with the shaft when it is properly seated upon its seat it is difficult to properly locate the button, inasmuch as the space between the button and the shaft has to be bridged over by a supplemental part or built up with solder, both of which operations are delicate ones and necessarily imperfect and variable in their results. I am aware that it is old, also, to bend a shaft at a right angle to the plane of the button forming the whistle, so as to conform its contour to the contour thereof.

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

5 In a speaking-tube whistle, the combination with a whistle-body having an annular seat formed by contracting its outer end for the attachment to it of the contracted inner
10 end of a flaring mouthpiece, of a whistle-button, which in its closed and normal position rests upon the said seat, a supporting-
shaft longitudinally bent at a point within the body in a plane parallel with the plane of the whistle-button and so as to extend toward the center thereof, and mounted in the

said body to one side of the longitudinal center thereof, so that when the button is seated upon the said seat it is in direct contact with the bend of the shaft; and means for uniting the bent portion of the shaft rigidly to the rear face of the whistle-button, substantially as set forth. 15 20

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

W. H. PERKINS.

Witnesses:

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